Table S12 Reaction List+FVA results

Unit for all flux values: **nmol/g dry weight per 30 min doubling time**

					LB medium constraints (all) (30 min doubling time)		Flux Variability Results -Only Exchange Reactions were constraint			Flux Variability Results -Exchange Reactions + stable RNA transcription were constraint			Flux Variability Results -Exchange Reactions + stable RNA transcription + mRNA degradation were constraint		
Reaction Abbreviation	**Reaction Name**	**Reaction**	**Direction**	**Subsystem**	**Lower Bound**	**Upper Bound**	**Minimum Flux Value**	**Maximum Flux Value**	**Flux Span**	**Minimum Flux Value**	**Maximum Flux Value**	**Flux Span**	**Minimum Flux Value**	**Maximum Flux Value**	**Flux Span**
10FTHFt	10-Formyltetrahydrofolate transport	1 10fthf[e] <==> 1 10fthf	reversible	Transport	-1.00E+09	1.00E+09	5.23E+03	2.30E+04	1.78E+04	3.85E+03	2.37E+04	19852.92	3.85E+03	2.15E+04	17644.16
16S_rRNA_FORM1	16S rRNA formation (generic 16S rRNA from rrsA)	1 rrsA --> 1 16S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
16S_rRNA_FORM2	16S rRNA formation (generic 16S rRNA from rrsB)	1 rrsB --> 1 16S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
16S_rRNA_FORM3	16S rRNA formation (generic 16S rRNA from rrsC)	1 rrsC --> 1 16S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
16S_rRNA_FORM4	16S rRNA formation (generic 16S rRNA from rrsD)	1 rrsD --> 1 16S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
16S_rRNA_FORM5	16S rRNA formation (generic 16S rRNA from rrsE)	1 rrsE --> 1 16S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
16S_rRNA_FORM6	16S rRNA formation (generic 16S rRNA from rrsG)	1 rrsG --> 1 16S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
16S_rRNA_FORM7	16S rRNA formation (generic 16S rRNA from rrsH)	1 rrsH --> 1 16S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
23S_rRNA_FORM1	23S rRNA formation (generic 23S rRNA from rrlA)	1 rrlA --> 1 23S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
23S_rRNA_FORM2	23S rRNA formation (generic 23S rRNA from rrlB)	1 rrlB --> 1 23S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
23S_rRNA_FORM3	23S rRNA formation (generic 23S rRNA from rrlC)	1 rrlC --> 1 23S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
23S_rRNA_FORM4	23S rRNA formation (generic 23S rRNA from rrlD)	1 rrlD --> 1 23S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
23S_rRNA_FORM5	23S rRNA formation (generic 23S rRNA from rrlE)	1 rrlE --> 1 23S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
23S_rRNA_FORM6	23S rRNA formation (generic 23S rRNA from rrlG)	1 rrlG --> 1 23S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
23S_rRNA_FORM7	23S rRNA formation (generic 23S rRNA from rrlH)	1 rrlH --> 1 23S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
5FTHFt	transport of 5fthf	1 5fthf <==> 1 5fthf[e]	reversible	Transport	-1.00E+09	1.00E+09	-1.86E+03	0	1.86E+03	-1.09E+02	-2.75E+01	81.96	-1.09E+02	-2.75E+01	81.96
5MTAt	transport of 5mta	1 5mta <==> 1 5mta[e]	reversible	Transport	-1.00E+09	1.00E+09	0	1.81E+03	1.81E+03	1.39E+01	1.83E+02	169.4	1.39E+01	1.83E+02	169.4
5S_rRNA_FORM1	5S rRNA formation (generic 5S rRNA from rrfA)	1 rrfA --> 1 5S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
5S_rRNA_FORM2	5S rRNA formation (generic 5S rRNA from rrfB)	1 rrfB --> 1 5S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
5S_rRNA_FORM3	5S rRNA formation (generic 5S rRNA from rrfC)	1 rrfC --> 1 5S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
5S_rRNA_FORM4	5S rRNA formation (generic 5S rRNA from rrfD)	1 rrfD --> 1 5S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
5S_rRNA_FORM5	5S rRNA formation (generic 5S rRNA from rrfE)	1 rrfE --> 1 5S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
5S_rRNA_FORM6	5S rRNA formation (generic 5S rRNA from rrfF)	1 rrfF --> 1 5S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
5S_rRNA_FORM7	5S rRNA formation (generic 5S rRNA from rrfG)	1 rrfG --> 1 5S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
5S_rRNA_FORM8	5S rRNA formation (generic 5S rRNA from rrfH)	1 rrfH --> 1 5S_rRNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
ACCOAt	transport of accoa	1 accoa <==> 1 accoa[e]	reversible	Transport	-1.00E+09	1.00E+09	-5.24E+03	-3.38E+02	4.90E+03	-5.59E+03	-2.49E+02	5343.775	-2.91E+03	-2.49E+02	2664.524
AHCYSt	S-adenosyl-L-homocysteine exchange	1 ahcys <==> 1 ahcys[e]	reversible	Transport	-1.00E+09	1.00E+09	3.88E+03	1.32E+04	9.34E+03	2.89E+03	1.03E+04	7399.09	2.89E+03	8.54E+03	5652.935
ALAt5r	L-alanine transport via diffusion	1 ala-L[e] <==> 1 ala-L	reversible	Transport	-1.00E+09	1.00E+09	8.26E+04	4.70E+05	3.88E+05	6.22E+04	4.70E+05	408040.84	6.25E+04	4.29E+05	366966.42
AMETt	S-adenosyl-L-methionine exchange	1 amet <==> 1 amet[e]	reversible	Transport	-1.00E+09	1.00E+09	-1.46E+04	-3.88E+03	1.07E+04	-1.07E+04	-2.90E+03	7840.78	-8.90E+03	-2.90E+03	5993.993
ARGt5r	L-arginine transport via diffusion	1 arg-L[e] <==> 1 arg-L	reversible	Transport	-1.00E+09	1.00E+09	6.29E+04	2.71E+05	2.08E+05	4.63E+04	2.71E+05	224466.7	4.63E+04	2.71E+05	224466.7
ASNt5r	L-asparagine transport via diffusion	1 asn-L[e] <==> 1 asn-L	reversible	Transport	-1.00E+09	1.00E+09	2.64E+04	1.77E+05	1.50E+05	1.95E+04	1.88E+05	168543.42	1.95E+04	1.62E+05	142880.92
ASPt5r	L-aspartate transport via diffusion	1 asp-L[e] <==> 1 asp-L	reversible	Transport	-1.00E+09	1.00E+09	3.55E+04	2.21E+05	1.85E+05	2.62E+04	2.21E+05	194498.54	2.62E+04	2.21E+05	194498.54
AlaS_RS_TETRA	formation of alanyl-tRNA synthetase (homotetramer)	4 AlaS_mono <==> 1 Ala_RS_tetra	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	6.64E+02	6.64E+02	0	7.70E+02	770.0907	0	3.14E+01	31.35225
Ala_RS_CHARG	Alanyl-tRNA synthetase charging	1 Ala_RS_tetra + 1 ala-L + 1 atp + 1 h2o --> 1 Ala_RS_ala_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	8.58E+04	4.74E+05	3.88E+05	6.32E+04	4.79E+05	415453.04	6.32E+04	4.33E+05	369977.64
Arg_RS_CHARG	Arginyl-tRNA synthetase charging	1 ArgS_mono + 1 arg-L + 1 atp + 1 h2o --> 1 Arg_RS_arg_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	6.29E+04	2.75E+05	2.12E+05	4.63E+04	2.77E+05	230699.9	4.63E+04	2.73E+05	226306.7
AsnS_RS_DIM	dimerization of Asparaginyl-tRNA synthetase	2 AsnS_mono <==> 1 Asn_RS_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.29E+03	1.29E+03	0	2.23E+03	2233.246	0	7.34E+01	73.359
Asn_RS_CHARG	Asparaginyl-tRNA synthetase charging	1 Asn_RS_dim + 1 asn-L + 1 atp + 1 h2o --> 1 Asn_RS_asn_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	2.64E+04	1.77E+05	1.51E+05	1.95E+04	1.89E+05	169232.42	1.95E+04	1.63E+05	143663.82
AspS_RS_DIM	dimerization of Aspartyl-tRNA synthetase	2 AspS_mono <==> 1 Asp_RS_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.24E+03	1.24E+03	0	2.11E+03	2114.115	0	3.93E+01	39.338
Asp_RS_CHARGa	Aspartyl-tRNA synthetase charging	1 Asp_RS_dim + 2 asp-L + 2 atp + 2 h2o --> 1 Asp_RS_2asp_2amp + 2 h + 2 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	1.10E+05	1.10E+05	0	1.11E+05	110520.4	0	1.10E+05	110377.2
Asp_RS_CHARGb	Aspartyl-tRNA synthetase charging	1 Asp_RS_dim + 1 asp-L + 1 atp + 1 h2o --> 1 Asp_RS_asp_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	2.21E+05	2.21E+05	0	2.21E+05	221040.8	0	2.21E+05	220754.4
C10H8O5t	transport of C10H8O5	1 C10H8O5 <==> 1 C10H8O5[e]	reversible	Transport	-1.00E+09	1.00E+09	0	1.38E+03	1.38E+03	1.39E+01	9.38E+01	79.83	1.39E+01	9.38E+01	79.83
C9H9O4t	transport of C9H9O4	1 C9H9O4 <==> 1 C9H9O4[e]	reversible	Transport	-1.00E+09	1.00E+09	0	1.38E+03	1.38E+03	1.39E+01	9.38E+01	79.83	1.39E+01	9.38E+01	79.83
CYStec	L-cysteine transport via diffusion (extracellular to cytosol)	1 cys-L[e] <==> 1 cys-L	reversible	Transport	-1.00E+09	1.00E+09	3.46E+03	7.34E+04	6.99E+04	2.58E+03	8.38E+04	81258.46	2.58E+03	5.79E+04	55298.11
Cys_RS_CHARG	Cysteinyl-tRNA synthetase charging	1 CysS_mono + 1 atp + 1 cys-L + 1 h2o --> 1 Cys_RS_cys_amp + 1 + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	3.38E+03	6.85E+04	6.51E+04	2.49E+03	7.80E+04	75550.35	2.49E+03	5.61E+04	53616.26
DATYRDTRNA1	deacylation of tyr1_tRNA_tyr-D	1 Dtd_dim + 1 atp + 1 tyr1_tRNA_tyr-D --> 1 Dtd_dim_tyr	irreversible	tRNA charging	0.00E+00	1.00E+09	0	7.10E+06	7.10E+06	0	7.41E+06	7412071	0	7.41E+06	7412071
DATYRDTRNA2	deacylation of tyr1_tRNA_tyr-D	1 Dtd_dim_tyr + 1 h2o --> 1 Dtd_dim_inact + 1 adp + 1 h + 1 pi + 1 tyr D + 1 tyr1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	7.10E+06	7.10E+06	0	7.41E+06	7412071	0	7.41E+06	7412071
DEGRADOSOME_FORM	Degradosome complex formation	1 Eno_dim + 1 Pnp_trim + 1 RNase_E_tetra + 1 RhlB_dim <==> 1 degradosome	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	2.20E+02	2.20E+02	0	2.39E+02	238.7058	0	2.88E+01	28.8145
DnaJ_DIM	Dimerization of DnaJ (chaperone Hsp40, co-chaperone with DnaK)	2 DnaJ_mono <==> 1 DnaJ_dim_inact	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	4.98E+02	4.98E+02	0	8.45E+02	844.9304	0	4.84E+01	48.411
DnaK_mono.ATP_Form	Binding of ATP to DnaK	1 DnaK_mono + 1 atp --> 1 DnaK_mono.ATP_inact	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	1.76E+03	1.76E+03	0	2.93E+03	2933.059	0	2.54E+02	253.857

Dtd_FORM	D-tyr-tRNA_tyr deacylase protein complex formation	2 Dtd_mono --> 1 Dtd_dim	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	2.16E+02	2.16E+02	0	3.51E+02	351.3855	0	3.90E+01	39.016
Dus_gen_FORMa	formation of generic Dus	1 DusA_mono --> 1 Dus_gen	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	2.73E+03	2.73E+03	0	4.75E+03	4751.471	0	9.56E+01	95.6
Dus_gen_FORMb	formation of generic Dus	1 DusB_mono --> 1 Dus_gen	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	1.90E+03	1.90E+03	0	3.31E+03	3305.097	0	6.51E+01	65.124
Dus_gen_FORMc	formation of generic Dus	1 DusC_mono --> 1 Dus_gen	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	2.78E+03	2.78E+03	0	4.83E+03	4832.749	0	9.38E+01	93.834
EF-G_FORM	EF-G formation (GDP binding)	1 FusA_mono + 1 gtp + 1 h2o + 1 mg2 --> 1 EF-G.GDP + 1 h + 1 pi	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	2.04E+03	2.04E+03	0	3.14E+03	3140.993	0	5.11E+02	510.778
EF-G_RECHARG	recharge of EF-G with GTP	1 EF-G.GDP + 1 gtp --> 1 EF-G.GTP + 1 gdp	irreversible	Translation	0.00E+00	1.00E+09	7.64E+05	4.24E+06	3.48E+06	5.62E+05	4.31E+06	3743538.3	5.62E+05	4.01E+06	3444862.3
EF-TU_FORM1a	EF-TU formation 1 (Ser1 acetylation,b3339)	1 AcT_EF-TU + 1 TufA_mono + 1 accoa --> 1 AcT_EF-TU_cplx_a	irreversible	Protein Modification	0.00E+00	1.00E+09	0	2.13E+03	2.13E+03	0	2.80E+03	2800.46	0	1.27E+03	1268.634
EF-TU_FORM1b	EF-TU formation 1 (Ser1 acetylation,b3980)	1 AcT_EF-TU + 1 TufB_mono + 1 accoa --> 1 AcT_EF-TU_cplx_b	irreversible	Protein Modification	0.00E+00	1.00E+09	0	3.66E+03	3.66E+03	0	5.33E+03	5328.195	0	1.30E+03	1297.43
EF-TU_FORM2a	EF-TU formation 2 (Ser1 acetylation,b3339)	1 AcT_EF-TU_cplx_a --> 1 AcT_EF-TU_inact + 1 coa + 1 pEF-TU_ac_a	irreversible	Protein Modification	0.00E+00	1.00E+09	0	2.13E+03	2.13E+03	0	2.80E+03	2800.46	0	1.27E+03	1268.634
EF-TU_FORM2b	EF-TU formation 2 (Ser1 acetylation,b3980)	1 AcT_EF-TU_cplx_b --> 1 AcT_EF-TU_inact + 1 coa + 1 pEF-TU_ac_b	irreversible	Protein Modification	0.00E+00	1.00E+09	0	3.66E+03	3.66E+03	0	5.33E+03	5328.195	0	1.30E+03	1297.43
EF-TU_FORM3a	EF-TU formation 3 (Lys56 methylation,b3339)	1 MeT_EF-TU + 1 amet + 1 pEF-TU_ac_a --> 1 MeT_EF-TU_cplx_a	irreversible	Protein Modification	0.00E+00	1.00E+09	0	2.13E+03	2.13E+03	0	2.80E+03	2800.46	0	1.27E+03	1268.634
EF-TU_FORM3b	EF-TU formation 3 (Lys56 methylation,b3980)	1 MeT_EF-TU + 1 amet + 1 pEF-TU_ac_b --> 1 MeT_EF-TU_cplx_b	irreversible	Protein Modification	0.00E+00	1.00E+09	0	3.66E+03	3.66E+03	0	5.33E+03	5328.195	0	1.30E+03	1297.43
EF-TU_FORM4a	EF-TU formation 4 (Lys56 methylation,b3339)	1 MeT_EF-TU_cplx_a --> 1 MeT_EF-TU_inact + 1 ahcys + 1 h + 1 pEF-TU_me_a	irreversible	Protein Modification	0.00E+00	1.00E+09	0	2.13E+03	2.13E+03	0	2.80E+03	2800.46	0	1.27E+03	1268.634
EF-TU_FORM4b	EF-TU formation 4 (Lys56 methylation,b3980)	1 MeT_EF-TU_cplx_b --> 1 MeT_EF-TU_inact + 1 ahcys + 1 h + 1 pEF-TU_me_b	irreversible	Protein Modification	0.00E+00	1.00E+09	0	3.66E+03	3.66E+03	0	5.33E+03	5328.195	0	1.30E+03	1297.43
EF-TU_FORM5a	EF-TU formation 5 (GDP binding,b3339)	1 gtp + 1 h2o + 1 mg2 + 1 pEF-TU_me_a --> 1 EF-Tu.GDP + 1 h + 1 pi	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	2.13E+03	2.13E+03	0	2.80E+03	2800.46	0	1.27E+03	1268.634
EF-TU_FORM5b	EF-TU formation 5 (GDP binding,b3980)	1 gtp + 1 h2o + 1 mg2 + 1 pEF-TU_me_b --> 1 EF-Tu.GDP + 1 h + 1 pi	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	3.66E+03	3.66E+03	0	5.33E+03	5328.195	0	1.30E+03	1297.43
EF-Tu.EF-Ts_FORM	Formation of binary complex: EF-Tu and EF-Ts by release of GTP	1 EF-Tu.GDP.EF-Ts --> 1 EF-Tu.EF-Ts + 1 gdp	irreversible	Charging EF-Tu	0.00E+00	1.00E+09	7.64E+05	4.24E+06	3.48E+06	5.62E+05	4.31E+06	3743156.3	5.62E+05	4.01E+06	3444862.3
EF-Tu.GDP.EF-TS_FORM	Formation of Complex of EF_Tu and EF_TS	1 EF-Ts + 1 EF-Tu.GDP <==> 1 EF-Tu.GDP.EF-Ts	reversible	Charging EF-Tu	-1.00E+09	1.00E+09	7.64E+05	4.24E+06	3.48E+06	5.62E+05	4.31E+06	3743156.3	5.62E+05	4.01E+06	3444862.3
EF-Tu.GTP.EF-Ts_FORM	formation of the ternary complex EF-Tu, GTP and EF-Ts	1 EF-Tu.EF-Ts + 1 gtp <==> 1 EF-Tu.GTP-EF-Ts	reversible	Charging EF-Tu	-1.00E+09	1.00E+09	7.64E+05	4.24E+06	3.48E+06	5.62E+05	4.31E+06	3743156.3	5.62E+05	4.01E+06	3444862.3
EF-Tu.GTP_FORM	Formation of EF-Tu.GTP by dissociation of ternary complex EF-Tu.GTP.EF-Ts	1 EF-Tu.GTP-EF-Ts --> 1 EF-Ts_inact + 1 EF-Tu.GTP	irreversible	Charging EF-Tu	0.00E+00	1.00E+09	7.64E+05	4.24E+06	3.48E+06	5.62E+05	4.31E+06	3743156.3	5.62E+05	4.01E+06	3444862.3
Eno_DIM	Enolase dimerization	2 Eno_mono <==> 1 Eno_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	2.20E+02	2.20E+02	0	2.39E+02	238.7058	0	2.88E+01	28.8145
Era_DIM	dimerization of era and GTP binding	2 Era_mono + 2 gtp --> 1 Era_dim.GTP	irreversible	Protein Complex formation	0.00E+00	1.00E+09	0	7.33E+02	7.33E+02	0	1.27E+03	1265.676	0	3.80E+01	38.0375
Era_RECHARGE	recharging of Era	1 Era_dim.GDP + 2 gtp --> 1 Era_dim.GTP + 2 gdp	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	2.41E+01	8.29E+01	58.7575
Exch_10fthf[e]	Exchange of 10fthf[e]	1 10fthf[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-2.30E+04	-5.23E+03	1.78E+04	-2.37E+04	-3.85E+03	19852.92	-2.15E+04	-3.85E+03	17644.16
Exch_5fthf[e]	Exchange of 5fthf	1 5fthf[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-1.86E+03	0	1.86E+03	-1.09E+02	-2.75E+01	81.96	-1.09E+02	-2.75E+01	81.96
Exch_5mta[e]	Exchange of 5mta	1 5mta[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	1.81E+03	1.81E+03	1.39E+01	1.83E+02	169.4	1.39E+01	1.83E+02	169.4
Exch_C10H8O5[e]	Exchange of C10H8O5	1 C10H8O5[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	1.38E+03	1.38E+03	1.39E+01	9.38E+01	79.83	1.39E+01	9.38E+01	79.83
Exch_C9H9O4[e]	Exchange of C9H9O4	1 C9H9O4[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	1.38E+03	1.38E+03	1.39E+01	9.38E+01	79.83	1.39E+01	9.38E+01	79.83
Exch_Fe(2)[e]	Exchange of Fe2+	1 fe2[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-1.15E+04	0	1.15E+04	-1.91E+04	0	19065.9	-1.55E+03	0	1552.616
Exch_Fe(3)[e]	Exchange of Fe3+	1 fe3[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
Exch_accoa[e]	Exchange of accoa[e]	1 accoa[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-5.24E+03	-3.38E+02	4.90E+03	-5.59E+03	-2.49E+02	5343.775	-2.91E+03	-2.49E+02	2664.524
Exch_ade[e]	Exchange of ade	1 ade[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.90E+02	789.686	0	8.58E+01	85.794
Exch_adocbl[e]	Exchange of adocbl[e]	1 adocbl[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
Exch_adp[e]	Exchange of adp[e]	1 adp[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+12	5.64E+02	7.11E+06	7.11E+06	3.86E+02	7.41E+06	7413166.4	3.86E+02	7.41E+06	7413166.4
Exch_ahcys[e]	Exchange of ahcys[e]	1 ahcys[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	3.88E+03	1.32E+04	9.34E+03	2.89E+03	1.03E+04	7399.09	2.89E+03	8.54E+03	5652.935
Exch_ala-L[e]	Exchange of ala-L[e]	1 ala-L[e] <==>	reversible	Exchange reactions	-4.70E+05	0.00E+00	-4.70E+05	-8.26E+04	3.88E+05	-4.70E+05	-6.22E+04	408040.84	-4.29E+05	-6.25E+04	366966.42
Exch_amet[e]	Exchange of amet[e]	1 amet[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-1.46E+04	-3.88E+03	1.07E+04	-1.07E+04	-2.90E+03	7840.78	-8.90E+03	-2.90E+03	5993.993
Exch_amp[e]	Exchange of amp[e]	1 amp[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+12	7.79E+05	7.88E+06	7.10E+06	5.74E+05	7.99E+06	7412102.1	5.74E+05	7.99E+06	7412102.1
Exch_arg-L[e]	Exchange of arg-L[e]	1 arg-L[e] <==>	reversible	Exchange reactions	-2.71E+05	1.00E+12	-2.71E+05	-6.29E+04	2.08E+05	-2.71E+05	-4.63E+04	224466.7	-2.71E+05	-4.63E+04	224466.7
Exch_asn-L[e]	Exchange of asn-L[e]	1 asn-L[e] <==>	reversible	Exchange reactions	-2.21E+05	1.00E+12	-1.77E+05	-2.64E+04	1.50E+05	-1.88E+05	-1.95E+04	168543.42	-1.62E+05	-1.95E+04	142880.92
Exch_asp-L[e]	Exchange of asp-L[e]	1 asp-L[e] <==>	reversible	Exchange reactions	-2.21E+05	1.00E+12	-2.21E+05	-3.55E+04	1.85E+05	-2.21E+05	-2.62E+04	194498.54	-2.21E+05	-2.62E+04	194498.54
Exch_atp[e]	Exchange of atp[e]	1 atp[e] <==>	reversible	Exchange reactions	-1.66E+07	1.00E+12	-1.51E+07	-8.80E+05	1.42E+07	-1.55E+07	-6.49E+05	14828678.9	-1.55E+07	-6.49E+05	14828679
Exch_cdp[e]	Exchange of cdp[e]	1 cdp[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
Exch_chor[e]	Exchange of chor	1 chor[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-2.76E+03	0	2.76E+03	-1.88E+02	-2.78E+01	159.66	-1.88E+02	-2.78E+01	159.66
Exch_cmp[e]	Exchange of cmp[e]	1 cmp[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	5.49E+03	3.75E+04	3.20E+04	4.17E+03	6.08E+04	56611.87	4.17E+03	2.62E+04	22046.26
Exch_coa[e]	Exchange of coa[e]	1 coa[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	3.38E+02	5.24E+03	4.90E+03	2.49E+02	5.59E+03	5343.775	2.49E+02	2.91E+03	2664.524
Exch_ctp[e]	Exchange of ctp[e]	1 ctp[e] <==>	reversible	Exchange reactions	-1.26E+05	0.00E+00	-1.26E+05	-9.45E+04	3.19E+04	-1.26E+05	-7.00E+04	56379.6	-1.26E+05	-7.00E+04	56379.6
Exch_cys-L[e]	Exchange of cys-L[e]	1 cys-L[e] <==>	reversible	Exchange reactions	-8.38E+04	1.00E+12	-7.34E+04	-3.46E+03	6.99E+04	-8.38E+04	-2.58E+03	81258.46	-5.79E+04	-2.58E+03	55298.11
Exch_dad-5[e]	Exchange of dad-5	1 dad-5[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	7.95E+02	795.0555	0	8.59E+01	85.864
Exch_dmpp[e]	Exchange of dmpp	1 dmpp[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-1.52E+03	0	1.52E+03	-8.03E+02	0	803.4932	-9.96E+01	0	99.564
Exch_fad[e]	Exchange of fad[e]	1 fad[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
Exch_fadh2[e]	Exchange of fadh2[e]	1 fadh2[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
Exch_fldox[e]	Exchange of fldox	1 fldox[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	7.95E+02	795.0555	0	8.59E+01	85.864
Exch_fldrd[e]	Exchange of fldrd	1 fldrd[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-1.52E+03	0	1.52E+03	-7.95E+02	0	795.0555	-8.59E+01	0	85.864
Exch_for[e]	Exchange of for[e]	1 for[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	5.23E+03	2.30E+04	1.78E+04	3.85E+03	2.37E+04	19852.92	3.85E+03	2.14E+04	17593.9
Exch_gdp[e]	Exchange of gdp[e]	1 gdp[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	1.54E+06	8.51E+06	6.97E+06	1.13E+06	8.64E+06	7509213	1.13E+06	8.04E+06	6911881

Exch_gln-L[e]	Exchange of gln-L[e]	1 gln-L[e] <==>	reversible	Exchange reactions	-2.41E+05	1.00E+12	-2.41E+05	-2.64E+04	2.14E+05	-2.41E+05	-1.95E+04	221447.82	-2.16E+05	-1.95E+04	196657.22
Exch_glu-L[e]	Exchange of glu-L[e]	1 glu-L[e] <==>	reversible	Exchange reactions	-2.41E+05	1.00E+12	-2.41E+05	-5.94E+04	1.81E+05	-2.41E+05	-4.38E+04	197143.26	-2.41E+05	-4.38E+04	197143.26
Exch_glx[e]	Exchange of glx	1 glx[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	1.86E+03	1.86E+03	2.75E+01	1.09E+02	81.96	2.75E+01	1.09E+02	81.96
Exch_gly[e]	Exchange of gly[e]	1 gly[e] <==>	reversible	Exchange reactions	-5.61E+05	1.00E+12	-3.73E+05	-6.08E+04	3.12E+05	-3.94E+05	-4.48E+04	348719.18	-3.32E+05	-4.48E+04	286829.28
Exch_gmp[e]	Exchange of gmp[e]	1 gmp[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	6.84E+03	5.42E+04	4.73E+04	5.26E+03	8.85E+04	83260.94	5.26E+03	2.99E+04	24655.18
Exch_gtp[e]	Exchange of gtp[e]	1 gtp[e] <==>	reversible	Exchange reactions	-2.04E+07	1.00E+12	-8.68E+06	-1.67E+06	7.01E+06	-8.80E+06	-1.23E+06	7573145	-8.20E+06	-1.23E+06	6970628
Exch_gua[e]	Exchange of gua	1 gua[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.90E+02	789.686	0	8.58E+01	85.794
Exch_h2o[e]	Exchange of h2o[e]	1 h2o[e] <==>	reversible	Exchange reactions	-1.66E+07	1.00E+12	-1.58E+07	-1.58E+06	1.42E+07	-1.60E+07	-1.17E+06	14824244	-1.60E+07	-1.17E+06	14824244
Exch_h2s[e]	Exchange of h[e]	1 h2s[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	1.86E+03	1.86E+03	0	9.36E+01	93.62	0	9.36E+01	93.62
Exch_h[e]	Exchange of h[e]	1 h[e] <==>	reversible	Exchange reactions	-1.00E+03	1.66E+07	2.35E+06	16554815	1.42E+07	1.73E+06	16554815	14824142	1.73E+06	16554815	14824142
Exch_hco3[e]	Exchange of hco3	1 hco3[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-1.81E+03	0	1.81E+03	-2.12E+02	-1.39E+01	197.71	-2.12E+02	-1.39E+01	197.71
Exch_his-L[e]	Exchange of his-L[e]	1 his-L[e] <==>	reversible	Exchange reactions	-8.67E+04	1.00E+12	-8.67E+04	-1.44E+04	7.23E+04	-8.67E+04	-1.06E+04	76096.02	-8.67E+04	-1.06E+04	76096.02
Exch_ile-L[e]	Exchange of ile-L[e]	1 ile-L[e] <==>	reversible	Exchange reactions	-2.66E+05	1.00E+12	-2.66E+05	-4.25E+04	2.23E+05	-2.66E+05	-3.13E+04	234691.42	-2.50E+05	-3.13E+04	218779.62
Exch_leu-L[e]	Exchange of leu-L[e]	1 leu-L[e] <==>	reversible	Exchange reactions	-4.12E+05	1.00E+12	-4.12E+05	-5.32E+04	3.59E+05	-4.12E+05	-3.92E+04	373266.6	-4.12E+05	-3.92E+04	373266.6
Exch_lys-L[e]	Exchange of lys-L[e]	1 lys-L[e] <==>	reversible	Exchange reactions	-3.14E+05	1.00E+12	-2.80E+05	-7.19E+04	2.08E+05	-2.99E+05	-5.30E+04	245920.18	-2.46E+05	-5.30E+04	192575.98
Exch_met-L[e]	Exchange of met-L[e]	1 met-L[e] <==>	reversible	Exchange reactions	-1.41E+05	0.00E+00	-1.33E+05	-1.47E+04	1.18E+05	-1.41E+05	-1.09E+04	129758.02	-1.15E+05	-1.19E+04	103535.85
Exch_mg2[e]	Exchange of mg2[e]	1 mg2[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-3.07E+04	-1.46E+04	1.61E+04	-3.38E+04	-1.08E+04	23040	-2.09E+04	-1.08E+04	10161.68
Exch_nad[e]	Exchange of nad	1 nad[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+12	0	1.86E+03	1.86E+03	0	8.52E+02	851.846	0	1.69E+02	168.674
Exch_nadh[e]	Exchange of nadh	1 nadh[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+12	-1.86E+03	0	1.86E+03	-8.52E+02	0	851.846	-1.69E+02	0	168.674
Exch_nadp[e]	Exchange of nadp	1 nadp[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+12	0	8.00E+03	8.00E+03	4.18E+01	9.61E+03	9564.167	4.18E+01	2.37E+03	2326.953
Exch_nadph[e]	Exchange of nadph	1 nadph[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+12	-8.00E+03	0	8.00E+03	-9.61E+03	-4.18E+01	9564.167	-2.37E+03	-4.18E+01	2326.953
Exch_nh3[e]	Exchange of nh3	1 nh3[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	5.86E+02	5.86E+02	0	3.55E+01	35.48	0	3.55E+01	35.48
Exch_phe-L[e]	Exchange of phe-L[e]	1 phe-L[e] <==>	reversible	Exchange reactions	-1.70E+05	1.00E+12	-1.70E+05	-2.17E+04	1.48E+05	-1.70E+05	-1.60E+04	153621.18	-1.62E+05	-1.60E+04	146446.98
Exch_pi[e]	Exchange of pi[e]	1 pi[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+12	1.54E+06	1.03E+07	8.80E+06	1.13E+06	1.03E+07	9209854	1.13E+06	1.03E+07	9135134
Exch_ppi[e]	Exchange of ppi[e]	1 ppi[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+12	1.19E+06	8.43E+06	7.24E+06	8.81E+05	8.44E+06	7556292.8	8.81E+05	8.38E+06	7498028.8
Exch_pro-L[e]	Exchange of pro-L[e]	1 pro-L[e] <==>	reversible	Exchange reactions	-2.02E+05	1.00E+12	-2.02E+05	-2.35E+04	1.79E+05	-2.02E+05	-1.73E+04	185078.72	-2.00E+05	-1.73E+04	182852.72
Exch_pydx5p	Exchange of pydx5p	1 pydx5p[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-1.30E+03	0	1.30E+03	-2.19E+03	0	2188.119	-1.43E+02	0	142.705
Exch_selnp[e]	Exchange of selnp[e]	1 selnp[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-1.86E+03	0	1.86E+03	-1.07E+02	0	107.32	-1.07E+02	0	107.32
Exch_ser-L[e]	Exchange of ser-L[e]	1 ser-L[e] <==>	reversible	Exchange reactions	-1.98E+05	1.00E+12	-1.98E+05	-3.45E+04	1.63E+05	-1.98E+05	-2.54E+04	172117.76	-1.98E+05	-2.54E+04	172117.76
Exch_so4[e]	Exchange of so4[e]	1 so4[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
Exch_spmd[e]	Exchange of spmd[e]	1 spmd[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+12	-9.01E+02	-6.75E+02	2.25E+02	-6.63E+02	-4.97E+02	165.76	-6.63E+02	-4.97E+02	165.76
Exch_thf[e]	Exchange of thf[e]	1 thf[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	5.23E+03	2.33E+04	1.80E+04	3.88E+03	2.38E+04	19872.77	3.88E+03	2.16E+04	17726.12
Exch_thr-L[e]	Exchange of thr-L[e]	1 thr-L[e] <==>	reversible	Exchange reactions	-2.32E+05	1.00E+12	-2.32E+05	-3.78E+04	1.94E+05	-2.32E+05	-2.79E+04	204369.7	-2.32E+05	-2.79E+04	204369.7
Exch_trdox[e]	Exchange of trdox	1 trdox[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-5.49E+03	1.86E+03	7.34E+03	-9.34E+03	1.09E+03	10432.265	-5.89E+02	5.27E+02	1116.229
Exch_trdrd[e]	Exchange of trdrd	1 trdrd[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-1.86E+03	5.49E+03	7.34E+03	-1.09E+03	9.34E+03	10432.265	-5.27E+02	5.89E+02	1116.229
Exch_trp-L[e]	Exchange of trp-L[e]	1 trp-L[e] <==>	reversible	Exchange reactions	-5.20E+04	1.00E+12	-5.20E+04	-3.63E+03	4.84E+04	-5.20E+04	-2.67E+03	49362.35	-5.20E+04	-2.67E+03	49362.35
Exch_tyr-D[e]	Exchange of tyr-D[e]	1 tyr-D[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
Exch_tyr-L[e]	Exchange of tyr-L[e]	1 tyr-L[e] <==>	reversible	Exchange reactions	-1.26E+05	1.00E+12	-1.26E+05	-1.27E+04	1.13E+05	-1.26E+05	-9.39E+03	116847.44	-1.17E+05	-9.39E+03	107184.64
Exch_udp[e]	Exchange of udp[e]	1 udp[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
Exch_ump[e]	Exchange of ump[e]	1 ump[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	8.44E+03	5.05E+04	4.21E+04	6.67E+03	7.78E+04	71153.83	6.67E+03	2.86E+04	21935.62
Exch_utp[e]	Exchange of utp[e]	1 utp[e] <==>	reversible	Exchange reactions	-1.36E+05	0.00E+00	-1.31E+05	-8.76E+04	4.35E+04	-1.36E+05	-6.54E+04	71006.98	-1.17E+05	-6.54E+04	51524.48
Exch_val-L[e]	Exchange of val-L[e]	1 val-L[e] <==>	reversible	Exchange reactions	-3.87E+05	1.00E+12	-3.76E+05	-7.33E+04	3.03E+05	-3.87E+05	-5.40E+04	333418.52	-3.38E+05	-5.40E+04	283575.22
Exch_zn2[e]	Exchange of zn2[e]	1 zn2[e] <==>	reversible	Exchange reactions	-1.00E+09	1.00E+09	-4.85E+03	0	4.85E+03	-6.60E+03	0	6599.788	-2.55E+03	0	2553.129
FORt	formate transport via diffusion	1 for[e] <==> 1 for	reversible	Transport	-1.00E+09	1.00E+09	-2.30E+04	-5.23E+03	1.78E+04	-2.37E+04	-3.85E+03	19852.92	-2.14E+04	-3.85E+03	17593.9
Fe(2)xt	transport of Fe2+	1 fe2 <==> 1 fe2[e]	reversible	Transport	-1.00E+09	1.00E+09	-1.15E+04	0	1.15E+04	-1.91E+04	0	19065.9	-1.55E+03	0	1552.616
Fe(3)xt	transport of Fe3+	1 fe3 <==> 1 fe3[e]	reversible	Transport	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
GLNt5r	L-glutamine transport via diffusion	1 gln-L[e] <==> 1 gln-L	reversible	Transport	-1.00E+09	1.00E+09	2.64E+04	2.41E+05	2.14E+05	1.95E+04	2.41E+05	221447.82	1.95E+04	2.16E+05	196657.22
GLUt5r	L-glutamate transport via diffusion	1 glu-L[e] <==> 1 glu-L	reversible	Transport	-1.00E+09	1.00E+09	5.94E+04	2.41E+05	1.81E+05	4.38E+04	2.41E+05	197143.26	4.38E+04	2.41E+05	197143.26
GLYt	Glycine transport via facilitate diffusion	1 gly[e] <==> 1 gly	reversible	Transport	-1.00E+09	1.00E+09	6.08E+04	3.73E+05	3.12E+05	4.48E+04	3.94E+05	348719.18	4.48E+04	3.32E+05	286829.28
Gln_RS_CHARG	Glutaminyl-tRNA synthetase charging	1 GlnS_mono + 1 atp + 1 gln-L + 1 h2o --> 1 Gln_RS_gln_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	2.64E+04	2.42E+05	2.16E+05	1.95E+04	2.45E+05	225156.12	1.95E+04	2.16E+05	196962.32
Glu_RS_CHARG	Glutamyl-tRNA synthetase charging	1 GltX_mono + 1 atp + 1 glu-L + 1 h2o --> 1 Glu_RS_glu_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	5.91E+04	2.44E+05	1.85E+05	4.35E+04	2.46E+05	202239.9	4.35E+04	2.41E+05	197591.3
GlySQ_RS_TETRA	glycine tRNA synthetase complex formation of 2 alpha subunits and 2 beta subunits	2 GlyQ_mono + 2 GlyS_mono <==> 1 Gly_RS_tetra	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	3.76E+02	3.76E+02	0	6.38E+02	637.5599	0	3.58E+01	35.7595
Gly_RS_CHARGa	Glycyl-tRNA synthetase charging	1 Gly_RS_tetra + 2 atp + 2 gly + 2 h2o --> 1 Gly_RS_2gly_2amp + 2 + 2 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	1.87E+05	1.87E+05	0	1.98E+05	198330.9	0	1.67E+05	166532.3
Gly_RS_CHARGb	Glycyl-tRNA synthetase charging	1 Gly_RS_tetra + 1 atp + 1 gly + 1 h2o --> 1 Gly_RS_gly_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	3.74E+05	3.74E+05	0	3.97E+05	396661.7	0	3.33E+05	333064.7
GroEL.(7)ADP.cisGroES_CONV	conversion of GroEL.(7)ADP.cisGroES to GroEL.(7)ADP.ctransGroES	1 GroEL.(7)ADP.cisGroES <==> 1 GroEL.(7)ADP.transGroES	reversible	Protein Folding	-1.00E+09	1.00E+09	-7.94E+03	1.49E+02	8.09E+03	-9.80E+03	2.45E+02	10048.1279	-5.82E+03	1.67E+01	5837.6464

GroEL_(7)ADP.cisGroES_FORM	formation of ternary complex GroEL (14-mer), GroES (7-mer) and 7 ADP	1 GroL_(14) + 7 adp + 1 cisGroES_hepta + 7 mg2 --> 1 GroEL_(7)ADP.cisGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.45E+02	244.8199	0	1.67E+01	16.66743
GroEL_(7)ADP.transGroES_FORM	formation of ternary complex GroEL (14-mer), GroES (7-mer) and 7 ADP	1 GroL_(14) + 7 adp + 7 mg2 + 1 transGroES_hepta --> 1 GroEL_(7)ADP.transGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.45E+02	244.8199	0	1.67E+01	16.66743
GroL_(14)_FORM	Formation of (GroL)14	2 GroL_hepta <==> 1 GroL_(14)	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.45E+02	244.8199	0	1.67E+01	16.66743
GroL_hepta_FORM	Formation of GroL heptamer	7 GroL_mono <==> 1 GroL_hepta	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	2.99E+02	2.99E+02	0	4.90E+02	489.6399	0	3.33E+01	33.33486
GroS_hepta_FORM	Formation of GroS heptamer	7 GroS_mono <==> 1 GroS_hepta	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	4.23E+02	4.23E+02	0	7.14E+02	714.4714	0	4.37E+01	43.73
GrpE_DIM	GrpE dimerization (heat shock protein, b2614)	2 GrpE_mono <==> 1 GrpE_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.55E+03	1.55E+03	0	2.66E+03	2664.459	0	1.03E+02	103.3285
H2Ot	H2O transport via diffusion	1 h2o[e] <==> 1 h2o	reversible	Transport	-1.00E+09	1.00E+09	1.58E+06	1.58E+07	1.42E+07	1.17E+06	1.60E+07	14824244	1.17E+06	1.60E+07	14824244
HISt5r	L-histidine transport via diffusion	1 his-L[e] <==> 1 his-L	reversible	Transport	-1.00E+09	1.00E+09	1.44E+04	8.67E+04	7.23E+04	1.06E+04	8.67E+04	76096.02	1.06E+04	8.67E+04	76096.02
HisS_RS_DIM	dimerization of histidyl-tRNA synthetase	2 HisS_mono <==> 1 His_RS_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.28E+03	1.28E+03	0	2.22E+03	2216.958	0	6.26E+01	62.628
His_RS_CHARGa	Histidyl-tRNA synthetase charging	1 His_RS_dim + 1 atp + 1 h2o + 1 his-L --> 1 His_RS_his_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	8.97E+04	8.97E+04	0	9.17E+04	91685.86	0	8.70E+04	87033.61
His_RS_CHARGb	Histidyl-tRNA synthetase charging	1 His_RS_dim + 2 atp + 2 h2o + 2 his-L --> 1 His_RS_2his_2amp + 2 h + 2 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	4.48E+04	4.48E+04	0	4.58E+04	45842.93	0	4.35E+04	43516.8
Ht	proton diffusion	1 h <==> 1 h[e]	reversible	Transport	-1.00E+09	1.00E+09	2.35E+06	16554815	1.42E+07	1.73E+06	16554815	14824142	1.73E+06	16554815	14824142
IF1_RENAME	translational initiation factor IF1 formation	1 InfA_mono --> 1 IF1	irreversible	Protein complex formation	0.00E+00	1.00E+09	8.44E+01	4.56E+03	4.48E+03	6.22E+01	6.34E+03	6276.458	6.22E+01	2.27E+03	2203.364
IF2_FORM	translational initiation factor IF2 formation	1 InfB_mono + 1 gtp + 1 h2o --> 1 IF2-GDP + 1 h + 1 pi	irreversible	Protein complex formation	0.00E+00	1.00E+09	8.44E+01	1.60E+03	1.52E+03	6.22E+01	2.03E+03	1965.924	6.22E+01	1.11E+02	49.12
IF2_RECHARG	recharge of IF2 with GTP	1 IF2-GDP + 1 gtp --> 1 IF2-GTP + 1 gdp	irreversible	Translation	0.00E+00	1.00E+09	5.32E+03	2.31E+04	1.78E+04	3.92E+03	2.38E+04	19852.92	3.92E+03	2.15E+04	17614.62
IF3_FORM	translational initiation factor IF3 formation	1 InfC_mono --> 1 IF3	irreversible	Protein complex formation	0.00E+00	1.00E+09	8.44E+01	3.02E+03	2.94E+03	6.22E+01	5.11E+03	5046.609	6.22E+01	2.96E+02	234.06
ILEtec	L-isoleucine transport via diffusion (extracellular to cytosol)	1 ile-L[e] <==> 1 ile-L	reversible	Transport	-1.00E+09	1.00E+09	4.25E+04	2.66E+05	2.23E+05	3.13E+04	2.66E+05	234691.42	3.13E+04	2.50E+05	218779.62
Ile_RS_CHARG	Isoleucyl-tRNA synthetase charging	1 IleS_mono + 1 atp + 1 h2o + 1 ile-L --> 1 Ile_RS_ile_Amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	4.25E+04	2.68E+05	2.26E+05	3.13E+04	2.70E+05	238579.52	3.13E+04	2.51E+05	219614.72
IscA-Fe_FORM	2 Fe2 bind to IscA (tetramer)	1 IscA_tetra + 2 fe2 + 1 h + 1 nadph + 1 trdox --> 1 IscA_tetra_Fe(2) 1 nadp + 1 trdrd	irreversible	Iron-sulfur cluster biosynthesis	0.00E+00	1.00E+09	0	5.57E+03	5.57E+03	0	9.38E+03	9377.848	0	6.17E+02	616.825
IscA_TETRA	IscA tetramer formation	4 IscA_mono --> 1 IscA_tetra	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	9.93E+01	9.93E+01	0	1.57E+02	157.3623	0	2.38E+01	23.802
IscS_DIM	Dimerization of IscS	2 IscS_mono + 2 pydx5p <==> 1 IscS_dim_S-H	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	6.26E+02	6.26E+02	0	1.07E+03	1070.975	0	4.70E+01	47.012
IscS_dim_S-SH_FORM	formation of IscS_dim_S-SH	1 IscS_dim_S-H + 1 cys-L --> 1 IscS_dim_S-SH + 1 ala-L	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.13E+04	1.13E+04	2.75E+01	1.88E+04	18812.28	2.75E+01	1.89E+03	1865.93
IscU_DIM	IscU dimerization	2 IscU_mono --> 1 IscU_dim_SH	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	1.11E+04	1.11E+04	0	1.88E+04	18755.7	0	1.23E+03	1233.65
IscU_dim_S-SH_FORM1	formation of IscU and IscS complex	1 IscS_dim_S-SH + 1 IscU_dim_SH --> 1 IscS_IscU_cplx	irreversible	Iron-sulfur cluster biosynthesis	0.00E+00	1.00E+09	0	1.11E+04	1.11E+04	0	1.88E+04	18755.7	0	1.23E+03	1233.65
IscU_dim_S-SH_FORM2	formation of IscU S-S bound	1 IscS_IscU_cplx --> 1 IscS_dim_S-H + 1 IscU_mono + 1 IscU_mono_S-SH	irreversible	Iron-sulfur cluster biosynthesis	0.00E+00	1.00E+09	0	1.11E+04	1.11E+04	0	1.88E+04	18755.7	0	1.23E+03	1233.65
LEUtec	L-leucine transport via diffusion (extracellular to cytosol)	1 leu-L[e] <==> 1 leu-L	reversible	Transport	-1.00E+09	1.00E+09	5.32E+04	4.12E+05	3.59E+05	3.92E+04	4.12E+05	373266.6	3.92E+04	4.12E+05	373266.6
LYSII_RS_DIM	Lysyl-tRNA synthetase dimerization (inducible)	2 LysU_mono <==> 1 LysII_RS_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.42E+03	1.42E+03	0	2.14E+03	2142.861	0	5.93E+01	59.2615
LYSt5r	L-lysine transport via diffusion	1 lys-L[e] <==> 1 lys-L	reversible	Transport	-1.00E+09	1.00E+09	7.19E+04	2.80E+05	2.08E+05	5.30E+04	2.99E+05	245920.18	5.30E+04	2.46E+05	192575.98
Leu_RS_CHARG	Leucyl-tRNA synthetase charging	1 LeuS_mono + 1 atp + 1 h2o + 1 leu-L --> 1 Leu_RS_leu_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	5.32E+04	4.21E+05	3.68E+05	3.92E+04	4.25E+05	385360.1	3.92E+04	4.17E+05	377769.6
LysS_RS_DIM	lysyl-tRNA synthetase dimerization (constitutive, b2890)	2 LysS_mono <==> 1 LysI_RS_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	7.36E+02	7.36E+02	0	1.26E+03	1257.488	0	5.77E+01	57.7245
Lys_RSII_CHARGa	Lysyl-tRNA synthetase II charging	1 LysII_RS_dim + 1 atp + 1 h2o + 1 lys-L --> 1 LysII_RS_lys_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	2.81E+05	2.81E+05	0	3.00E+05	299732.5	0	2.46E+05	246432.4
Lys_RSII_CHARGb	Lysyl-tRNA synthetase II charging	1 LysII_RS_dim + 2 atp + 2 h2o + 2 lys-L --> 1 LysII_RS_2lys_2amp 2 h + 2 ppi	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.40E+05	1.40E+05	0	1.50E+05	149866.2	0	1.23E+05	123216.2
Lys_RSI_CHARGa	Lysyl-tRNA synthetase charging	1 LysI_RS_dim + 1 atp + 1 h2o + 1 lys-L --> 1 LysI_RS_lys_amp + 1 + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	2.81E+05	2.81E+05	0	3.00E+05	299732.5	0	2.46E+05	246432.4
Lys_RSI_CHARGb	Lysyl-tRNA synthetase charging	1 LysI_RS_dim + 2 atp + 2 h2o + 2 lys-L --> 1 LysI_RS_2lys_2amp + 2 h + 2 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	1.40E+05	1.40E+05	0	1.50E+05	149866.2	0	1.23E+05	123216.2
METtec	L-methionine transport via diffusion (extracellular to cytosol)	1 met-L[e] <==> 1 met-L	reversible	Transport	-1.00E+09	1.00E+09	1.47E+04	1.33E+05	1.18E+05	1.09E+04	1.41E+05	129758.02	1.19E+04	1.15E+05	103535.85
MGt5	magnesium transport in/out via permease (no H+)	1 mg2 <==> 1 mg2[e]	reversible	Transport	-1.00E+09	1.00E+09	-3.07E+04	-1.46E+04	1.61E+04	-3.38E+04	-1.08E+04	23040	-2.09E+04	-1.08E+04	10161.68
MetG_RS_DIM	dimerization of Methionyl-tRNA synthetase	2 MetG_mono <==> 1 Met_RS_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.21E+03	1.21E+03	0	2.08E+03	2075.962	0	5.56E+01	55.6335
Met_RS_CHARGa	Methionyl-tRNA synthetase charging	1 Met_RS_dim + 2 atp + 2 h2o + 2 met-L --> 1 Met_RS_2met_2amp 2 h + 2 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	7.18E+03	7.32E+04	6.61E+04	5.28E+03	7.89E+04	73616.67	5.28E+03	6.44E+04	59069.45
Met_RS_CHARGb	Methionyl-tRNA synthetase charging	1 Met_RS_dim + 1 atp + 1 h2o + 1 met-L --> 1 Met_RS_met_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	2.30E+04	2.30E+04	0	2.37E+04	23706.84	0	2.15E+04	21498.08
MiaA_DIM	Dimerization of MiaA	2 MiaA_mono <==> 1 MiaA_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.90E+02	1.90E+02	0	2.74E+02	273.6907	0	8.06E+01	80.586
Orn_DIM	TEMP_Orn_dim	2 Orn_mono --> 1 Orn_dim	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	1.24E+03	1.24E+03	0	2.16E+03	2155.584	0	3.68E+01	36.76
PHEtec	L-phenylalanine transport via diffusion (extracellular to cytosol)	1 phe-L[e] <==> 1 phe-L	reversible	Transport	-1.00E+09	1.00E+09	2.17E+04	1.70E+05	1.48E+05	1.60E+04	1.70E+05	153621.18	1.60E+04	1.62E+05	146446.98
Pit	Inorganic phosphate exchange, diffusion	1 pi <==> 1 pi[e]	reversible	Transport	-1.00E+09	1.00E+09	1.54E+06	1.03E+07	8.80E+06	1.13E+06	1.03E+07	9209854	1.13E+06	1.03E+07	9135134
PNPase_TRIM	PNPase trimerization	3 Pnp_mono <==> 1 Pnp_trim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	2.20E+02	2.20E+02	0	2.39E+02	238.7058	0	2.88E+01	28.8145
PROt5r	L-proline transport via diffusion	1 pro-L[e] <==> 1 pro-L	reversible	Transport	-1.00E+09	1.00E+09	2.35E+04	2.02E+05	1.79E+05	1.73E+04	2.02E+05	185078.72	1.73E+04	2.00E+05	182852.72
PheST_RS_TETRA	formation of phenyl-tRNA synthetase (2 a;pha, 2 beta subunits)	2 PheS_mono + 2 PheT_mono + 2 zn2 <==> 1 Phe_RS_tetra	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	3.64E+02	3.64E+02	0	5.97E+02	596.7828	0	5.36E+01	53.5624
Phe_RS_CHARG	Phenyl-tRNA synthetase charging	1 Phe_RS_tetra + 1 atp + 1 h2o + 1 phe-L --> 1 Phe_RS_phe_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	2.17E+04	1.73E+05	1.52E+05	1.60E+04	1.76E+05	159664.48	1.60E+04	1.63E+05	147228.38
ProS_RS_DIM	dimerization of Prolyl-tRNA synthetase	2 ProS_mono <==> 1 Pro_RS_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.24E+03	1.24E+03	0	2.05E+03	2053.575	0	5.72E+01	57.2055

Pro_RS_CHARGa	Prolyl-tRNA synthetase charging	1 Pro_RS_dim + 2 atp + 2 h2o + 2 pro-L --> 1 Pro_RS_2pro_2amp + 2 h + 2 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	1.03E+05	1.03E+05	0	1.05E+05	104716.7	0	1.00E+05	100346.3
Pro_RS_CHARGb	Prolyl-tRNA synthetase charging	1 Pro_RS_dim + 1 atp + 1 h2o + 1 pro-L --> 1 Pro_RS_pro_amp + 1 + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	2.07E+05	2.07E+05	0	2.09E+05	209433.4	0	2.01E+05	200692.5
QueF_DIM	Dimerization of QueF	2 QueF_mono <==> 1 QueF_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.26E+03	1.26E+03	0	2.20E+03	2200.206	0	3.26E+01	32.592
RF1_FORM1	protein release factor RF1 formation1 (methylation)	1 PrfA_mono + 1 PrmC_mono + 1 amet --> 1 PrmC_RF1_cplx	irreversible	Protein Modification	0.00E+00	1.00E+09	0	2.52E+03	2.52E+03	0	4.38E+03	4382.152	0	9.89E+01	98.868
RF1_FORM2	protein release factor RF1 formation2 (methylation)	1 PrmC_RF1_cplx --> 1 PrmC_mono_inact + 1 RF1_mono_inact + 1 ahcys + 1 h	irreversible	Protein Modification	0.00E+00	1.00E+09	0	2.52E+03	2.52E+03	0	4.38E+03	4382.152	0	9.89E+01	98.868
RF2_FORM1	release factor 2 formation 1 (methylation of Gln252)	1 PrfB_mono + 1 PrmC_mono + 1 amet <==> 1 PrmC_RF2_cplx	reversible	Protein Modification	-1.00E+09	1.00E+09	0	1.07E+03	1.07E+03	0	1.82E+03	1824.129	0	8.65E+01	86.541
RF2_FORM2	protein release factor RF2 formation2 (methylation)	1 PrmC_RF2_cplx --> 1 PrmC_mono_inact + 1 RF2_mono_inact + 1 ahcys + 1 h	irreversible	Protein Modification	0.00E+00	1.00E+09	0	1.07E+03	1.07E+03	0	1.82E+03	1824.129	0	8.65E+01	86.541
RF3_FORM	protein release factor RF3 formation	1 PrfC_mono + 1 gtp + 1 h2o --> 1 RF3_mono.GDP + 1 h + 1 pi	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	2.49E+03	2.49E+03	0	4.33E+03	4334.315	0	9.14E+01	91.388
RNAP19_FORM	RNA polymerase, sigma 19, formation	1 FecI_mono + 1 hRNAP <==> 1 RNAP_19	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
RNAP24_FORM	RNA polymerase, sigma 24, formation	1 RpoE_mono + 1 hRNAP <==> 1 RNAP_24	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	5.44E+02	543.5469	0	6.81E+00	6.814
RNAP28_FORM	RNA polymerase, sigma 28, formation	1 FliA_mono + 1 hRNAP <==> 1 RNAP_28	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
RNAP32_FORM	RNA polymerase, sigma 32, formation	1 RpoH_mono + 1 hRNAP <==> 1 RNAP_32	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	3.37E+02	3.37E+02	0	4.79E+02	478.8246	0	1.43E+01	14.262
RNAP38_FORM	RNA polymerase, sigma 38, formation	1 RpoS_mono + 1 hRNAP <==> 1 RNAP_38	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	2.28E+02	2.28E+02	0	2.73E+02	273.4138	0	1.52E+01	15.16
RNAP54_FORM	RNA polymerase, sigma 54, formation	1 RpoN_mono + 1 hRNAP <==> 1 RNAP_54	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	5.93E+02	5.93E+02	0	9.40E+02	939.6599	0	6.22E-01	0.622
RNAP70_FORM	RNA polymerase, sigma 70, formation	1 RpoD_mono + 1 hRNAP <==> 1 RNAP_70	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.86E+03	1.86E+03	3.57E+01	1.26E+03	1222.624	3.57E+01	4.97E+02	460.9116
RNase_BN_DIM	diemrization of ElaC_mono to form active RNase_BN	2 ElaC_mono <==> 1 RNase_BN_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.21E+03	1.21E+03	0	2.10E+03	2100.966	0	4.57E+01	45.6535
RNase_E_TETRAM	RNase E tetramerization	4 Rne_mono + 2 zn2 <==> 1 RNase_E_tetra	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	3.49E+02	3.49E+02	0	3.79E+02	379.1216	0	2.88E+01	28.8145
RNase_G_DIM	dimerization of Rng_mono to form active RNase_dim	2 Rng_mono <==> 1 RNase_G_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	4.23E+02	4.23E+02	0	7.19E+02	718.9986	0	3.88E+01	38.836
RNase_Gen_FORMa	formation of generic RNase (consists of can be done by RNase T, PH (both show highest act.), D (Rnd_mono), II (Rnb_mono), BN(BN has poor acitivity - presence of only one out of these 5 RNase is sufficient for growth)	1 RNase_T_dim --> 1 RNase_Gen	irreversible	Protein Complex formation	0.00E+00	1.00E+09	0	1.73E+02	1.73E+02	0	2.71E+02	271.4044	0	4.52E+01	45.246
RNase_Gen_FORMb	formation of generic RNase (consists of can be done by RNase T, PH (both show highest act.), D (Rnd_mono), II (Rnb_mono), BN(BN has poor acitivity - presence of only one out of these 5 RNase is sufficient for growth)	1 Rnd_mono --> 1 RNase_Gen	irreversible	Protein Complex formation	0.00E+00	1.00E+09	0	2.50E+03	2.50E+03	0	4.11E+03	4113.529	0	7.31E+01	73.139
RNase_Gen_FORMc	formation of generic RNase (consists of can be done by RNase T, PH (both show highest act.), D (Rnd_mono), II (Rnb_mono), BN(BN has poor acitivity - presence of only one out of these 5 RNase is sufficient for growth)	1 RNase_PH --> 1 RNase_Gen	irreversible	Protein Complex formation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
RNase_Gen_FORMd	formation of generic RNase (consists of can be done by RNase T, PH (both show highest act.), D (Rnd_mono), II (Rnb_mono), BN(BN has poor acitivity - presence of only one out of these 5 RNase is sufficient for growth)	1 Rnb_mono --> 1 RNase_Gen	irreversible	Protein Complex formation	0.00E+00	1.00E+09	0	2.38E+03	2.38E+03	0	3.79E+03	3791.216	0	1.25E+02	125.43
RNase_Gen_FORMe	formation of generic RNase (consists of can be done by RNase T, PH (both show highest act.), D (Rnd_mono), II (Rnb_mono), BN(BN has poor acitivity - presence of only one out of these 5 RNase is sufficient for growth)	1 RNase_BN_dim --> 1 RNase_Gen	irreversible	Protein Complex formation	0.00E+00	1.00E+09	0	1.21E+03	1.21E+03	0	2.10E+03	2100.966	0	4.57E+01	45.6535
RNase_III_DIM	RNase III dimerization	2 Rnc_mono <==> 1 RNase_III_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	5.64E+02	5.64E+02	0	9.72E+02	971.8349	0	3.31E+01	33.0525
RNase_P_FORM	formation of active RNase P	1 RnpA_mono + 1 RnpB_RNA + 2 mg2 <==> 1 RNase_P_cplx	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	2.81E+02	2.81E+02	0	5.93E+01	59.25644	0	1.08E+01	10.8499
RNase_T_DIM	dimerization of Rnt_mono to form active RNase T	2 Rnt_mono <==> 1 RNase_T_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.73E+02	1.73E+02	0	2.71E+02	271.4044	0	4.52E+01	45.246
RP_L11_FORM1	Ribosomal protein L11 formation (1)	1 PrmA_mono + 1 RplK_mono + 9 amet --> 1 PrmA_rpL11_cplx	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_L11_FORM2	Ribosomal protein L11 formation (2)	1 PrmA_rpL11_cplx --> 1 PrmA_mono_inact + 1 RplK_mono_me3 + ahcys + 9 h	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_L15_FORM	Ribosomal protein L15 formation	1 RplO_mono + 1 spmd --> 1 RplO_mono_spmd	irreversible	Protein complex formation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_L16_FORM1	Ribosomal protein L16 formation (1) (Methyltransferase is unknown)	1 MeT_L16 + 1 RplP_mono + 1 amet --> 1 MeT_rpL16_cplx	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_L16_FORM2	Ribosomal protein L16 formation (2) (Methyltransferase is unknown)	1 MeT_rpL16_cplx --> 1 MeT_L16_inact + 1 RplP_mono_me + 1 ahcys + 1 h	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_L17_FORM	Ribosomal protein L17 formation	1 RplQ_mono + 1 spmd --> 1 RplQ_mono_spmd	irreversible	Protein complex formation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_L18_FORM	Ribosomal protein L18 formation	1 RplR_mono + 1 spmd --> 1 RplR_mono_spmd	irreversible	Protein complex formation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_L2_FORM	Ribosomal protein L2 formation	1 RplB_mono + 1 spmd --> 1 RplB_mono_spmd	irreversible	Protein complex formation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_L33_FORM1	Ribosomal protein L33 formation (1) (Methyltransferase is unknown)	1 MeT_L33 + 1 RpmG_mono + 1 amet --> 1 MeT_rpL33_cplx	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_L33_FORM2	Ribosomal protein L33 formation (2) (Methyltransferase is unknown)	1 MeT_rpL33_cplx --> 1 MeT_L33_inact + 1 RpmG_mono_me + 1 ahcys + 1 h	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72

RP_L3_FORM1	Ribosomal protein L3 formation (1)	1 PrmB_mono + 1 RplC_mono + 1 amet --> 1 PrmB_rpL3_cplx	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_L3_FORM2	Ribosomal protein L3 formation (2)	1 PrmB_rpL3_cplx + 1 spmd --> 1 PrmB_mono_inact + 1 RplC_mono_me_spmd + 1 ahcys + 1 h	irreversible	Protein complex formation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_L6_FORM	Ribosomal protein L6 formation	1 RplF_mono + 1 spmd --> 1 RplF_mono_spmd	irreversible	Protein complex formation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_L7/12_FORM	dimer L7/L12 formation	1 RplL_mono_ac + 1 RplL_mono_me --> 1 rpL7/12	irreversible	Protein complex formation	0.00E+00	1.00E+09	1.69E+02	2.25E+02	5.63E+01	1.24E+02	1.66E+02	41.44	1.24E+02	1.66E+02	41.44
RP_L7_FORM1	Ribosomal protein L7 formation (1)	1 RimL_mono + 1 RplL_mono + 1 accoa --> 1 RimL_rpL7_cplx	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	1.69E+02	2.25E+02	5.63E+01	1.24E+02	1.66E+02	41.44	1.24E+02	1.66E+02	41.44
RP_L7_FORM2	Ribosomal protein L7 formation (2)	1 RimL_rpL7_cplx --> 1 RimL_mono_inact + 1 RplL_mono_ac + 1 co	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	1.69E+02	2.25E+02	5.63E+01	1.24E+02	1.66E+02	41.44	1.24E+02	1.66E+02	41.44
RP_L7_FORM3	Ribosomal protein L7 formation (3) - methylation (K81)	1 MeT_L7/L12 + 1 RplL_mono + 1 amet <==> 1 MeT_L7/L12_rpL12_cplx	reversible	Ribosomal protein modification	-1.00E+09	1.00E+09	1.69E+02	2.25E+02	5.63E+01	1.24E+02	1.66E+02	41.44	1.24E+02	1.66E+02	41.44
RP_L7_FORM4	Ribosomal protein L7 formation (4) - methylation (K81)	1 MeT_L7/L12_rpL12_cplx --> 1 MeT_L7/L12_inact + 1 RplL_mono_me + 1 ahcys + 1 h	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	1.69E+02	2.25E+02	5.63E+01	1.24E+02	1.66E+02	41.44	1.24E+02	1.66E+02	41.44
RP_S11_FORM1	Ribosomal protein S11 formation (1) (Methyltransferase is unknown)	1 MeT_S11 + 1 RpsK_mono + 1 amet --> 1 MeT_rpS11_cplx	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_S11_FORM2	Ribosomal protein S11 formation (2)	1 MeT_rpS11_cplx --> 1 MeT_S11_inact + 1 RpsK_mono_me + 1 ahcys + 1 h	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_S12_FORM1	Ribosomal protein S12 formation (1) (beta-methylthio-aspartic acid)	1 MeST_S12 + 1 RpsL_mono + 1 amet + 1 cys-L + 1 fe2 --> 1 MeST_rpS12_cplx	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_S12_FORM2	Ribosomal protein S12 formation (2) (beta-methylthiolation)	1 MeST_rpS12_cplx --> 1 MeST_S12_inact + 1 RpsL_mono_me + 1 ahcys + 1 ala-L + 1 fe2 + 1 h	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_S18_FORM1	Ribosomal protein S18 formation (1)	1 RimI_mono + 1 RpsR_mono + 1 accoa --> 1 RimI_rps18_cplx	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_S18_FORM2	Ribosomal protein S18 formation (2)	1 RimI_rps18_cplx --> 1 RimI_mono_inact + 1 RpsR_mono_ac + 1 coa	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_S3_FORM	Ribosomal protein S3 formation	1 RpsC_mono + 1 spmd --> 1 RpsC_mono_spmd	irreversible	Protein complex formation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_S4_FORM	Ribosomal protein S4 formation	1 RpsD_mono + 1 spmd --> 1 RpsD_mono_spmd	irreversible	Protein complex formation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_S5_FORM1	Ribosomal protein S5 formation (1)	1 RimJ_mono + 1 RpsE_mono + 1 accoa --> 1 RimJ_rps5_cplx	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_S5_FORM2	Ribosomal protein S5 formation (2)	1 RimJ_rps5_cplx --> 1 RimJ_mono_inact + 1 RpsE_mono_ac + 1 coa	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_S6_FORM1	Ribosomal protein S6 formation (1) (ribosomal protein S6/ rimK/ ATP/ Glu complex	1 RimK_mono + 1 RpsF_mono + 4 atp + 4 glu-L --> 1 rps6_rimK_cplx	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RP_S6_FORM2	Ribosomal protein S6 formation (2) (ribosomal protein S6/ rimK/ ATP complex (release of phosphorylated S6 complexed with rimK)	1 rps6_rimK_cplx --> 1 RimK_mono_inact + 1 RpsF_mono_glu4 + 4 adp + 4 h + 4 pi	irreversible	Ribosomal protein modification	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RhlB_DIM	RNA helicase RhlB dimerization	2 RhlB_mono <==> 1 RhlB_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	2.20E+02	2.20E+02	0	2.39E+02	238.7058	0	2.88E+01	28.8145
Rho_HEXA	formation of Rho hexamer	6 Rho_mono + 3 atp + 3 mg2 --> 1 Rho_hexa	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	3.67E+02	3.67E+02	0	6.32E+02	632.4217	0	2.04E+01	20.428
Rib_30_ass1	ribosomal subunit 30 S assembly 1 (21S)	1 16S_rRNA + 1 Era_dim.GTP + 1 RbfA_mono + 1 RimM_mono + 1 RpsD_mono_spmd + 1 RpsE_mono_ac + 1 RpsF_mono_glu4 + 1 RpsG_mono + 1 RpsH_mono + 1 RpsI_mono + 1 RpsK_mono_me + 1 RpsL_mono_me + 1 RpsM_mono + 1 RpsO_mono + 1 RpsP_mono + 1 RpsQ_mono + 1 RpsR_mono_ac + 1 RpsS_mono + 1 RpsT_mono + 1 YrdC_mono + 2 h2o --> 1 RI_30	irreversible	Ribosomal Assembly	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
Rib_30_ass2a	ribosomal subunit 30 S assembly 2 (activation of RI_30, spontanous)	1 RI_30 --> 1 Era_dim.GDP + 1 RI_30* + 1 RbfA_mono_inact + 1 RimM_mono_inact + 1 YrdC_mono_inact + 2 h + 2 pi	irreversible	Ribosomal Assembly	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
Rib_30_ass2b_1	ribosomal subunit 30 S assembly 2 (activation of RI_30, DnaK mediated)	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 RI_30 --> 1 DnaKJ_RI_30_cplx + 1 Era_dim.GDP + 1 RbfA_mono_inact + 1 RimM_mono_inact + 1 YrdC_mono_inact + 2 h + 2 pi	irreversible	Ribosomal Assembly	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
Rib_30_ass2b_2	ribosomal subunit 30 S assembly 2 (activation of RI_30, DnaK mediated)	1 DnaKJ_RI_30_cplx + 1 GrpE_dim + 1 h2o --> 1 DnaJ_dim_inact + DnaK_GrpE_RI_30_complex + 1 adp + 1 h + 1 pi	irreversible	Ribosomal Assembly	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
Rib_30_ass2b_3	ribosomal subunit 30 S assembly 2 (activation of RI_30, DnaK mediated)	1 DnaK_GrpE_RI_30_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 RI_30*	irreversible	Ribosomal Assembly	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
Rib_30_ass3	ribosomal subunit 30 S assembly 3	1 RI_30* + 1 RpsA_mono + 1 RpsB_mono + 1 RpsC_mono_spmd + 1 RpsJ_mono + 1 RpsN_mono + 1 RpsU_mono + 1 Sra_mono + 60 mg2 --> 1 rib_30	irreversible	Ribosomal Assembly	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
Rib_30_ini_FORM	formation of 30S translation initiation complex (30S subunit, IF1, IF2-GTP, IF3)	1 IF2-GTP + 1 rib_30_IF1_IF3 --> 1 rib_30_ini_inact	irreversible	Translation	0.00E+00	1.00E+09	5.32E+03	2.31E+04	1.78E+04	3.92E+03	2.38E+04	19852.92	3.92E+03	2.15E+04	17614.62
Rib_50_ass1	ribosomal subunit 50 S assembly 1	1 23S_rRNA + 1 5S_rRNA + 1 RplA_mono + 1 RplB_mono_spmd + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplE_mono + 1 RplI_mono + 1 RplJ_mono + 1 RplK_mono_me3 + 1 RplM_mono + 1 RplQ_mono_spmd + 1 RplS_mono + 1 RplT_mono + 1 RplU_mono + 1 RplV_mono + 1 RplW_mono + 1 RplX_mono + 1 RpmC_mono + 1 RpmG_mono_me + 1 RpmH_mono + 2 rpL7/12 --> 1 RI_50	irreversible	Ribosomal Assembly	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
Rib_50_ass2a	ribosomal subunit 50 S assembly 2 (RI_50 activation, spontanous)	1 RI_50 --> 1 RI_50*	irreversible	Ribosomal Assembly	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
Rib_50_ass2b_1	ribosomal subunit 50 S assembly 2 (RI_50 activation, GroEL mediated)	1 GroEL.(7)ADP.cisGroES + 1 RI_50 + 7 atp + 1 transGroES_hepta --> 1 GroEL.(7)ATP.transGroES_RI_50_cplx + 7 adp + 1 cisGroES_hepta	irreversible	Ribosomal Assembly	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
Rib_50_ass2b_2	ribosomal subunit 50 S assembly 2 (RI_50 activation, GroEL mediated)	1 GroEL.(7)ATP.transGroES_RI_50_cplx + 7 h2o --> 1 GroEL.(7)ADP.transGroES_RI_50_cplx + 7 h + 7 pi	irreversible	Ribosomal Assembly	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
Rib_50_ass2b_3	ribosomal subunit 50 S assembly 2 (RI_50 activation, GroEL mediated)	1 GroEL.(7)ADP.transGroES_RI_50_cplx --> 1 GroEL.(7)ADP.transGroES + 1 RI_50*	irreversible	Ribosomal Assembly	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
Rib_50_ass3	ribosomal subunit 50 S assembly 3	1 RI_50* + 1 RplF_mono_spmd + 1 RplN_mono + 1 RplO_mono_spmd + 1 RplP_mono_me + 1 RplR_mono_spmd + 1 RplY_mono + 1 RpmA_mono + 1 RpmB_mono + 1 RpmD_mono + 1 RpmE_mono + 1 RpmF_mono + 1 RpmI_mono + 1 RpmJ_mono + 1 Tig_mono + 111 mg2 --> 1 rib_50_inact	irreversible	Ribosomal Assembly	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
Rib_70_DISS	70S ribosome dissociation	1 IF1 + 1 IF3 + 1 rib_70 --> 1 rib_30_IF1_IF3 + 1 rib_50_inact	irreversible	Translation	0.00E+00	1.00E+09	5.32E+03	2.31E+04	1.78E+04	3.92E+03	2.38E+04	19852.92	3.92E+03	2.15E+04	17614.62
Rib_70_ass	70S ribosome formation	1 rib_30 + 1 rib_50 --> 1 rib_70	irreversible	Ribosomal Assembly	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72

RlmB_DIM	Dimerization of RlmB (b4180)	2 RlmB_mono <==> 1 RlmB_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	2.81E+02	2.81E+02	0	4.61E+02	460.6318	0	4.65E+01	46.466
RnpBa_RENAME	TEMP_RnpBa	1 b3123_RNA --> 1 RnpB_RNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	2.81E+02	2.81E+02	0	1.08E+01	10.8	0	1.08E+01	10.8
RnpBb_RENAME	TEMP_RnpBb	1 b3123_v1_RNA --> 1 RnpB_RNA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
RrmA_DIM	Dimerization of RrmA (23S rRNA m1G745 methyltransferase (b1822))	2 RrmA_mono <==> 1 RrmA_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.26E+03	1.26E+03	0	2.19E+03	2190.606	0	4.48E+01	44.7735
SELNPt	transport of selnp	1 selnp <==> 1 selnp[e]	reversible	Transport	-1.00E+09	1.00E+09	-1.86E+03	0	1.86E+03	-1.07E+02	0	107.32	-1.07E+02	0	107.32
SERt5r	L-serine transport via diffusion	1 ser-L[e] <==> 1 ser-L	reversible	Transport	-1.00E+09	1.00E+09	3.45E+04	1.98E+05	1.63E+05	2.54E+04	1.98E+05	172117.76	2.54E+04	1.98E+05	172117.76
SO4tr	sulfate reversible uniport	1 so4[e] <==> 1 so4	reversible	Transport	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
SPMDti	spermidine irreversible uniport	1 spmd[e] --> 1 spmd	irreversible	Transport	0.00E+00	1.00E+09	6.75E+02	9.01E+02	2.25E+02	4.97E+02	6.63E+02	165.76	4.97E+02	6.63E+02	165.76
SelA_FORM	formation of SelA decamer (contains 1 pyridoxal-5-phosphate per monomer subunit)	10 SelA_mono + 5 pydx5p <==> 1 SelA_deca	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	4.62E+01	46.224	0	9.74E+00	9.7362
SerS_RS_DIM	seryl-tRNA synthetase dimerization	2 SerS_mono <==> 1 Ser_RS_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.34E+03	1.34E+03	0	2.30E+03	2297.203	0	1.05E+02	105.2375
Ser_RS_CHARGa	Seryl-tRNA synthetase charging	1 Ser_RS_dim + 2 atp + 2 h2o + 2 ser-L --> 1 Ser_RS_2ser_2amp + h + 2 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	1.03E+05	1.03E+05	0	1.05E+05	104805.4	0	1.00E+05	100188.8
Ser_RS_CHARGb	Seryl-tRNA synthetase charging	1 Ser_RS_dim + 1 atp + 1 h2o + 1 ser-L --> 1 Ser_RS_ser_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	2.06E+05	2.06E+05	0	2.10E+05	209610.8	0	2.00E+05	200377.6
TC_ala1	ternary complex formation with ala1-tRNA	1 EF-Tu.GTP + 1 ala1_tRNA_ala --> 1 EF-Tu.GTP.ala1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	7.83E+04	3.88E+05	3.09E+05	5.76E+04	4.04E+05	345895.78	5.76E+04	3.52E+05	294635.08
TC_ala2	ternary complex formation with ala2-tRNA	1 EF-Tu.GTP + 1 ala2_tRNA_ala --> 1 EF-Tu.GTP.ala2-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	7.51E+03	1.23E+05	1.16E+05	5.53E+03	1.42E+05	136727.26	5.53E+03	1.05E+05	99582.36
TC_arg1	ternary complex formation with arg1-tRNA	1 EF-Tu.GTP + 1 arg1_tRNA_ala --> 1 EF-Tu.GTP.arg1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	6.21E+04	2.70E+05	2.08E+05	4.57E+04	2.72E+05	225864.1	4.57E+04	2.60E+05	214349.6
TC_argU	ternary complex formation with argU-tRNA	1 EF-Tu.GTP + 1 argU_tRNA_ala --> 1 EF-Tu.GTP.argU-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	5.07E+02	1.59E+04	1.54E+04	3.73E+02	2.10E+04	20599.27	3.73E+02	9.06E+03	8686.903
TC_argW	ternary complex formation with argW-tRNA	1 EF-Tu.GTP + 1 argW_tRNA_arg --> 1 EF-Tu.GTP.argW-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	0	1.14E+04	1.14E+04	0	1.33E+04	13314.72	0	7.04E+03	7036.922
TC_argX	ternary complex formation with argX-tRNA	1 EF-Tu.GTP + 1 argX_tRNA_arg --> 1 EF-Tu.GTP.argX-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	3.38E+02	4.51E+04	4.48E+04	2.49E+02	5.26E+04	52370.69	2.49E+02	3.08E+04	30511.28
TC_asn1	ternary complex formation with asn1-tRNA	1 EF-Tu.GTP + 1 asn1_tRNA_asn --> 1 EF-Tu.GTP.asn1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	2.64E+04	1.77E+05	1.51E+05	1.95E+04	1.89E+05	169232.42	1.95E+04	1.63E+05	143663.82
TC_asp1	ternary complex formation with asp1-tRNA	1 EF-Tu.GTP + 1 asp1_tRNA_asp --> 1 EF-Tu.GTP.asp1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	3.55E+04	2.21E+05	1.85E+05	2.62E+04	2.21E+05	194871.44	2.62E+04	2.21E+05	194585.04
TC_cysT	ternary complex formation with asp1-tRNA	1 EF-Tu.GTP + 1 cysT_tRNA_cys --> 1 EF-Tu.GTP.cysT-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	3.38E+03	6.85E+04	6.51E+04	2.49E+03	7.80E+04	75550.35	2.49E+03	5.61E+04	53616.26
TC_gln1	ternary complex formation with gln1-tRNA	1 EF-Tu.GTP + 1 gln1_tRNA_gln --> 1 EF-Tu.GTP.gln1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	1.95E+04	1.61E+05	1.42E+05	1.44E+04	1.74E+05	159569.24	1.44E+04	1.48E+05	133738.94
TC_gln2	ternary complex formation with gln2-tRNA	1 EF-Tu.GTP + 1 gln2_tRNA_gln --> 1 EF-Tu.GTP.gln2-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	6.92E+03	1.10E+05	1.03E+05	5.10E+03	1.25E+05	119982.98	5.10E+03	8.11E+04	76038.87
TC_glu1	ternary complex formation with glu1-tRNA	1 EF-Tu.GTP + 1 glu1_tRNA_glu --> 1 EF-Tu.GTP.glu1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	5.91E+04	2.44E+05	1.85E+05	4.35E+04	2.46E+05	202239.9	4.35E+04	2.41E+05	197591.3
TC_gly1	ternary complex formation with gly1-tRNA	1 EF-Tu.GTP + 1 gly1_tRNA_gly --> 1 EF-Tu.GTP.gly1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	5.94E+04	3.22E+05	2.63E+05	4.37E+04	3.41E+05	297767.62	4.37E+04	2.89E+05	245349.42
TC_glyT	ternary complex formation with glyT-tRNA	1 EF-Tu.GTP + 1 glyT_tRNA_gly --> 1 EF-Tu.GTP.glyT-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	7.60E+02	4.14E+04	4.07E+04	5.59E+02	4.71E+04	46499.04	5.59E+02	3.61E+04	35512.63
TC_glyU	ternary complex formation with glyU-tRNA	1 EF-Tu.GTP + 1 glyU_tRNA_gly --> 1 EF-Tu.GTP.glyU-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	6.75E+02	5.39E+04	5.32E+04	4.97E+02	6.25E+04	62041.16	4.97E+02	4.60E+04	45491.6
TC_hisR	ternary complex formation with hisR-tRNA	1 EF-Tu.GTP + 1 hisR_tRNA_his --> 1 EF-Tu.GTP.hisR-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	1.44E+04	8.97E+04	7.52E+04	1.06E+04	9.17E+04	81056.5	1.06E+04	8.70E+04	76404.25
TC_ile1	ternary complex formation with ile1-tRNA	1 EF-Tu.GTP + 1 ile1_tRNA_ile --> 1 EF-Tu.GTP.ile1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	4.22E+04	2.66E+05	2.24E+05	3.11E+04	2.68E+05	237268.6	3.11E+04	2.44E+05	212773.4
TC_ile2	ternary complex formation with ile2-tRNA	1 EF-Tu.GTP + 1 ile2_tRNA_ile --> 1 EF-Tu.GTP.ile2-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	2.53E+02	2.35E+04	2.32E+04	1.86E+02	2.88E+04	28643.74	1.86E+02	1.69E+04	16706.63
TC_leu1	ternary complex formation with leu1-tRNA	1 EF-Tu.GTP + 1 leu1_tRNA_leu --> 1 EF-Tu.GTP.leu1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	4.42E+04	2.86E+05	2.42E+05	3.26E+04	2.97E+05	264787.16	3.26E+04	2.51E+05	218188.56
TC_leu2	ternary complex formation with leu2-tRNA	1 EF-Tu.GTP + 1 leu2_tRNA_leu --> 1 EF-Tu.GTP.leu2-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	2.11E+03	7.59E+04	7.38E+04	1.55E+03	8.47E+04	83125.76	1.55E+03	6.29E+04	61390.68
TC_leuU	ternary complex formation with leuU-tRNA	1 EF-Tu.GTP + 1 leuU_tRNA_leu --> 1 EF-Tu.GTP.leuU-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	5.23E+03	1.07E+05	1.02E+05	3.85E+03	1.18E+05	113903.98	3.85E+03	9.56E+04	91727.67
TC_leuW	ternary complex formation with leuW-tRNA	1 EF-Tu.GTP + 1 leuW_tRNA_leu --> 1 EF-Tu.GTP.leuW-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	8.44E+01	2.16E+04	2.15E+04	6.22E+01	2.54E+04	25300.64	6.22E+01	1.72E+04	17178.58
TC_leuZ	ternary complex formation with leuZ-tRNA	1 EF-Tu.GTP + 1 leuZ_tRNA_leu --> 1 EF-Tu.GTP.leuZ-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	1.52E+03	8.27E+04	8.12E+04	1.12E+03	9.15E+04	90351.38	1.12E+03	5.88E+04	57667.91
TC_lys1	ternary complex formation with lys1-tRNA	1 EF-Tu.GTP + 1 lys1_tRNA_lys --> 1 EF-Tu.GTP.lys1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	7.19E+04	2.81E+05	2.09E+05	5.30E+04	3.00E+05	246772.18	5.30E+04	2.46E+05	193472.08
TC_met1	ternary complex formation with met1-tRNA	1 EF-Tu.GTP + 1 met1_tRNA_met --> 1 EF-Tu.GTP.met1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	1.44E+04	1.30E+05	1.15E+05	1.06E+04	1.41E+05	130816.8	1.06E+04	1.13E+05	102388.4
TC_phe1	ternary complex formation with phe1-tRNA	1 EF-Tu.GTP + 1 phe1_tRNA_phe --> 1 EF-Tu.GTP.phe1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	2.17E+04	1.73E+05	1.52E+05	1.60E+04	1.76E+05	159664.48	1.60E+04	1.63E+05	147228.38
TC_pro1	ternary complex formation with pro1-tRNA	1 EF-Tu.GTP + 1 pro1_tRNA_pro --> 1 EF-Tu.GTP.pro1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	1.67E+04	1.38E+05	1.21E+05	1.23E+04	1.51E+05	138552.52	1.23E+04	1.28E+05	115401.02
TC_pro2	ternary complex formation with pro2-tRNA	1 EF-Tu.GTP + 1 pro2_tRNA_pro --> 1 EF-Tu.GTP.pro2-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	3.55E+03	5.39E+04	5.03E+04	2.61E+03	6.18E+04	59223.94	2.61E+03	4.19E+04	39334.93
TC_proL	ternary complex formation with proL-tRNA	1 EF-Tu.GTP + 1 proL_tRNA_pro --> 1 EF-Tu.GTP.proL-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	2.53E+02	3.86E+04	3.83E+04	1.86E+02	4.57E+04	45486.69	1.86E+02	2.81E+04	27870.28
TC_proM	ternary complex formation with proM-tRNA	1 EF-Tu.GTP + 1 proM_tRNA_pro --> 1 EF-Tu.GTP.proM-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	2.96E+03	5.23E+04	4.94E+04	2.18E+03	6.13E+04	59156.69	2.18E+03	4.45E+04	42283.27
TC_sec	ternary complex formation with sec-tRNA	1 SelB_mono + 1 gtp + 1 sec_tRNA_sec --> 1 SelB.GTP.sec_tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
TC_ser1	ternary complex formation with ser1-tRNA	1 EF-Tu.GTP + 1 ser1_tRNA_ser --> 1 EF-Tu.GTP.ser1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	8.70E+03	5.45E+04	4.58E+04	6.40E+03	5.88E+04	52383.65	6.40E+03	4.83E+04	41871.29
TC_ser2	ternary complex formation with ser2-tRNA	1 EF-Tu.GTP + 1 ser2_tRNA_ser --> 1 EF-Tu.GTP.ser2-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	1.35E+04	7.19E+04	5.84E+04	9.95E+03	7.49E+04	64973.44	9.95E+03	6.51E+04	55196.43
TC_ser3	ternary complex formation with ser3-tRNA	1 EF-Tu.GTP + 1 ser3_tRNA_ser --> 1 EF-Tu.GTP.ser3-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	7.60E+02	4.39E+04	4.31E+04	5.59E+02	5.09E+04	50383.93	5.59E+02	3.60E+04	35446.53
TC_serT	ternary complex formation with serT-tRNA	1 EF-Tu.GTP + 1 serT_tRNA_ser --> 1 EF-Tu.GTP.serT-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	1.10E+03	3.41E+04	3.30E+04	8.08E+02	3.94E+04	38627.56	8.08E+02	2.82E+04	27377.49
TC_serV	ternary complex formation with serV-tRNA	1 EF-Tu.GTP + 1 serV_tRNA_ser --> 1 EF-Tu.GTP.serV-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	1.05E+04	1.14E+05	1.04E+05	7.71E+03	1.24E+05	116319.36	7.71E+03	1.04E+05	96377.16
TC_thr1	ternary complex formation with thr1-tRNA	1 EF-Tu.GTP + 1 thr1_tRNA_thr --> 1 EF-Tu.GTP.thr1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	1.64E+04	1.27E+05	1.11E+05	1.21E+04	1.37E+05	125299.76	1.21E+04	1.15E+05	103317.86
TC_thr2	ternary complex formation with thr2-tRNA	1 EF-Tu.GTP + 1 thr2_tRNA_thr --> 1 EF-Tu.GTP.thr2-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	1.74E+04	8.45E+04	6.71E+04	1.28E+04	8.67E+04	73881.9	1.28E+04	7.80E+04	65237.21
TC_thr3	ternary complex formation with thr3-tRNA	1 EF-Tu.GTP + 1 thr3_tRNA_thr --> 1 EF-Tu.GTP.thr3-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	2.53E+03	7.89E+04	7.64E+04	1.86E+03	8.73E+04	85415.28	1.86E+03	6.83E+04	66480.6
TC_thrU	ternary complex formation with thrU-tRNA	1 EF-Tu.GTP + 1 thrU_tRNA_thr --> 1 EF-Tu.GTP.thrU-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	1.52E+03	3.87E+04	3.71E+04	1.12E+03	4.61E+04	44982.49	1.12E+03	2.97E+04	28541.32
TC_trpT	ternary complex formation with trpT-tRNA	1 EF-Tu.GTP + 1 trpT_tRNA_trp --> 1 EF-Tu.GTP.trpT-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	3.63E+03	5.38E+04	5.02E+04	2.67E+03	5.48E+04	52095.4	2.67E+03	5.25E+04	49845.16
TC_tyr1	ternary complex formation with tyr1-tRNA	1 EF-Tu.GTP + 1 tyr1_tRNA_tyr --> 1 EF-Tu.GTP.tyr1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	1.27E+04	1.27E+05	1.14E+05	9.39E+03	1.29E+05	119488.84	9.39E+03	1.17E+05	107468.44
TC_val1	ternary complex formation with val1-tRNA	1 EF-Tu.GTP + 1 val1_tRNA_val --> 1 EF-Tu.GTP.val1-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	2.99E+04	2.02E+05	1.72E+05	2.20E+04	2.18E+05	195531.36	2.20E+04	1.73E+05	150984.96
TC_val2	ternary complex formation with val2-tRNA	1 EF-Tu.GTP + 1 val2_tRNA_val --> 1 EF-Tu.GTP.val2-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	6.50E+03	9.11E+04	8.46E+04	4.79E+03	1.06E+05	101600.58	4.79E+03	7.33E+04	68522.62

TC_val3	ternary complex formation with val3-tRNA	1 EF-Tu.GTP + 1 val3_tRNA_val --> 1 EF-Tu.GTP.val3-tRNA	irreversible	tRNA activation (EF-TU)	0.00E+00	1.00E+09	3.69E+04	1.59E+05	1.22E+05	2.72E+04	1.63E+05	135578.28	2.72E+04	1.54E+05	126576.38
TEMP_gltT_tRNA	TEMP_gltT_tRNA	1 gltT_tRNA_Se --> 1 gltT_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
TEMP_gltU_tRNA	TEMP_gltU_tRNA	1 gltU_tRNA_Se --> 1 gltU_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
TEMP_gltV_tRNA	TEMP_gltV_tRNA	1 gltV_tRNA_Se --> 1 gltV_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
TEMP_gltW_tRNA	TEMP_gltW_tRNA	1 gltW_tRNA_Se --> 1 gltW_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
TEMP_lysQ_tRNA	TEMP_lysQ_tRNA	1 lysQ_tRNA_Se --> 1 lysQ_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
TEMP_lysT_tRNA	TEMP_lysT_tRNA	1 lysT_tRNA_Se --> 1 lysT_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
TEMP_lysV_tRNA	TEMP_lysV_tRNA	1 lysV_tRNA_Se --> 1 lysV_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
TEMP_lysW_tRNA	TEMP_lysW_tRNA	1 lysW_tRNA_Se --> 1 lysW_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
TEMP_lysY_tRNA	TEMP_lysY_tRNA	1 lysY_tRNA_Se --> 1 lysY_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
TEMP_lysZ_tRNA	TEMP_lysZ_tRNA	1 lysZ_tRNA_Se --> 1 lysZ_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
THFt	5,6,7,8-Tetrahydrofolate transport	1 thf <==> 1 thf[e]	reversible	Transport	-1.00E+09	1.00E+09	5.23E+03	2.33E+04	1.80E+04	3.88E+03	2.38E+04	19872.77	3.88E+03	2.16E+04	17726.12
THRt5r	L-threonine transport via diffusion	1 thr-L[e] <==> 1 thr-L	reversible	Transport	-1.00E+09	1.00E+09	3.78E+04	2.32E+05	1.94E+05	2.79E+04	2.32E+05	204369.7	2.79E+04	2.32E+05	204369.7
TRPt	L-tryptophan transport	1 trp-L[e] <==> 1 trp-L	reversible	Transport	-1.00E+09	1.00E+09	3.63E+03	5.20E+04	4.84E+04	2.67E+03	5.20E+04	49362.35	2.67E+03	5.20E+04	49362.35
TU-8389_DNA_act_bind	TU-8389_DNA binding of activator	1 TU-8389_DNA_neu --> 1 TU-8389_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.81E+02	5.81E+02	0	1.03E+03	1025.084	0	6.81E+00	6.81
TU-8390_DNA_act_bind	TU-8390_DNA binding of activator	1 TU-8390_DNA_neu --> 1 TU-8390_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.81E+02	5.81E+02	0	1.03E+03	1025.084	0	6.81E+00	6.81
TU-8392_DNA_act_bind	TU-8392_DNA binding of activator	1 TU-8392_DNA_neu --> 1 TU-8392_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.54E+01	3.54E+01	0	6.24E+01	62.43587	0	1.42E-01	0.142
TU-8392_cleavage	Cleavage of TU-8392_mRNA	1 TU-8392_mRNA_cleav_cplx + 97 h2o --> 1 RNase_III_dim_inact + 29 amp + 1 b2891_v1_mRNA + 1 b2892_mRNA + 1 b2893_v1_mRNA + 24 cmp + 16 gmp + 97 h + 26 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.54E+01	3.54E+01	0	6.24E+01	62.43587	0	1.42E-01	0.142
TU-8392_cleavage_cplx	Cleavage complex formation of TU-8392_mRNA (dsbCp2, no_common_name_3124)	1 RNase_III_dim + 1 TU-8392_mRNA <==> 1 TU-8392_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.54E+01	3.54E+01	0	6.24E+01	62.43587	0	1.42E-01	0.142
TU-8397_DNA_act_bind	TU-8397_DNA binding of activator	1 TU-8397_DNA_neu --> 1 TU-8397_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.07E+02	3.07E+02	0	5.42E+02	542.1115	0	2.45E-01	0.245
TU-8398_DNA_act_bind	TU-8398_DNA binding of activator	1 TU-8398_DNA_neu --> 1 TU-8398_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.04E+01	3.04E+01	0	5.37E+01	53.74604	0	2.07E-01	0.207
TU-8398_cleavage	Cleavage of TU-8398_mRNA	1 TU-8398_mRNA_cleav_cplx + 235 h2o --> 1 RNase_III_dim_inact + 54 amp + 1 b3201_mRNA + 1 b3202_v2_mRNA + 1 b3203_v1_mRNA + 1 b3204_v1_mRNA + 1 b3205_v1_mRNA + 43 cmp + 67 gmp + 235 h + 67 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.04E+01	3.04E+01	0	5.37E+01	53.74604	0	2.07E-01	0.207
TU-8398_cleavage_cplx	Cleavage complex formation of TU-8398_mRNA (lptBp, no_common_name_3119)	1 RNase_III_dim + 1 TU-8398_mRNA <==> 1 TU-8398_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.04E+01	3.04E+01	0	5.37E+01	53.74604	0	2.07E-01	0.207
TU-8407_DNA_act_bind	TU-8407_DNA binding of activator	1 TU-8407_DNA_neu --> 1 TU-8407_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.60E+01	3.60E+01	0	6.36E+01	63.56211	0	1.89E-01	0.189
TU0-1181_DNA_act_bind	TU0-1181_DNA binding of activator	1 TU0-1181_DNA_neu --> 1 TU0-1181_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
TU0-1181_cutting	Cutting of stable TU0-1181_RNA	1 TU0-1181_RNA_cut_cplx + 391 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 133 amp + 1 b3851_RNA + 1 b3852_RNA + 1 b3853_RNA + 1 b3854_RNA + 1 b3855_RNA + 65 cmp + 81 gmp + 391 h + 1 ppi + 107 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
TU0-1181_cutting_cplx	Cutting complex formation of stable TU0-1181_RNA (rrnAp1, no_common_name_3075)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU0-1181_RNA <==> 1 TU0-1181_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
TU0-1182_DNA_act_bind	TU0-1182_DNA binding of activator	1 TU0-1182_DNA_neu --> 1 TU0-1182_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
TU0-1182_cutting	Cutting of stable TU0-1182_RNA	1 TU0-1182_RNA_cut_cplx + 460 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 145 amp + 1 b3968_v1_RNA + 1 b3969_v1_RNA + 1 b3970_v1_RNA + 1 b3971_v1_RNA + 83 cmp + 106 gmp + 460 h + 1 ppi + 122 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
TU0-1182_cutting_cplx	Cutting complex formation of stable TU0-1182_RNA (rrsBp1, no_common_name_3074)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU0-1182_RNA <==> 1 TU0-1182_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
TU0-1183_DNA_act_bind	TU0-1183_DNA binding of activator	1 TU0-1183_DNA_neu --> 1 TU0-1183_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
TU0-1183_cutting	Cutting of stable TU0-1183_RNA	1 TU0-1183_RNA_cut_cplx + 374 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 118 amp + 1 b3756_v1_RNA + 1 b3757_v1_RNA + 1 b3758_v1_RNA + 1 b3759_v1_RNA + 66 cmp + 86 gmp + 374 h + 1 ppi + 100 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
TU0-1183_cutting_cplx	Cutting complex formation of stable TU0-1183_RNA (rrnCp1, no_common_name_3073)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU0-1183_RNA <==> 1 TU0-1183_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
TU0-1184_DNA_act_bind	TU0-1184_DNA binding of activator	1 TU0-1184_DNA_neu --> 1 TU0-1184_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
TU0-1184_cutting	Cutting of stable TU0-1184_RNA	1 TU0-1184_RNA_cut_cplx + 374 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 118 amp + 1 b3756_RNA + 1 b3757_RNA + 1 b3758_RNA + 1 b3759_RNA + 66 cmp + 86 gmp + 374 h + 1 ppi + 100 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
TU0-1184_cutting_cplx	Cutting complex formation of stable TU0-1184_RNA (rrnCp2, no_common_name_3072)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU0-1184_RNA <==> 1 TU0-1184_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
TU0-1186_DNA_act_bind	TU0-1186_DNA binding of activator	1 TU0-1186_DNA_neu --> 1 TU0-1186_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6

TU0-1186_cutting	Cutting of stable TU0-1186_RNA	1 TU0-1186_RNA_cut_cplx + 375 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 11 amp + 1 b4007_RNA + 1 b4008_RNA + 1 b4009_RNA + 1 b4010_RNA + 66 cmp + 85 gmp + 375 h + 1 ppi + 102 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
TU0-1186_cutting_cplx	Cutting complex formation of stable TU0-1186_RNA (rrnEp, no_common_name_3071)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU0-1186_RNA <==> 1 TU0-1186_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
TU0-1187_DNA_act_bind	TU0-1187_DNA binding of activator	1 TU0-1187_DNA_neu --> 1 TU0-1187_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
TU0-1187_cutting	Cutting of stable TU0-1187_RNA	1 TU0-1187_RNA_cut_cplx + 451 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 141 amp + 1 b2588_v1_RNA + 1 b2589_v1_RNA + 1 b2590_v1_RNA + 1 b2591_v1_RNA + 82 cmp + 101 gmp + 451 h + 1 ppi + 123 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
TU0-1187_cutting_cplx	Cutting complex formation of stable TU0-1187_RNA (rrsGp1, no_common_name_3070)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU0-1187_RNA <==> 1 TU0-1187_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
TU0-1188_DNA_act_bind	TU0-1188_DNA binding of activator	1 TU0-1188_DNA_neu --> 1 TU0-1188_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
TU0-1188_cutting	Cutting of stable TU0-1188_RNA	1 TU0-1188_RNA_cut_cplx + 451 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 141 amp + 1 b2588_RNA + 1 b2589_RNA + 1 b2590_RNA + 1 b2591_RNA + 82 cmp + 101 gmp + 451 h + 1 ppi + 123 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
TU0-1188_cutting_cplx	Cutting complex formation of stable TU0-1188_RNA (rrsGp2, no_common_name_3069)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU0-1188_RNA <==> 1 TU0-1188_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
TU0-1189_DNA_act_bind	TU0-1189_DNA binding of activator	1 TU0-1189_DNA_neu --> 1 TU0-1189_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
TU0-1189_cutting	Cutting of stable TU0-1189_RNA	1 TU0-1189_RNA_cut_cplx + 391 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 130 amp + 1 b0201_v1_RNA + 1 b0202_v1_RNA + 1 b0203_v1_RNA + 1 b0204_v1_RNA + 1 b0205_v1_RNA + 67 cmp + 82 gmp + 391 h + 1 ppi + 107 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
TU0-1189_cutting_cplx	Cutting complex formation of stable TU0-1189_RNA (rrsHp1, no_common_name_3068)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU0-1189_RNA <==> 1 TU0-1189_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
TU0-1190_DNA_act_bind	TU0-1190_DNA binding of activator	1 TU0-1190_DNA_neu --> 1 TU0-1190_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
TU0-1190_cutting	Cutting of stable TU0-1190_RNA	1 TU0-1190_RNA_cut_cplx + 391 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 130 amp + 1 b0201_RNA + 1 b0202_RNA + 1 b0203_RNA + 1 b0204_RNA + 1 b0205_RNA + 67 cmp + 82 gmp + 391 h + 1 ppi + 107 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
TU0-1190_cutting_cplx	Cutting complex formation of stable TU0-1190_RNA (rrsHp2, no_common_name_3067)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU0-1190_RNA <==> 1 TU0-1190_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
TU0-1191_DNA_act_bind	TU0-1191_DNA binding of activator	1 TU0-1191_DNA_neu --> 1 TU0-1191_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
TU0-1191_cutting	Cutting of stable TU0-1191_RNA	1 TU0-1191_RNA_cut_cplx + 432 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 144 amp + 1 b3272_v1_RNA + 1 b3273_v1_RNA + 1 b3274_v1_RNA + 1 b3275_v1_RNA + 1 b3276_v1_RNA + 1 b3277_v1_RNA + 1 b3278_v1_RNA + 71 cmp + 88 gmp + 432 h + 1 ppi + 122 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
TU0-1191_cutting_cplx	Cutting complex formation of stable TU0-1191_RNA (rrnDp1, no_common_name_3066)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU0-1191_RNA <==> 1 TU0-1191_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
TU0-1192_DNA_act_bind	TU0-1192_DNA binding of activator	1 TU0-1192_DNA_neu --> 1 TU0-1192_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
TU0-1192_cutting	Cutting of stable TU0-1192_RNA	1 TU0-1192_RNA_cut_cplx + 432 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 144 amp + 1 b3272_RNA + 1 b3273_RNA + 1 b3274_RNA + 1 b3275_RNA + 1 b3276_RNA + 1 b3277_RNA + 1 b3278_RNA + 71 cmp + 88 gmp + 432 h + 1 ppi + 122 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
TU0-1192_cutting_cplx	Cutting complex formation of stable TU0-1192_RNA (rrnDp2, no_common_name_3065)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU0-1192_RNA <==> 1 TU0-1192_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
TU0-12803_DNA_act_bind	TU0-12803_DNA binding of activator	1 TU0-12803_DNA_neu --> 1 TU0-12803_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	6.04E+01	60.36359	0	1.86E-01	0.186
TU0-12803_cleavage	Cleavage of TU0-12803_mRNA	1 TU0-12803_mRNA_cleav_cplx + 12 h2o --> 1 RNase_III_dim_inact + 4 amp + 1 b0058_mRNA + 1 b0059_v1_mRNA + 3 cmp + 4 gmp + 12 h	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	6.04E+01	60.36359	0	1.86E-01	0.186
TU0-12803_cleavage_cplx	Cleavage complex formation of TU0-12803_mRNA (, no_common_name_3037)	1 RNase_III_dim + 1 TU0-12803_mRNA <==> 1 TU0-12803_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	6.04E+01	60.36359	0	1.86E-01	0.186
TU0-12827_DNA_act_bind	TU0-12827_DNA binding of activator	1 TU0-12827_DNA_neu --> 1 TU0-12827_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207
TU0-12827_cleavage	Cleavage of TU0-12827_mRNA	1 TU0-12827_mRNA_cleav_cplx + 93 h2o --> 1 RNase_III_dim_inact + 26 amp + 1 b0166_v1_mRNA + 1 b0167_mRNA + 1 b0168_mRNA + 13 cmp + 23 gmp + 93 h + 29 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207
TU0-12827_cleavage_cplx	Cleavage complex formation of TU0-12827_mRNA (, no_common_name_3012)	1 RNase_III_dim + 1 TU0-12827_mRNA <==> 1 TU0-12827_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207

TU0-12830_DNA_act_bind	TU0-12830_DNA binding of activator	1 TU0-12830_DNA_neu --> 1 TU0-12830_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.46E+02	2.46E+02	0	4.34E+02	433.6892	0	3.99E-01	0.399
TU0-12833_DNA_act_bind	TU0-12833_DNA binding of activator	1 TU0-12833_DNA_neu --> 1 TU0-12833_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.48E+01	9.48E+01	0	1.67E+02	167.2985	0	1.66E-01	0.166
TU0-12921_DNA_act_bind	TU0-12921_DNA binding of activator	1 TU0-12921_DNA_neu --> 1 TU0-12921_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
TU0-12921_cleavage	Cleavage of TU0-12921_mRNA	1 TU0-12921_mRNA_cleav_cplx + 113 h2o --> 1 RNase_III_dim_inact + 35 amp + 1 b0413_mRNA + 1 b0414_mRNA + 1 b0415_mRNA + 1 b0416_mRNA + 31 cmp + 28 gmp + 113 h + 16 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
TU0-12921_cleavage_cplx	Cleavage complex formation of TU0-12921_mRNA (, no_common_name_2917)	1 RNase_III_dim + 1 TU0-12921_mRNA <==> 1 TU0-12921_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
TU0-12928_DNA_act_bind	TU0-12928_DNA binding of activator	1 TU0-12928_DNA_neu --> 1 TU0-12928_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	3.08E-01	0.308
TU0-13010_DNA_act_bind	TU0-13010_DNA binding of activator	1 TU0-13010_DNA_neu --> 1 TU0-13010_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
TU0-13010_cleavage	Cleavage of TU0-13010_mRNA , 1 nt short (b0640)	1 TU0-13010_mRNA_cleav_cplx + 42 h2o --> 1 RNase_III_dim_inact + 7 amp + 1 b0638_mRNA + 1 b0639_mRNA + 1 b0640_mRNA + 1 b0641_mRNA + 1 b0642_mRNA + 8 cmp + 16 gmp + 42 h + 7 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
TU0-13010_cleavage_cplx	Cleavage complex formation of TU0-13010_mRNA (, no_common_name_2829) , 1 nt short (b0640)	1 RNase_III_dim + 1 TU0-13010_mRNA <==> 1 TU0-13010_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
TU0-13018_DNA_act_bind	TU0-13018_DNA binding of activator	1 TU0-13018_DNA_neu --> 1 TU0-13018_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	8.54E+01	8.54E+01	0	1.51E+02	150.7476	0	1.92E-01	0.192
TU0-13020_DNA_act_bind	TU0-13020_DNA binding of activator	1 TU0-13020_DNA_neu --> 1 TU0-13020_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	7.55E+01	7.55E+01	0	1.33E+02	133.2851	0	4.14E-01	0.414
TU0-13034_DNA_act_bind	TU0-13034_DNA binding of activator	1 TU0-13034_DNA_neu --> 1 TU0-13034_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
TU0-13034_cutting	Cutting of stable TU0-13034_RNA	1 TU0-13034_RNA_cut_cplx + 5 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 1 b0746_RNA + 1 b0747_RNA + 2 cmp + 5 h + 1 ppi + 1 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
TU0-13034_cutting_cplx	Cutting complex formation of stable TU0-13034_RNA (, no_common_name_2805)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m16 + 1 RNase_m23 + 1 RNase_m5 + 1 TU0-13034_RNA <==> 1 TU0-13034_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
TU0-13035_DNA_act_bind	TU0-13035_DNA binding of activator	1 TU0-13035_DNA_neu --> 1 TU0-13035_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
TU0-13035_trimming	Cutting of stable TU0-13035_RNA	1 TU0-13035_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b0748_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
TU0-13035_trimming_cplx	Cutting complex formation of stable TU0-13035_RNA (, no_common_name_2804)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU0-13035_RNA <==> 1 TU0-13035_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
TU0-13036_DNA_act_bind	TU0-13036_DNA binding of activator	1 TU0-13036_DNA_neu --> 1 TU0-13036_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
TU0-13036_trimming	Cutting of stable TU0-13036_RNA	1 TU0-13036_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b0749_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
TU0-13036_trimming_cplx	Cutting complex formation of stable TU0-13036_RNA (, no_common_name_2803)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU0-13036_RNA <==> 1 TU0-13036_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
TU0-13072_DNA_act_bind	TU0-13072_DNA binding of activator	1 TU0-13072_DNA_neu --> 1 TU0-13072_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	7.59E+01	7.59E+01	0	1.34E+02	133.9183	0	1.04E-01	0.104
TU0-13072_cleavage	Cleavage of TU0-13072_mRNA	1 TU0-13072_mRNA_cleav_cplx + 41 h2o --> 1 RNase_III_dim_inact + 9 amp + 1 b0858_mRNA + 1 b0859_mRNA + 7 cmp + 11 gmp + 41 h + 13 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	7.59E+01	7.59E+01	0	1.34E+02	133.9183	0	1.04E-01	0.104
TU0-13072_cleavage_cplx	Cleavage complex formation of TU0-13072_mRNA (, no_common_name_2767)	1 RNase_III_dim + 1 TU0-13072_mRNA <==> 1 TU0-13072_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	7.59E+01	7.59E+01	0	1.34E+02	133.9183	0	1.04E-01	0.104
TU0-13080_DNA_act_bind	TU0-13080_DNA binding of activator	1 TU0-13080_DNA_neu --> 1 TU0-13080_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.98E+01	9.98E+01	0	1.76E+02	176.1862	0	8.29E-01	0.829
TU0-13093_DNA_act_bind	TU0-13093_DNA binding of activator	1 TU0-13093_DNA_neu --> 1 TU0-13093_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.10E+01	9.10E+01	0	1.61E+02	160.6256	0	6.34E-01	0.634
TU0-13104_DNA_act_bind	TU0-13104_DNA binding of activator	1 TU0-13104_DNA_neu --> 1 TU0-13104_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.99E+02	4.99E+02	0	8.81E+02	880.9312	0	1.54E-01	0.154
TU0-13134_DNA_act_bind	TU0-13134_DNA binding of activator	1 TU0-13134_DNA_neu --> 1 TU0-13134_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.51E+02	1.51E+02	0	2.66E+02	265.9415	0	2.07E-01	0.207
TU0-13139_DNA_act_bind	TU0-13139_DNA binding of activator	1 TU0-13139_DNA_neu --> 1 TU0-13139_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
TU0-13145_DNA_act_bind	TU0-13145_DNA binding of activator	1 TU0-13145_DNA_neu --> 1 TU0-13145_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	2.00E+02	199.9276	0	1.28E-01	0.128
TU0-13145_cleavage	Cleavage of TU0-13145_mRNA	1 TU0-13145_mRNA_cleav_cplx + 10 h2o --> 1 RNase_III_dim_inact + 4 amp + 1 b1134_mRNA + 1 b1135_mRNA + 1 cmp + 3 gmp + 10 + 1 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	2.00E+02	199.9276	0	1.28E-01	0.128
TU0-13145_cleavage_cplx	Cleavage complex formation of TU0-13145_mRNA (, no_common_name_2694)	1 RNase_III_dim + 1 TU0-13145_mRNA <==> 1 TU0-13145_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	2.00E+02	199.9276	0	1.28E-01	0.128
TU0-13195_DNA_act_bind	TU0-13195_DNA binding of activator	1 TU0-13195_DNA_neu --> 1 TU0-13195_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.56E+02	1.56E+02	0	2.75E+02	275.0224	0	2.45E-01	0.245
TU0-13225_DNA_act_bind	TU0-13225_DNA binding of activator	1 TU0-13225_DNA_neu --> 1 TU0-13225_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.70E+02	269.7588	0	1.89E-01	0.189
TU0-13421_DNA_act_bind	TU0-13421_DNA binding of activator	1 TU0-13421_DNA_neu --> 1 TU0-13421_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.86E+02	286.1908	0	7.98E-02	0.0798
TU0-13443_DNA_act_bind	TU0-13443_DNA binding of activator	1 TU0-13443_DNA_neu --> 1 TU0-13443_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158
TU0-13443_cleavage	Cleavage of TU0-13443_mRNA , 4 nt short (b1871)	1 TU0-13443_mRNA_cleav_cplx + 42 h2o --> 1 RNase_III_dim_inact + 7 amp + 1 b1869_mRNA + 1 b1870_mRNA + 1 b1871_mRNA + 12 cmp + 5 gmp + 42 h + 16 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158
TU0-13443_cleavage_cplx	Cleavage complex formation of TU0-13443_mRNA (, no_common_name_2396) , 4 nt short (b1871)	1 RNase_III_dim + 1 TU0-13443_mRNA <==> 1 TU0-13443_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158
TU0-13444_DNA_act_bind	TU0-13444_DNA binding of activator	1 TU0-13444_DNA_neu --> 1 TU0-13444_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	7.32E+01	7.32E+01	0	1.29E+02	129.311	0	3.26E-01	0.326
TU0-13519_DNA_act_bind	TU0-13519_DNA binding of activator	1 TU0-13519_DNA_neu --> 1 TU0-13519_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.98E+01	5.98E+01	0	1.06E+02	105.5798	0	5.13E-01	0.513
TU0-13534_DNA_act_bind	TU0-13534_DNA binding of activator	1 TU0-13534_DNA_neu --> 1 TU0-13534_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	1.83E-01	0.183
TU0-13555_DNA_act_bind	TU0-13555_DNA binding of activator	1 TU0-13555_DNA_neu --> 1 TU0-13555_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.78E+02	1.78E+02	0	3.15E+02	314.9698	0	1.86E-01	0.186
TU0-13557_DNA_act_bind	TU0-13557_DNA binding of activator	1 TU0-13557_DNA_neu --> 1 TU0-13557_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	3.50E-01	0.35
TU0-13573_DNA_act_bind	TU0-13573_DNA binding of activator	1 TU0-13573_DNA_neu --> 1 TU0-13573_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.42E+02	241.9725	0	1.71E-01	0.171
TU0-13593_DNA_act_bind	TU0-13593_DNA binding of activator	1 TU0-13593_DNA_neu --> 1 TU0-13593_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876

TU0-13593_cleavage	Cleavage of TU0-13593_mRNA , 1 nt short (b2326), 1 nt short (b2327)	1 TU0-13593_mRNA_cleav_cplx + 75 h2o --> 1 RNase_III_dim_inact + 30 amp + 1 b2325_mRNA + 1 b2326_mRNA + 1 b2327_mRNA + 1 b2328_mRNA + 1 b2329_mRNA + 1 b2330_mRNA + 16 cmp + 16 gmp + 75 h + 8 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
TU0-13593_cleavage_cplx	Cleavage complex formation of TU0-13593_mRNA (, no_common_name_2246) , 1 nt short (b2326), 1 nt short (b2327)	1 RNase_III_dim + 1 TU0-13593_mRNA <==> 1 TU0-13593_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
TU0-13667_DNA_act_bind	TU0-13667_DNA binding of activator	1 TU0-13667_DNA_neu --> 1 TU0-13667_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	1.31E-01	0.131
TU0-13667_cleavage	Cleavage of TU0-13667_mRNA	1 TU0-13667_mRNA_cleav_cplx + 25 h2o --> 1 RNase_III_dim_inact + 8 amp + 1 b2559_mRNA + 1 b2560_mRNA + 4 cmp + 6 gmp + 25 + 6 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	1.31E-01	0.131
TU0-13667_cleavage_cplx	Cleavage complex formation of TU0-13667_mRNA (, no_common_name_2172)	1 RNase_III_dim + 1 TU0-13667_mRNA <==> 1 TU0-13667_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	1.31E-01	0.131
TU0-13675_DNA_act_bind	TU0-13675_DNA binding of activator	1 TU0-13675_DNA_neu --> 1 TU0-13675_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
TU0-13675_cleavage	Cleavage of TU0-13675_mRNA , 4 nt short (b2593)	1 TU0-13675_mRNA_cleav_cplx + 1 h2o --> 1 RNase_III_dim_inact + 1 b2593_mRNA + 1 b2594_mRNA + 1 h	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
TU0-13675_cleavage_cplx	Cleavage complex formation of TU0-13675_mRNA (, no_common_name_2164) , 4 nt short (b2593)	1 RNase_III_dim + 1 TU0-13675_mRNA <==> 1 TU0-13675_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
TU0-13704_DNA_act_bind	TU0-13704_DNA binding of activator	1 TU0-13704_DNA_neu --> 1 TU0-13704_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
TU0-13704_trimming	Cutting of stable TU0-13704_RNA	1 TU0-13704_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b2652_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
TU0-13704_trimming_cplx	Cutting complex formation of stable TU0-13704_RNA (, no_common_name_2135)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU0-13704_RNA <==> 1 TU0-13704_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
TU0-13717_DNA_act_bind	TU0-13717_DNA binding of activator	1 TU0-13717_DNA_neu --> 1 TU0-13717_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.01E+01	5.01E+01	0	8.85E+01	88.508	0	5.39E-01	0.539
TU0-13734_DNA_act_bind	TU0-13734_DNA binding of activator	1 TU0-13734_DNA_neu --> 1 TU0-13734_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.52E+01	75.1818	0	4.14E-01	0.414
TU0-13734_cleavage	Cleavage of TU0-13734_mRNA	1 TU0-13734_mRNA_cleav_cplx + 88 h2o --> 1 RNase_III_dim_inact + 24 amp + 1 b2779_mRNA + 1 b2780_v2_mRNA + 15 cmp + 24 gmp + 88 h + 24 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.52E+01	75.1818	0	4.14E-01	0.414
TU0-13734_cleavage_cplx	Cleavage complex formation of TU0-13734_mRNA (, no_common_name_2105)	1 RNase_III_dim + 1 TU0-13734_mRNA <==> 1 TU0-13734_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.31E+01	4.31E+01	0	7.52E+01	75.1818	0	4.14E-01	0.414
TU0-13735_DNA_act_bind	TU0-13735_DNA binding of activator	1 TU0-13735_DNA_neu --> 1 TU0-13735_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.95E+01	9.95E+01	0	1.76E+02	175.6374	0	9.45E-02	0.0945
TU0-13736_DNA_act_bind	TU0-13736_DNA binding of activator	1 TU0-13736_DNA_neu --> 1 TU0-13736_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
TU0-13736_cleavage	Cleavage of TU0-13736_mRNA , 1 nt short (b2791)	1 TU0-13736_mRNA_cleav_cplx + 19 h2o --> 1 RNase_III_dim_inact + 6 amp + 1 b2790_mRNA + 1 b2791_mRNA + 1 b2792_mRNA + 3 cmp + 6 gmp + 19 h + 2 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
TU0-13736_cleavage_cplx	Cleavage complex formation of TU0-13736_mRNA (, no_common_name_2103) , 1 nt short (b2791)	1 RNase_III_dim + 1 TU0-13736_mRNA <==> 1 TU0-13736_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
TU0-13738_DNA_act_bind	TU0-13738_DNA binding of activator	1 TU0-13738_DNA_neu --> 1 TU0-13738_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.71E+02	271.0557	0	1.04E-01	0.104
TU0-13805_DNA_act_bind	TU0-13805_DNA binding of activator	1 TU0-13805_DNA_neu --> 1 TU0-13805_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
TU0-13805_cleavage	Cleavage of TU0-13805_mRNA	1 TU0-13805_mRNA_cleav_cplx + 13 h2o --> 1 RNase_III_dim_inact + 6 amp + 1 b2946_mRNA + 1 b2947_mRNA + 1 cmp + 4 gmp + 13 + 1 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
TU0-13805_cleavage_cplx	Cleavage complex formation of TU0-13805_mRNA (, no_common_name_2034)	1 RNase_III_dim + 1 TU0-13805_mRNA <==> 1 TU0-13805_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
TU0-13809_DNA_act_bind	TU0-13809_DNA binding of activator	1 TU0-13809_DNA_neu --> 1 TU0-13809_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.44E+02	244.0675	0	1.52E-01	0.152
TU0-13809_cleavage	Cleavage of TU0-13809_mRNA , 1 nt short (b2959)	1 TU0-13809_mRNA_cleav_cplx + 1 h2o --> 1 RNase_III_dim_inact + 1 b2959_mRNA + 1 b2960_mRNA + 1 h	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.44E+02	244.0675	0	1.52E-01	0.152
TU0-13809_cleavage_cplx	Cleavage complex formation of TU0-13809_mRNA (, no_common_name_2030) , 1 nt short (b2959)	1 RNase_III_dim + 1 TU0-13809_mRNA <==> 1 TU0-13809_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.38E+02	1.38E+02	0	2.44E+02	244.0675	0	1.52E-01	0.152
TU0-13915_DNA_act_bind	TU0-13915_DNA binding of activator	1 TU0-13915_DNA_neu --> 1 TU0-13915_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
TU0-13915_cleavage	Cleavage of TU0-13915_mRNA , 1 nt short (b3344), 1 nt short (b3345)	1 TU0-13915_mRNA_cleav_cplx + 10 h2o --> 1 RNase_III_dim_inact + 1 b3343_mRNA + 1 b3344_mRNA + 1 b3345_mRNA + 1 b3346_mRNA + 1 cmp + 3 gmp + 10 h + 3 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
TU0-13915_cleavage_cplx	Cleavage complex formation of TU0-13915_mRNA (, no_common_name_1924) , 1 nt short (b3344), 1 nt short (b3345)	1 RNase_III_dim + 1 TU0-13915_mRNA <==> 1 TU0-13915_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
TU0-13931_DNA_act_bind	TU0-13931_DNA binding of activator	1 TU0-13931_DNA_neu --> 1 TU0-13931_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.90E+02	2.90E+02	0	5.13E+02	512.5418	0	9.45E-02	0.0945
TU0-14007_DNA_act_bind	TU0-14007_DNA binding of activator	1 TU0-14007_DNA_neu --> 1 TU0-14007_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
TU0-14007_trimming	Cutting of stable TU0-14007_RNA	1 TU0-14007_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b3658_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
TU0-14007_trimming_cplx	Cutting complex formation of stable TU0-14007_RNA (, no_common_name_1831)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU0-14007_RNA <==> 1 TU0-14007_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
TU0-14021_DNA_act_bind	TU0-14021_DNA binding of activator	1 TU0-14021_DNA_neu --> 1 TU0-14021_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.54E+02	154.0426	0	2.63E-01	0.263
TU0-14029_DNA_act_bind	TU0-14029_DNA binding of activator	1 TU0-14029_DNA_neu --> 1 TU0-14029_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.48E+01	84.78135	0	2.07E-01	0.207
TU0-14029_cleavage	Cleavage of TU0-14029_mRNA	1 TU0-14029_mRNA_cleav_cplx + 64 h2o --> 1 RNase_III_dim_inact + 22 amp + 1 b3740_mRNA + 1 b3741_mRNA + 19 cmp + 12 gmp + 64 h + 10 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.48E+01	84.78135	0	2.07E-01	0.207
TU0-14029_cleavage_cplx	Cleavage complex formation of TU0-14029_mRNA (, no_common_name_1808)	1 RNase_III_dim + 1 TU0-14029_mRNA <==> 1 TU0-14029_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.48E+01	84.78135	0	2.07E-01	0.207
TU0-14037_DNA_act_bind	TU0-14037_DNA binding of activator	1 TU0-14037_DNA_neu --> 1 TU0-14037_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.34E+01	9.34E+01	0	1.59E+02	159.0788	0	3.26E-01	0.326
TU0-14038_DNA_act_bind	TU0-14038_DNA binding of activator	1 TU0-14038_DNA_neu --> 1 TU0-14038_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
TU0-14038_cleavage	Cleavage of TU0-14038_mRNA	1 TU0-14038_mRNA_cleav_cplx + 85 h2o --> 1 RNase_III_dim_inact + 28 amp + 1 b3782_v1_mRNA + 1 b3783_v1_mRNA + 24 cmp + 12 gmp + 85 h + 20 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
TU0-14038_cleavage_cplx	Cleavage complex formation of TU0-14038_mRNA (, no_common_name_1799)	1 RNase_III_dim + 1 TU0-14038_mRNA <==> 1 TU0-14038_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
TU0-14070_DNA_act_bind	TU0-14070_DNA binding of activator	1 TU0-14070_DNA_neu --> 1 TU0-14070_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104

TU0-14070_cleavage	Cleavage of TU0-14070_mRNA , 7 nt short (b3886), 4 nt short (b3887), 4 nt short (b3888)	1 TU0-14070_mRNA_cleav_cplx + 3 h2o --> 1 RNase_III_dim_inact + 1 b3885_mRNA + 1 b3886_mRNA + 1 b3887_mRNA + 1 b3888_mRNA + 3 h	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
TU0-14070_cleavage_cplx	Cleavage complex formation of TU0-14070_mRNA (, no_common_name_1767) , 7 nt short (b3886), 4 nt short (b3887), 4 nt short (b3888)	1 RNase_III_dim + 1 TU0-14070_mRNA <==> 1 TU0-14070_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
TU0-14100_DNA_act_bind	TU0-14100_DNA binding of activator	1 TU0-14100_DNA_neu --> 1 TU0-14100_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.84E+02	183.6469	0	1.51E+00	1.51
TU0-14118_DNA_act_bind	TU0-14118_DNA binding of activator	1 TU0-14118_DNA_neu --> 1 TU0-14118_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.32E+02	1.32E+02	0	2.33E+02	232.9735	0	1.80E-01	0.18
TU0-14151_DNA_act_bind	TU0-14151_DNA binding of activator	1 TU0-14151_DNA_neu --> 1 TU0-14151_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.40E+02	2.40E+02	0	4.24E+02	423.9067	0	1.42E-01	0.142
TU0-14215_DNA_act_bind	TU0-14215_DNA binding of activator	1 TU0-14215_DNA_neu --> 1 TU0-14215_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.17E+02	1.17E+02	0	2.07E+02	207.2779	0	3.37E-01	0.337
TU0-14216_DNA_act_bind	TU0-14216_DNA binding of activator	1 TU0-14216_DNA_neu --> 1 TU0-14216_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
TU0-14216_cleavage	Cleavage of TU0-14216_mRNA , 32 nt short (b4373)	1 TU0-14216_mRNA_cleav_cplx + 16 h2o --> 1 RNase_III_dim_inact + 6 amp + 1 b4372_mRNA + 1 b4373_mRNA + 1 b4374_mRNA + 1 cmp + 4 gmp + 16 h + 3 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
TU0-14216_cleavage_cplx	Cleavage complex formation of TU0-14216_mRNA (, no_common_name_1620) , 32 nt short (b4373)	1 RNase_III_dim + 1 TU0-14216_mRNA <==> 1 TU0-14216_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
TU0-14217_DNA_act_bind	TU0-14217_DNA binding of activator	1 TU0-14217_DNA_neu --> 1 TU0-14217_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	7.77E+01	7.77E+01	0	1.37E+02	137.1766	0	3.08E-01	0.308
TU0-14252_DNA_act_bind	TU0-14252_DNA binding of activator	1 TU0-14252_DNA_neu --> 1 TU0-14252_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	3.08E-01	0.308
TU0-1881_DNA_act_bind	TU0-1881_DNA binding of activator	1 TU0-1881_DNA_neu --> 1 TU0-1881_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
TU0-1881_cleavage	Cleavage of TU0-1881_mRNA	1 TU0-1881_mRNA_cleav_cplx + 157 h2o --> 1 RNase_III_dim_inact + 45 amp + 1 b2528_mRNA + 1 b2529_mRNA + 1 b2530_mRNA + 1 b2531_mRNA + 26 cmp + 41 gmp + 157 h + 42 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
TU0-1881_cleavage_cplx	Cleavage complex formation of TU0-1881_mRNA (iscRp, no_common_name_1548)	1 RNase_III_dim + 1 TU0-1881_mRNA <==> 1 TU0-1881_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
TU0-1_DNA_act_bind	TU0-1_DNA binding of activator	1 TU0-1_DNA_neu --> 1 TU0-1_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
TU0-1_cleavage	Cleavage of TU0-1_mRNA	1 TU0-1_mRNA_cleav_cplx + 178 h2o --> 1 RNase_III_dim_inact + 56 amp + 1 b1089_v2_mRNA + 1 b1090_v1_mRNA + 1 b1091_v2_mRNA + 1 b1092_v3_mRNA + 1 b1093_v4_mRNA + 39 cmp + 49 gmp + 178 h + 30 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
TU0-1_cleavage_cplx	Cleavage complex formation of TU0-1_mRNA (rpmFp, no_common_name_3093)	1 RNase_III_dim + 1 TU0-1_mRNA <==> 1 TU0-1_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
TU0-2081_DNA_act_bind	TU0-2081_DNA binding of activator	1 TU0-2081_DNA_neu --> 1 TU0-2081_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
TU0-2082_DNA_act_bind	TU0-2082_DNA binding of activator	1 TU0-2082_DNA_neu --> 1 TU0-2082_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
TU0-2101_DNA_act_bind	TU0-2101_DNA binding of activator	1 TU0-2101_DNA_neu --> 1 TU0-2101_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.24E+01	5.24E+01	0	9.26E+01	92.57733	0	2.07E-01	0.207
TU0-2101_cleavage	Cleavage of TU0-2101_mRNA , 17 nt short (b0851)	1 TU0-2101_mRNA_cleav_cplx + 150 h2o --> 1 RNase_III_dim_inact + 33 amp + 1 b0850_mRNA + 1 b0851_mRNA + 1 b0852_v1_mRNA + 1 b0853_v1_mRNA + 31 cmp + 39 gmp + 150 h + 44 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	5.24E+01	5.24E+01	0	9.26E+01	92.57733	0	2.07E-01	0.207
TU0-2101_cleavage_cplx	Cleavage complex formation of TU0-2101_mRNA (ybjCp, no_common_name_1535) , 17 nt short (b0851)	1 RNase_III_dim + 1 TU0-2101_mRNA <==> 1 TU0-2101_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	5.24E+01	5.24E+01	0	9.26E+01	92.57733	0	2.07E-01	0.207
TU0-2121_DNA_act_bind	TU0-2121_DNA binding of activator	1 TU0-2121_DNA_neu --> 1 TU0-2121_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.07E-01	0.207
TU0-2121_cleavage	Cleavage of TU0-2121_mRNA	1 TU0-2121_mRNA_cleav_cplx + 88 h2o --> 1 RNase_III_dim_inact + 19 amp + 1 b0852_mRNA + 1 b0853_mRNA + 17 cmp + 19 gmp + 8 h + 32 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.07E-01	0.207
TU0-2121_cleavage_cplx	Cleavage complex formation of TU0-2121_mRNA (rimKp, no_common_name_1534)	1 RNase_III_dim + 1 TU0-2121_mRNA <==> 1 TU0-2121_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.07E-01	0.207
TU0-3304_DNA_act_bind	TU0-3304_DNA binding of activator	1 TU0-3304_DNA_neu --> 1 TU0-3304_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.73E+02	2.73E+02	0	4.82E+02	481.8769	0	6.22E-01	0.622
TU0-3305_DNA_act_bind	TU0-3305_DNA binding of activator	1 TU0-3305_DNA_neu --> 1 TU0-3305_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.73E+02	2.73E+02	0	4.82E+02	481.8769	0	6.22E-01	0.622
TU0-3364_DNA_act_bind	TU0-3364_DNA binding of activator	1 TU0-3364_DNA_neu --> 1 TU0-3364_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
TU0-3364_cutting	Cutting of stable TU0-3364_RNA	1 TU0-3364_RNA_cut_cplx + 460 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 145 amp + 1 b3968_RNA + 1 b3969_RNA + 1 b3970_RNA + 1 b3971_RNA + 83 cmp + 106 gmp + 460 h + 1 ppi + 122 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
TU0-3364_cutting_cplx	Cutting complex formation of stable TU0-3364_RNA (rrsBp2, no_common_name_1483)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU0-3364_RNA <==> 1 TU0-3364_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
TU0-3561_DNA_act_bind	TU0-3561_DNA binding of activator	1 TU0-3561_DNA_neu --> 1 TU0-3561_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
TU0-3561_trimming	Cutting of stable TU0-3561_RNA	1 TU0-3561_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b1984_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
TU0-3561_trimming_cplx	Cutting complex formation of stable TU0-3561_RNA (asnWp, no_common_name_1467)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU0-3561_RNA <==> 1 TU0-3561_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
TU0-3901_DNA_act_bind	TU0-3901_DNA binding of activator	1 TU0-3901_DNA_neu --> 1 TU0-3901_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	3.10E+00	3.1
TU0-4925_DNA_act_bind	TU0-4925_DNA binding of activator	1 TU0-4925_DNA_neu --> 1 TU0-4925_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.84E+02	183.6469	0	1.51E+00	1.51
TU0-5003_DNA_act_bind	TU0-5003_DNA binding of activator	1 TU0-5003_DNA_neu --> 1 TU0-5003_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.32E+02	5.32E+02	0	9.40E+02	939.6599	0	6.22E-01	0.622
TU0-5121_DNA_act_bind	TU0-5121_DNA binding of activator	1 TU0-5121_DNA_neu --> 1 TU0-5121_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.82E+01	3.82E+01	0	6.74E+01	67.35913	0	7.58E-01	0.758
TU0-5121_cleavage	Cleavage of TU0-5121_mRNA	1 TU0-5121_mRNA_cleav_cplx + 71 h2o --> 1 RNase_III_dim_inact + 21 amp + 1 b3339_v1_mRNA + 1 b3340_v1_mRNA + 16 cmp + 18 gmp + 71 h + 15 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.82E+01	3.82E+01	0	6.74E+01	67.35913	0	7.58E-01	0.758
TU0-5121_cleavage_cplx	Cleavage complex formation of TU0-5121_mRNA (fusAp, no_common_name_1357)	1 RNase_III_dim + 1 TU0-5121_mRNA <==> 1 TU0-5121_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.82E+01	3.82E+01	0	6.74E+01	67.35913	0	7.58E-01	0.758
TU0-5182_DNA_act_bind	TU0-5182_DNA binding of activator	1 TU0-5182_DNA_neu --> 1 TU0-5182_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.50E+01	3.50E+01	0	6.18E+01	61.81973	0	9.45E-02	0.0945
TU0-5182_cleavage	Cleavage of TU0-5182_mRNA , 1 nt short (b2318_v1)	1 TU0-5182_mRNA_cleav_cplx + 150 h2o --> 1 RNase_III_dim_inact + 41 amp + 1 b2317_v1_mRNA + 1 b2318_v1_mRNA + 1 b2319_v1_mRNA + 1 b2320_mRNA + 33 cmp + 34 gmp + 150 h + 3 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.50E+01	3.50E+01	0	6.18E+01	61.81973	0	9.45E-02	0.0945

TU0-5182_cleavage_cplx	Cleavage complex formation of TU0-5182_mRNA (pdxBp, no_common_name_1354) , 1 nt short (b2318_v1)	1 RNase_III_dim + 1 TU0-5182_mRNA <==> 1 TU0-5182_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.50E+01	3.50E+01	0	6.18E+01	61.81973	0	9.45E-02	0.0945
TU0-5183_DNA_act_bind	TU0-5183_DNA binding of activator	1 TU0-5183_DNA_neu --> 1 TU0-5183_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945
TU0-5183_cleavage	Cleavage of TU0-5183_mRNA , 1 nt short (b2318)	1 TU0-5183_mRNA_cleav_cplx + 84 h2o --> 1 RNase_III_dim_inact + 29 amp + 1 b2317_mRNA + 1 b2318_mRNA + 1 b2319_mRNA + 16 cmp + 21 gmp + 84 h + 16 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945
TU0-5183_cleavage_cplx	Cleavage complex formation of TU0-5183_mRNA (usgp, no_common_name_1353) , 1 nt short (b2318)	1 RNase_III_dim + 1 TU0-5183_mRNA <==> 1 TU0-5183_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945
TU0-5186_DNA_act_bind	TU0-5186_DNA binding of activator	1 TU0-5186_DNA_neu --> 1 TU0-5186_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.90E+01	5.90E+01	0	1.04E+02	104.2137	0	1.68E-01	0.168
TU0-5186_cleavage	Cleavage of TU0-5186_mRNA	1 TU0-5186_mRNA_cleav_cplx + 10 h2o --> 1 RNase_III_dim_inact + 4 amp + 1 b0049_v3_mRNA + 1 b0050_v3_mRNA + 1 b0051_v3_mRNA + 1 cmp + 2 gmp + 10 h + 1 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	5.90E+01	5.90E+01	0	1.04E+02	104.2137	0	1.68E-01	0.168
TU0-5186_cleavage_cplx	Cleavage complex formation of TU0-5186_mRNA (rsmAp, no_common_name_1351)	1 RNase_III_dim + 1 TU0-5186_mRNA <==> 1 TU0-5186_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	5.90E+01	5.90E+01	0	1.04E+02	104.2137	0	1.68E-01	0.168
TU0-5201_DNA_act_bind	TU0-5201_DNA binding of activator	1 TU0-5201_DNA_neu --> 1 TU0-5201_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.90E+01	3.90E+01	0	6.89E+01	68.92371	0	1.68E-01	0.168
TU0-5201_cleavage	Cleavage of TU0-5201_mRNA , 4 nt short (b0051_v2)	1 TU0-5201_mRNA_cleav_cplx + 11 h2o --> 1 RNase_III_dim_inact + 4 amp + 1 b0049_v2_mRNA + 1 b0050_v2_mRNA + 1 b0051_v2_mRNA + 1 b0052_v2_mRNA + 1 cmp + 2 gmp + 11 h + 1 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.90E+01	3.90E+01	0	6.89E+01	68.92371	0	1.68E-01	0.168
TU0-5201_cleavage_cplx	Cleavage complex formation of TU0-5201_mRNA (pdxAp, no_common_name_1350) , 4 nt short (b0051_v2)	1 RNase_III_dim + 1 TU0-5201_mRNA <==> 1 TU0-5201_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.90E+01	3.90E+01	0	6.89E+01	68.92371	0	1.68E-01	0.168
TU0-5221_DNA_act_bind	TU0-5221_DNA binding of activator	1 TU0-5221_DNA_neu --> 1 TU0-5221_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	1.13E+02	113.4398	0	1.68E-01	0.168
TU0-5221_cleavage	Cleavage of TU0-5221_mRNA , 4 nt short (b0051_v1)	1 TU0-5221_mRNA_cleav_cplx + 1 h2o --> 1 RNase_III_dim_inact + 1 b0051_v1_mRNA + 1 b0052_v1_mRNA + 1 h	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	1.13E+02	113.4398	0	1.68E-01	0.168
TU0-5221_cleavage_cplx	Cleavage complex formation of TU0-5221_mRNA (pdxAp, no_common_name_1348) , 4 nt short (b0051_v1)	1 RNase_III_dim + 1 TU0-5221_mRNA <==> 1 TU0-5221_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	6.43E+01	6.43E+01	0	1.13E+02	113.4398	0	1.68E-01	0.168
TU0-5522_DNA_act_bind	TU0-5522_DNA binding of activator	1 TU0-5522_DNA_neu --> 1 TU0-5522_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.30E+01	6.30E+01	0	7.71E+01	77.08692	0	1.04E-01	0.104
TU0-5522_cleavage	Cleavage of TU0-5522_mRNA	1 TU0-5522_mRNA_cleav_cplx + 336 h2o --> 1 RNase_III_dim_inact + 75 amp + 1 b3635_v3_mRNA + 1 b3636_v3_mRNA + 1 b3637_v3_mRNA + 1 b3638_v1_mRNA + 81 cmp + 82 gmp + 336 h + 95 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	6.30E+01	6.30E+01	0	7.71E+01	77.08692	0	1.04E-01	0.104
TU0-5522_cleavage_cplx	Cleavage complex formation of TU0-5522_mRNA (yicRp, no_common_name_1339)	1 RNase_III_dim + 1 TU0-5522_mRNA <==> 1 TU0-5522_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	6.30E+01	6.30E+01	0	7.71E+01	77.08692	0	1.04E-01	0.104
TU0-5543_DNA_act_bind	TU0-5543_DNA binding of activator	1 TU0-5543_DNA_neu --> 1 TU0-5543_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	1.92E-01	0.192
TU0-5543_cleavage	Cleavage of TU0-5543_mRNA	1 TU0-5543_mRNA_cleav_cplx + 119 h2o --> 1 RNase_III_dim_inact + 26 amp + 1 b3635_v1_mRNA + 1 b3636_v2_mRNA + 1 b3637_v2_mRNA + 27 cmp + 24 gmp + 119 h + 40 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	1.92E-01	0.192
TU0-5543_cleavage_cplx	Cleavage complex formation of TU0-5543_mRNA (rpmBp, no_common_name_1337)	1 RNase_III_dim + 1 TU0-5543_mRNA <==> 1 TU0-5543_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	1.92E-01	0.192
TU0-5601_DNA_act_bind	TU0-5601_DNA binding of activator	1 TU0-5601_DNA_neu --> 1 TU0-5601_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	1.04E-01	0.104
TU0-5601_cleavage	Cleavage of TU0-5601_mRNA	1 TU0-5601_mRNA_cleav_cplx + 238 h2o --> 1 RNase_III_dim_inact + 58 amp + 1 b3636_v1_mRNA + 1 b3637_v1_mRNA + 1 b3638_mRNA + 56 cmp + 62 gmp + 238 h + 60 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	1.04E-01	0.104
TU0-5601_cleavage_cplx	Cleavage complex formation of TU0-5601_mRNA (yicRp, no_common_name_1329)	1 RNase_III_dim + 1 TU0-5601_mRNA <==> 1 TU0-5601_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	1.04E-01	0.104
TU0-6223_DNA_act_bind	TU0-6223_DNA binding of activator	1 TU0-6223_DNA_neu --> 1 TU0-6223_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
TU0-6223_cleavage	Cleavage of TU0-6223_mRNA , 1 nt short (b3166_v1)	1 TU0-6223_mRNA_cleav_cplx + 752 h2o --> 1 RNase_III_dim_inact + 175 amp + 1 b3164_v3_mRNA + 1 b3165_v3_mRNA + 1 b3166_v1_mRNA + 1 b3167_v1_mRNA + 1 b3168_v3_mRNA + 1 b3169_v3_mRNA + 1 b3170_v3_mRNA + 1 b3171_v4_RNA_pre + 148 cmp + 193 gmp + 752 h + 229 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
TU0-6223_cleavage_cplx	Cleavage complex formation of TU0-6223_mRNA (metYp1, no_common_name_1307) , 1 nt short (b3166_v1)	1 RNase_III_dim + 1 TU0-6223_mRNA <==> 1 TU0-6223_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
TU0-6405_DNA_act_bind	TU0-6405_DNA binding of activator	1 TU0-6405_DNA_neu --> 1 TU0-6405_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	7.43E+01	74.28142	0	4.90E-01	0.49
TU0-6409_DNA_act_bind	TU0-6409_DNA binding of activator	1 TU0-6409_DNA_neu --> 1 TU0-6409_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
TU0-6423_DNA_act_bind	TU0-6423_DNA binding of activator	1 TU0-6423_DNA_neu --> 1 TU0-6423_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.93E+02	2.93E+02	0	4.97E+02	496.5524	0	1.15E-01	0.115
TU0-6441_DNA_act_bind	TU0-6441_DNA binding of activator	1 TU0-6441_DNA_neu --> 1 TU0-6441_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.01E+01	5.01E+01	0	8.85E+01	88.508	0	5.39E-01	0.539
TU0-6504_DNA_act_bind	TU0-6504_DNA binding of activator	1 TU0-6504_DNA_neu --> 1 TU0-6504_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	7.55E+01	7.55E+01	0	1.33E+02	133.2851	0	4.14E-01	0.414
TU0-6506_DNA_act_bind	TU0-6506_DNA binding of activator	1 TU0-6506_DNA_neu --> 1 TU0-6506_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	5.99E-01	0.599
TU0-6512_DNA_act_bind	TU0-6512_DNA binding of activator	1 TU0-6512_DNA_neu --> 1 TU0-6512_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
TU0-6512_cleavage	Cleavage of TU0-6512_mRNA	1 TU0-6512_mRNA_cleav_cplx + 881 h2o --> 1 RNase_III_dim_inact + 221 amp + 1 b3983_mRNA + 1 b3984_mRNA + 1 b3985_v1_mRNA + 1 b3986_v2_mRNA + 1 b3987_v2_mRNA + 1 b3988_v2_mRNA + 201 cmp + 215 gmp + 881 h + 239 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
TU0-6512_cleavage_cplx	Cleavage complex formation of TU0-6512_mRNA (rplKp, no_common_name_1269)	1 RNase_III_dim + 1 TU0-6512_mRNA <==> 1 TU0-6512_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
TU0-6550_DNA_act_bind	TU0-6550_DNA binding of activator	1 TU0-6550_DNA_neu --> 1 TU0-6550_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
TU0-6551_DNA_act_bind	TU0-6551_DNA binding of activator	1 TU0-6551_DNA_neu --> 1 TU0-6551_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
TU0-6562_DNA_act_bind	TU0-6562_DNA binding of activator	1 TU0-6562_DNA_neu --> 1 TU0-6562_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	7.21E+01	7.21E+01	0	1.27E+02	127.2677	0	2.07E-01	0.207
TU0-6626_DNA_act_bind	TU0-6626_DNA binding of activator	1 TU0-6626_DNA_neu --> 1 TU0-6626_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
TU0-6626_cleavage	Cleavage of TU0-6626_mRNA	1 TU0-6626_mRNA_cleav_cplx + 304 h2o --> 1 RNase_III_dim_inact + 96 amp + 1 b1712_v1_mRNA + 1 b1713_mRNA + 1 b1714_mRNA + 1 b1715_v2_mRNA + 67 cmp + 82 gmp + 304 h + 56 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988

TU0-6626_cleavage_cplx	Cleavage complex formation of TU0-6626_mRNA (pheMp, no_common_name_1244)	1 RNase_III_dim + 1 TU0-6626_mRNA <==> 1 TU0-6626_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
TU0-6654_DNA_act_bind	TU0-6654_DNA binding of activator	1 TU0-6654_DNA_neu --> 1 TU0-6654_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.71E+01	5.71E+01	0	1.00E+02	100.0923	0	6.46E-01	0.646
TU0-6657_DNA_act_bind	TU0-6657_DNA binding of activator	1 TU0-6657_DNA_neu --> 1 TU0-6657_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	1.65E-01	0.165
TU0-6658_DNA_act_bind	TU0-6658_DNA binding of activator	1 TU0-6658_DNA_neu --> 1 TU0-6658_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
TU0-6660_DNA_act_bind	TU0-6660_DNA binding of activator	1 TU0-6660_DNA_neu --> 1 TU0-6660_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.03E+01	70.31333	0	4.81E-01	0.481
TU0-6660_cleavage	Cleavage of TU0-6660_mRNA	1 TU0-6660_mRNA_cleav_cplx + 178 h2o --> 1 RNase_III_dim_inact + 39 amp + 1 b3164_v1_mRNA + 1 b3165_v2_mRNA + 35 cmp + 52 gmp + 178 h + 51 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.03E+01	70.31333	0	4.81E-01	0.481
TU0-6660_cleavage_cplx	Cleavage complex formation of TU0-6660_mRNA (rpsOp, no_common_name_1226)	1 RNase_III_dim + 1 TU0-6660_mRNA <==> 1 TU0-6660_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.77E+01	4.77E+01	0	7.03E+01	70.31333	0	4.81E-01	0.481
TU0-6687_DNA_act_bind	TU0-6687_DNA binding of activator	1 TU0-6687_DNA_neu --> 1 TU0-6687_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	7.43E+01	74.28142	0	4.90E-01	0.49
TU0-6941_DNA_act_bind	TU0-6941_DNA binding of activator	1 TU0-6941_DNA_neu --> 1 TU0-6941_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
TU0-6941_cleavage	Cleavage of TU0-6941_mRNA	1 TU0-6941_mRNA_cleav_cplx + 85 h2o --> 1 RNase_III_dim_inact + 28 amp + 1 b3782_mRNA + 1 b3783_mRNA + 24 cmp + 12 gmp + 8 h + 20 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
TU0-6941_cleavage_cplx	Cleavage complex formation of TU0-6941_mRNA (rhoLp, no_common_name_1208)	1 RNase_III_dim + 1 TU0-6941_mRNA <==> 1 TU0-6941_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
TU0-7002_DNA_act_bind	TU0-7002_DNA binding of activator	1 TU0-7002_DNA_neu --> 1 TU0-7002_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.49E+01	1.49E+01	0	2.63E+01	26.30872	0	1.89E-01	0.189
TU0-7002_cleavage	Cleavage of TU0-7002_mRNA	1 TU0-7002_mRNA_cleav_cplx + 77 h2o --> 1 RNase_III_dim_inact + 18 amp + 1 b3987_v1_mRNA + 1 b3988_v1_mRNA + 22 cmp + 20 gmp + 77 h + 16 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.49E+01	1.49E+01	0	2.63E+01	26.30872	0	1.89E-01	0.189
TU0-7002_cleavage_cplx	Cleavage complex formation of TU0-7002_mRNA (rpoBp, no_common_name_1201)	1 RNase_III_dim + 1 TU0-7002_mRNA <==> 1 TU0-7002_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.49E+01	1.49E+01	0	2.63E+01	26.30872	0	1.89E-01	0.189
TU0-7141_DNA_act_bind	TU0-7141_DNA binding of activator	1 TU0-7141_DNA_neu --> 1 TU0-7141_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	8.29E+01	82.88	0	1.89E-01	0.189
TU0-7141_cleavage	Cleavage of TU0-7141_mRNA	1 TU0-7141_mRNA_cleav_cplx + 102 h2o --> 1 RNase_III_dim_inact + 24 amp + 1 b1480_mRNA + 1 b1481_mRNA + 18 cmp + 27 gmp + 102 h + 32 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	8.29E+01	82.88	0	1.89E-01	0.189
TU0-7141_cleavage_cplx	Cleavage complex formation of TU0-7141_mRNA (bdmp, no_common_name_1194)	1 RNase_III_dim + 1 TU0-7141_mRNA <==> 1 TU0-7141_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.03E+02	1.03E+02	0	8.29E+01	82.88	0	1.89E-01	0.189
TU0-7281_DNA_act_bind	TU0-7281_DNA binding of activator	1 TU0-7281_DNA_neu --> 1 TU0-7281_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
TU0-7281_cleavage	Cleavage of TU0-7281_mRNA , 4 nt short (b3280)	1 TU0-7281_mRNA_cleav_cplx + 11 h2o --> 1 RNase_III_dim_inact + 4 amp + 1 b3280_mRNA + 1 b3281_mRNA + 1 b3282_mRNA + 1 b3283_mRNA + 2 cmp + 11 h + 2 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
TU0-7281_cleavage_cplx	Cleavage complex formation of TU0-7281_mRNA (yrdDp, no_common_name_1183) , 4 nt short (b3280)	1 RNase_III_dim + 1 TU0-7281_mRNA <==> 1 TU0-7281_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
TU0-7842_DNA_act_bind	TU0-7842_DNA binding of activator	1 TU0-7842_DNA_neu --> 1 TU0-7842_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	2.92E+00	2.92
TU0-7844_DNA_act_bind	TU0-7844_DNA binding of activator	1 TU0-7844_DNA_neu --> 1 TU0-7844_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	2.92E+00	2.92
TU0-8084_DNA_act_bind	TU0-8084_DNA binding of activator	1 TU0-8084_DNA_neu --> 1 TU0-8084_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	7.08E+01	7.08E+01	0	1.25E+02	125.0102	0	1.04E-01	0.104
TU0-8281_DNA_act_bind	TU0-8281_DNA binding of activator	1 TU0-8281_DNA_neu --> 1 TU0-8281_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.28E+02	2.28E+02	0	4.03E+02	402.7114	0	3.11E-01	0.311
TU0-8464_DNA_act_bind	TU0-8464_DNA binding of activator	1 TU0-8464_DNA_neu --> 1 TU0-8464_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.61E+02	3.61E+02	0	3.32E+02	331.52	0	1.70E+00	1.7
TU0-8474_DNA_act_bind	TU0-8474_DNA binding of activator	1 TU0-8474_DNA_neu --> 1 TU0-8474_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	4.81E-01	0.481
TU0-8476_DNA_act_bind	TU0-8476_DNA binding of activator	1 TU0-8476_DNA_neu --> 1 TU0-8476_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
TU0-8476_trimming	Cutting of stable TU0-8476_RNA	1 TU0-8476_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b3171_v3_RNA + 1 + 1 ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
TU0-8476_trimming_cplx	Cutting complex formation of stable TU0-8476_RNA (metYp2, no_common_name_1038)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU0-8476_RNA <==> 1 TU0-8476_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
TU0-8477_DNA_act_bind	TU0-8477_DNA binding of activator	1 TU0-8477_DNA_neu --> 1 TU0-8477_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.76E-01	0.276
TU0-8502_DNA_act_bind	TU0-8502_DNA binding of activator	1 TU0-8502_DNA_neu --> 1 TU0-8502_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118
TU0-8502_cleavage	Cleavage of TU0-8502_mRNA	1 TU0-8502_mRNA_cleav_cplx + 219 h2o --> 1 RNase_III_dim_inact + 74 amp + 1 b4178_mRNA + 1 b4179_mRNA + 1 b4180_mRNA + 46 cmp + 49 gmp + 219 h + 48 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118
TU0-8502_cleavage_cplx	Cleavage complex formation of TU0-8502_mRNA (nsrRp, no_common_name_1013)	1 RNase_III_dim + 1 TU0-8502_mRNA <==> 1 TU0-8502_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118
TU0-8505_DNA_act_bind	TU0-8505_DNA binding of activator	1 TU0-8505_DNA_neu --> 1 TU0-8505_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.71E+02	271.0557	0	1.71E-01	0.171
TU0-8506_DNA_act_bind	TU0-8506_DNA binding of activator	1 TU0-8506_DNA_neu --> 1 TU0-8506_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	3.72E-01	0.372
TU0-8510_DNA_act_bind	TU0-8510_DNA binding of activator	1 TU0-8510_DNA_neu --> 1 TU0-8510_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.77E+02	4.77E+02	0	8.41E+02	841.4865	0	2.00E-01	0.2
TU0-8529_DNA_act_bind	TU0-8529_DNA binding of activator	1 TU0-8529_DNA_neu --> 1 TU0-8529_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	1.57E+02	157.4849	0	1.86E-01	0.186
TU0-8823_DNA_act_bind	TU0-8823_DNA binding of activator	1 TU0-8823_DNA_neu --> 1 TU0-8823_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.17E+02	117.4575	0	1.17E-01	0.117
TU0-8855_DNA_act_bind	TU0-8855_DNA binding of activator	1 TU0-8855_DNA_neu --> 1 TU0-8855_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.02E+02	1.02E+02	0	8.29E+01	82.88	0	9.88E-02	0.0988
TU0-8855_cleavage	Cleavage of TU0-8855_mRNA	1 TU0-8855_mRNA_cleav_cplx + 123 h2o --> 1 RNase_III_dim_inact + 36 amp + 1 b1715_v1_mRNA + 1 b1716_v1_mRNA + 28 cmp + 24 gmp + 123 h + 34 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.02E+02	1.02E+02	0	8.29E+01	82.88	0	9.88E-02	0.0988
TU0-8855_cleavage_cplx	Cleavage complex formation of TU0-8855_mRNA (rplTp, no_common_name_685)	1 RNase_III_dim + 1 TU0-8855_mRNA <==> 1 TU0-8855_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.02E+02	1.02E+02	0	8.29E+01	82.88	0	9.88E-02	0.0988
TU0-8862_DNA_act_bind	TU0-8862_DNA binding of activator	1 TU0-8862_DNA_neu --> 1 TU0-8862_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	2.30E+02	230.1208	0	1.89E-01	0.189
TU0-8864_DNA_act_bind	TU0-8864_DNA binding of activator	1 TU0-8864_DNA_neu --> 1 TU0-8864_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.46E+01	4.46E+01	0	7.87E+01	78.74245	0	1.04E-01	0.104
TU0-8864_cleavage	Cleavage of TU0-8864_mRNA	1 TU0-8864_mRNA_cleav_cplx + 188 h2o --> 1 RNase_III_dim_inact + 49 amp + 1 b1636_v1_mRNA + 1 b1637_v1_mRNA + 1 b1638_mRNA + 35 cmp + 45 gmp + 188 h + 57 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.46E+01	4.46E+01	0	7.87E+01	78.74245	0	1.04E-01	0.104
TU0-8864_cleavage_cplx	Cleavage complex formation of TU0-8864_mRNA (pdxHp, no_common_name_681)	1 RNase_III_dim + 1 TU0-8864_mRNA <==> 1 TU0-8864_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.46E+01	4.46E+01	0	7.87E+01	78.74245	0	1.04E-01	0.104
TU0-8865_DNA_act_bind	TU0-8865_DNA binding of activator	1 TU0-8865_DNA_neu --> 1 TU0-8865_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.09E+01	6.09E+01	0	1.08E+02	107.5946	0	2.24E-01	0.224

TU0-8865_cleavage	Cleavage of TU0-8865_mRNA	1 TU0-8865_mRNA_cleav_cplx + 59 h2o --> 1 RNase_III_dim_inact + 17 amp + 1 b1636_mRNA + 1 b1637_mRNA + 10 cmp + 17 gmp + 5 h + 14 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	6.09E+01	6.09E+01	0	1.08E+02	107.5946	0	2.24E-01	0.224
TU0-8865_cleavage_cplx	Cleavage complex formation of TU0-8865_mRNA (tyrSp, no_common_name_680)	1 RNase_III_dim + 1 TU0-8865_mRNA <==> 1 TU0-8865_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	6.09E+01	6.09E+01	0	1.08E+02	107.5946	0	2.24E-01	0.224
TU00021_DNA_act_bind	TU00021_DNA binding of activator	1 TU00021_DNA_neu --> 1 TU00021_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	1.28E-01	0.128
TU00021_cleavage	Cleavage of TU00021_mRNA	1 TU00021_mRNA_cleav_cplx + 26 h2o --> 1 RNase_III_dim_inact + 13 amp + 1 b3260_mRNA + 1 b3261_mRNA + 4 cmp + 5 gmp + 26 h + 3 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	1.28E-01	0.128
TU00021_cleavage_cplx	Cleavage complex formation of TU00021_mRNA (dusBp, no_common_name_644)	1 RNase_III_dim + 1 TU00021_mRNA <==> 1 TU00021_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	1.28E-01	0.128
TU00083_DNA_act_bind	TU00083_DNA binding of activator	1 TU00083_DNA_neu --> 1 TU00083_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
TU00084_DNA_act_bind	TU00084_DNA binding of activator	1 TU00084_DNA_neu --> 1 TU00084_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
TU00221_DNA_act_bind	TU00221_DNA binding of activator	1 TU00221_DNA_neu --> 1 TU00221_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.39E+01	9.39E+01	0	1.66E+02	165.8223	0	2.07E-01	0.207
TU00236_DNA_act_bind	TU00236_DNA binding of activator	1 TU00236_DNA_neu --> 1 TU00236_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
TU00236_cleavage	Cleavage of TU00236_mRNA , 29 nt short (b4168_v2), 8 nt short (b4171_v2)	1 TU00236_mRNA_cleav_cplx + 282 h2o --> 1 RNase_III_dim_inact + 78 amp + 1 b4167_v2_mRNA + 1 b4168_v2_mRNA + 1 b4169_v2_mRNA + 1 b4170_v2_mRNA + 1 b4171_v2_mRNA + 1 b4172_v2_mRNA + 1 b4173_v2_mRNA + 1 b4174_v2_mRNA + 1 b4175_v2_mRNA + 54 cmp + 77 gmp + 282 h + 65 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
TU00236_cleavage_cplx	Cleavage complex formation of TU00236_mRNA (yjeFp1, no_common_name_432) , 29 nt short (b4168_v2), 8 nt short (b4171_v2)	1 RNase_III_dim + 1 TU00236_mRNA <==> 1 TU00236_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
TU00258_DNA_act_bind	TU00258_DNA binding of activator	1 TU00258_DNA_neu --> 1 TU00258_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.07E+01	9.07E+01	0	1.60E+02	160.1693	0	2.84E-01	0.284
TU00258_cleavage	Cleavage of TU00258_mRNA	1 TU00258_mRNA_cleav_cplx + 15 h2o --> 1 RNase_III_dim_inact + 7 amp + 1 b3287_mRNA + 1 b3288_mRNA + 2 cmp + 3 gmp + 15 h + 2 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	9.07E+01	9.07E+01	0	1.60E+02	160.1693	0	2.84E-01	0.284
TU00258_cleavage_cplx	Cleavage complex formation of TU00258_mRNA (defp, no_common_name_410)	1 RNase_III_dim + 1 TU00258_mRNA <==> 1 TU00258_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	9.07E+01	9.07E+01	0	1.60E+02	160.1693	0	2.84E-01	0.284
TU00260_DNA_act_bind	TU00260_DNA binding of activator	1 TU00260_DNA_neu --> 1 TU00260_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
TU00260_cleavage	Cleavage of TU00260_mRNA	1 TU00260_mRNA_cleav_cplx + 89 h2o --> 1 RNase_III_dim_inact + 25 amp + 1 b0014_v2_mRNA + 1 b0015_v2_mRNA + 21 cmp + 21 gmp + 89 h + 21 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
TU00260_cleavage_cplx	Cleavage complex formation of TU00260_mRNA (dnaKp1, no_common_name_408)	1 RNase_III_dim + 1 TU00260_mRNA <==> 1 TU00260_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
TU00277_DNA_act_bind	TU00277_DNA binding of activator	1 TU00277_DNA_neu --> 1 TU00277_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
TU00277_cleavage	Cleavage of TU00277_mRNA	1 TU00277_mRNA_cleav_cplx + 100 h2o --> 1 RNase_III_dim_inact + 30 amp + 1 b3178_v1_mRNA + 1 b3179_v1_mRNA + 15 cmp + 25 gmp + 100 h + 29 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
TU00277_cleavage_cplx	Cleavage complex formation of TU00277_mRNA (rrmJp1, no_common_name_392)	1 RNase_III_dim + 1 TU00277_mRNA <==> 1 TU00277_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
TU00281_DNA_act_bind	TU00281_DNA binding of activator	1 TU00281_DNA_neu --> 1 TU00281_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.02E+01	4.02E+01	0	7.10E+01	71.00705	0	2.07E-01	0.207
TU00281_cleavage	Cleavage of TU00281_mRNA	1 TU00281_mRNA_cleav_cplx + 10 h2o --> 1 RNase_III_dim_inact + 1 amp + 1 b3559_mRNA + 1 b3560_mRNA + 2 cmp + 5 gmp + 10 h + 1 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.02E+01	4.02E+01	0	7.10E+01	71.00705	0	2.07E-01	0.207
TU00281_cleavage_cplx	Cleavage complex formation of TU00281_mRNA (glyQp, no_common_name_388)	1 RNase_III_dim + 1 TU00281_mRNA <==> 1 TU00281_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.02E+01	4.02E+01	0	7.10E+01	71.00705	0	2.07E-01	0.207
TU00291_DNA_act_bind	TU00291_DNA binding of activator	1 TU00291_DNA_neu --> 1 TU00291_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
TU00291_cleavage	Cleavage of TU00291_mRNA , 1 nt short (b0027)	1 TU00291_mRNA_cleav_cplx + 171 h2o --> 1 RNase_III_dim_inact + 50 amp + 1 b0025_mRNA + 1 b0026_mRNA + 1 b0027_mRNA + 1 b0028_mRNA + 1 b0029_mRNA + 44 cmp + 38 gmp + 171 h + 35 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
TU00291_cleavage_cplx	Cleavage complex formation of TU00291_mRNA (ribFp, no_common_name_379) , 1 nt short (b0027)	1 RNase_III_dim + 1 TU00291_mRNA <==> 1 TU00291_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
TU00304_DNA_act_bind	TU00304_DNA binding of activator	1 TU00304_DNA_neu --> 1 TU00304_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
TU00304_cleavage	Cleavage of TU00304_mRNA , 11 nt short (b3247), 1 nt short (b3249)	1 TU00304_mRNA_cleav_cplx + 77 h2o --> 1 RNase_III_dim_inact + 16 amp + 1 b3247_mRNA + 1 b3248_mRNA + 1 b3249_mRNA + 1 b3250_mRNA + 1 b3251_mRNA + 15 cmp + 21 gmp + 77 h + 21 um	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
TU00304_cleavage_cplx	Cleavage complex formation of TU00304_mRNA (mreBp, no_common_name_367) , 11 nt short (b3247), 1 nt short (b3249)	1 RNase_III_dim + 1 TU00304_mRNA <==> 1 TU00304_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
TU00309_DNA_act_bind	TU00309_DNA binding of activator	1 TU00309_DNA_neu --> 1 TU00309_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
TU00309_cleavage	Cleavage of TU00309_mRNA	1 TU00309_mRNA_cleav_cplx + 63 h2o --> 1 RNase_III_dim_inact + 13 amp + 1 b2741_v2_mRNA + 1 b2742_v1_mRNA + 15 cmp + 19 gmp + 63 h + 15 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
TU00309_cleavage_cplx	Cleavage complex formation of TU00309_mRNA (nlpDp1, no_common_name_362)	1 RNase_III_dim + 1 TU00309_mRNA <==> 1 TU00309_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
TU00311_DNA_act_bind	TU00311_DNA binding of activator	1 TU00311_DNA_neu --> 1 TU00311_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
TU00311_cleavage	Cleavage of TU00311_mRNA	1 TU00311_mRNA_cleav_cplx + 53 h2o --> 1 RNase_III_dim_inact + 17 amp + 1 b3168_v2_mRNA + 1 b3169_v2_mRNA + 1 b3170_v2_mRNA + 9 cmp + 17 gmp + 53 h + 8 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
TU00311_cleavage_cplx	Cleavage complex formation of TU00311_mRNA (yhbCp, no_common_name_360)	1 RNase_III_dim + 1 TU00311_mRNA <==> 1 TU00311_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
TU00314_DNA_act_bind	TU00314_DNA binding of activator	1 TU00314_DNA_neu --> 1 TU00314_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196
TU00314_cleavage	Cleavage of TU00314_mRNA , 11 nt short (b3258)	1 TU00314_mRNA_cleav_cplx + 13 h2o --> 1 RNase_III_dim_inact + 2 amp + 1 b3257_mRNA + 1 b3258_mRNA + 1 b3259_mRNA + 2 cmp + 3 gmp + 13 h + 4 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196
TU00314_cleavage_cplx	Cleavage complex formation of TU00314_mRNA (yhdTp, no_common_name_357) , 11 nt short (b3258)	1 RNase_III_dim + 1 TU00314_mRNA <==> 1 TU00314_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196
TU00324_DNA_act_bind	TU00324_DNA binding of activator	1 TU00324_DNA_neu --> 1 TU00324_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.70E+01	4.70E+01	0	8.30E+01	83.03328	0	2.91E-01	0.291

TU00324_cleavage	Cleavage of TU00324_mRNA	1 TU00324_mRNA_cleav_cplx + 10 h2o --> 1 RNase_III_dim_inact + 4 amp + 1 b2890_mRNA + 1 b2891_mRNA + 3 cmp + 2 gmp + 10 h	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.70E+01	4.70E+01	0	8.30E+01	83.03328	0	2.91E-01	0.291
TU00324_cleavage_cplx	Cleavage complex formation of TU00324_mRNA (prfBp, no_common_name_349)	1 RNase_III_dim + 1 TU00324_mRNA <==> 1 TU00324_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.70E+01	4.70E+01	0	8.30E+01	83.03328	0	2.91E-01	0.291
TU00332_DNA_act_bind	TU00332_DNA binding of activator	1 TU00332_DNA_neu --> 1 TU00332_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	8.19E+01	8.19E+01	0	1.45E+02	144.5631	0	1.35E-01	0.135
TU00332_cleavage	Cleavage of TU00332_mRNA , 4 nt short (b2566_v1)	1 TU00332_mRNA_cleav_cplx + 1 h2o --> 1 RNase_III_dim_inact + b2566_v1_mRNA + 1 b2567_v1_mRNA + 1 h	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	8.19E+01	8.19E+01	0	1.45E+02	144.5631	0	1.35E-01	0.135
TU00332_cleavage_cplx	Cleavage complex formation of TU00332_mRNA (rncp, no_common_name_342) , 4 nt short (b2566_v1)	1 RNase_III_dim + 1 TU00332_mRNA <==> 1 TU00332_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	8.19E+01	8.19E+01	0	1.45E+02	144.5631	0	1.35E-01	0.135
TU00333_DNA_act_bind	TU00333_DNA binding of activator	1 TU00333_DNA_neu --> 1 TU00333_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	3.79E+01	37.86407	0	1.71E-01	0.171
TU00333_cleavage	Cleavage of TU00333_mRNA	1 TU00333_mRNA_cleav_cplx + 93 h2o --> 1 RNase_III_dim_inact + 24 amp + 1 b1652_mRNA + 1 b1653_mRNA + 20 cmp + 23 gmp + 9 h + 25 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	3.79E+01	37.86407	0	1.71E-01	0.171
TU00333_cleavage_cplx	Cleavage complex formation of TU00333_mRNA (rntp, no_common_name_341)	1 RNase_III_dim + 1 TU00333_mRNA <==> 1 TU00333_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.14E+01	2.14E+01	0	3.79E+01	37.86407	0	1.71E-01	0.171
TU00335_DNA_act_bind	TU00335_DNA binding of activator	1 TU00335_DNA_neu --> 1 TU00335_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.32E+01	1.32E+01	0	2.33E+01	23.27811	0	1.89E-01	0.189
TU00335_cleavage	Cleavage of TU00335_mRNA	1 TU00335_mRNA_cleav_cplx + 464 h2o --> 1 RNase_III_dim_inact + 113 amp + 1 b3985_mRNA + 1 b3986_mRNA + 1 b3987_mRNA + 1 b3988_mRNA + 109 cmp + 107 gmp + 464 h + 132 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.32E+01	1.32E+01	0	2.33E+01	23.27811	0	1.89E-01	0.189
TU00335_cleavage_cplx	Cleavage complex formation of TU00335_mRNA (rplJp, no_common_name_339)	1 RNase_III_dim + 1 TU00335_mRNA <==> 1 TU00335_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.32E+01	1.32E+01	0	2.33E+01	23.27811	0	1.89E-01	0.189
TU00336_DNA_act_bind	TU00336_DNA binding of activator	1 TU00336_DNA_neu --> 1 TU00336_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.48E+01	9.48E+01	0	8.29E+01	82.88	0	4.68E-01	0.468
TU00336_cleavage	Cleavage of TU00336_mRNA	1 TU00336_mRNA_cleav_cplx + 16 h2o --> 1 RNase_III_dim_inact + 4 amp + 1 b3230_mRNA + 1 b3231_mRNA + 2 cmp + 5 gmp + 16 h + 4 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	9.48E+01	9.48E+01	0	8.29E+01	82.88	0	4.68E-01	0.468
TU00336_cleavage_cplx	Cleavage complex formation of TU00336_mRNA (rplMp, no_common_name_338)	1 RNase_III_dim + 1 TU00336_mRNA <==> 1 TU00336_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	9.48E+01	9.48E+01	0	8.29E+01	82.88	0	4.68E-01	0.468
TU00337_DNA_act_bind	TU00337_DNA binding of activator	1 TU00337_DNA_neu --> 1 TU00337_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
TU00337_cleavage	Cleavage of TU00337_mRNA	1 TU00337_mRNA_cleav_cplx + 161 h2o --> 1 RNase_III_dim_inact + 49 amp + 1 b3299_mRNA + 1 b3300_mRNA + 1 b3301_mRNA + 1 b3302_mRNA + 1 b3303_mRNA + 1 b3304_mRNA + 1 b3305_mRNA + 1 b3306_mRNA + 1 b3307_mRNA + 1 b3308_mRNA + 1 b3309_mRNA + 1 b3310_mRNA + 21 cmp + 50 gmp + 161 h + 30 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
TU00337_cleavage_cplx	Cleavage complex formation of TU00337_mRNA (rplNp, no_common_name_337)	1 RNase_III_dim + 1 TU00337_mRNA <==> 1 TU00337_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
TU00338_DNA_act_bind	TU00338_DNA binding of activator	1 TU00338_DNA_neu --> 1 TU00338_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.01E+02	1.01E+02	0	8.29E+01	82.88	0	5.39E-01	0.539
TU00338_cleavage	Cleavage of TU00338_mRNA	1 TU00338_mRNA_cleav_cplx + 21 h2o --> 1 RNase_III_dim_inact + 7 amp + 1 b3185_mRNA + 1 b3186_mRNA + 3 cmp + 6 gmp + 21 h + 4 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.01E+02	1.01E+02	0	8.29E+01	82.88	0	5.39E-01	0.539
TU00338_cleavage_cplx	Cleavage complex formation of TU00338_mRNA (rplUp, no_common_name_336)	1 RNase_III_dim + 1 TU00338_mRNA <==> 1 TU00338_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.01E+02	1.01E+02	0	8.29E+01	82.88	0	5.39E-01	0.539
TU00339_DNA_act_bind	TU00339_DNA binding of activator	1 TU00339_DNA_neu --> 1 TU00339_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.41E-01	0.641
TU00339_cleavage	Cleavage of TU00339_mRNA	1 TU00339_mRNA_cleav_cplx + 21 h2o --> 1 RNase_III_dim_inact + 9 amp + 1 b3636_mRNA + 1 b3637_mRNA + 2 cmp + 4 gmp + 21 h + 5 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.41E-01	0.641
TU00339_cleavage_cplx	Cleavage complex formation of TU00339_mRNA (rpmBp, no_common_name_335)	1 RNase_III_dim + 1 TU00339_mRNA <==> 1 TU00339_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.41E-01	0.641
TU00340_DNA_act_bind	TU00340_DNA binding of activator	1 TU00340_DNA_neu --> 1 TU00340_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
TU00340_cleavage	Cleavage of TU00340_mRNA	1 TU00340_mRNA_cleav_cplx + 17 h2o --> 1 RNase_III_dim_inact + 6 amp + 1 b3703_v2_mRNA + 1 b3704_v2_mRNA + 5 cmp + 2 gmp + 17 h + 3 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
TU00340_cleavage_cplx	Cleavage complex formation of TU00340_mRNA (rpmHp1, no_common_name_334)	1 RNase_III_dim + 1 TU00340_mRNA <==> 1 TU00340_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
TU00342_DNA_act_bind	TU00342_DNA binding of activator	1 TU00342_DNA_neu --> 1 TU00342_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
TU00342_cleavage	Cleavage of TU00342_mRNA , 4 nt short (b2570_v2), 1 nt short (b2571_v2)	1 TU00342_mRNA_cleav_cplx + 35 h2o --> 1 RNase_III_dim_inact + 9 amp + 1 b2570_v2_mRNA + 1 b2571_v2_mRNA + 1 b2572_v2_mRNA + 1 b2573_v1_mRNA + 4 cmp + 12 gmp + 35 h + 1 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
TU00342_cleavage_cplx	Cleavage complex formation of TU00342_mRNA (rpoEp2, no_common_name_333) , 4 nt short (b2570_v2), 1 nt short (b2571_v2)	1 RNase_III_dim + 1 TU00342_mRNA <==> 1 TU00342_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
TU00343_DNA_act_bind	TU00343_DNA binding of activator	1 TU00343_DNA_neu --> 1 TU00343_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	8.36E+01	8.36E+01	0	1.48E+02	147.5906	0	2.07E-01	0.207
TU00344_DNA_act_bind	TU00344_DNA binding of activator	1 TU00344_DNA_neu --> 1 TU00344_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
TU00344_cleavage	Cleavage of TU00344_mRNA	1 TU00344_mRNA_cleav_cplx + 32 h2o --> 1 RNase_III_dim_inact + 4 amp + 1 b3649_mRNA + 1 b3650_mRNA + 1 b3651_mRNA + 1 b3652_mRNA + 9 cmp + 8 gmp + 32 h + 8 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
TU00344_cleavage_cplx	Cleavage complex formation of TU00344_mRNA (rpoZp, no_common_name_331)	1 RNase_III_dim + 1 TU00344_mRNA <==> 1 TU00344_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
TU00345_DNA_act_bind	TU00345_DNA binding of activator	1 TU00345_DNA_neu --> 1 TU00345_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	7.50E+01	7.50E+01	0	8.09E+01	80.94127	0	5.18E-01	0.518
TU00345_cleavage	Cleavage of TU00345_mRNA	1 TU00345_mRNA_cleav_cplx + 258 h2o --> 1 RNase_III_dim_inact + 67 amp + 1 b0169_mRNA + 1 b0170_mRNA + 56 cmp + 73 gmp + 258 h + 61 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	7.50E+01	7.50E+01	0	8.09E+01	80.94127	0	5.18E-01	0.518
TU00345_cleavage_cplx	Cleavage complex formation of TU00345_mRNA (rpsBp, no_common_name_330)	1 RNase_III_dim + 1 TU00345_mRNA <==> 1 TU00345_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	7.50E+01	7.50E+01	0	8.09E+01	80.94127	0	5.18E-01	0.518
TU00346_DNA_act_bind	TU00346_DNA binding of activator	1 TU00346_DNA_neu --> 1 TU00346_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
TU00346_cleavage	Cleavage of TU00346_mRNA	1 TU00346_mRNA_cleav_cplx + 54 h2o --> 1 RNase_III_dim_inact + 13 amp + 1 b4200_mRNA + 1 b4201_mRNA + 1 b4202_mRNA + 1 b4203_mRNA + 10 cmp + 12 gmp + 54 h + 16 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
TU00346_cleavage_cplx	Cleavage complex formation of TU00346_mRNA (rpsFp, no_common_name_329)	1 RNase_III_dim + 1 TU00346_mRNA <==> 1 TU00346_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289

TU00347_DNA_act_bind	TU00347_DNA binding of activator	1 TU00347_DNA_neu --> 1 TU00347_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
TU00347_cleavage	Cleavage of TU00347_mRNA , 1 nt short (b3311), 1 nt short (b3312), 4 nt short (b3318)	1 TU00347_mRNA_cleav_cplx + 128 h2o --> 1 RNase_III_dim_inact + 36 amp + 1 b3311_mRNA + 1 b3312_mRNA + 1 b3313_mRNA + 1 b3314_mRNA + 1 b3315_mRNA + 1 b3316_mRNA + 1 b3317_mRNA + 1 b3318_mRNA + 1 b3319_mRNA + 1 b3320_mRNA + 1 b3321_mRNA + 16 cmp + 43 gmp + 128 h + 23 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
TU00347_cleavage_cplx	Cleavage complex formation of TU00347_mRNA (rpsJp, no_common_name_328) , 1 nt short (b3311), 1 nt short (b3312), 4 nt short (b3318)	1 RNase_III_dim + 1 TU00347_mRNA <==> 1 TU00347_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
TU00348_DNA_act_bind	TU00348_DNA binding of activator	1 TU00348_DNA_neu --> 1 TU00348_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.93E+01	2.93E+01	0	5.17E+01	51.7244	0	5.67E-01	0.567
TU00348_cleavage	Cleavage of TU00348_mRNA	1 TU00348_mRNA_cleav_cplx + 196 h2o --> 1 RNase_III_dim_inact + 67 amp + 1 b3339_mRNA + 1 b3340_mRNA + 1 b3341_mRNA + 1 b3342_mRNA + 39 cmp + 40 gmp + 196 h + 47 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.93E+01	2.93E+01	0	5.17E+01	51.7244	0	5.67E-01	0.567
TU00348_cleavage_cplx	Cleavage complex formation of TU00348_mRNA (rpsLp, no_common_name_327)	1 RNase_III_dim + 1 TU00348_mRNA <==> 1 TU00348_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.93E+01	2.93E+01	0	5.17E+01	51.7244	0	5.67E-01	0.567
TU00349_DNA_act_bind	TU00349_DNA binding of activator	1 TU00349_DNA_neu --> 1 TU00349_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
TU00349_cleavage	Cleavage of TU00349_mRNA	1 TU00349_mRNA_cleav_cplx + 118 h2o --> 1 RNase_III_dim_inact + 35 amp + 1 b3294_mRNA + 1 b3295_mRNA + 1 b3296_mRNA + 1 b3297_mRNA + 1 b3298_mRNA + 18 cmp + 33 gmp + 118 h + 28 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
TU00349_cleavage_cplx	Cleavage complex formation of TU00349_mRNA (rpsMp, no_common_name_326)	1 RNase_III_dim + 1 TU00349_mRNA <==> 1 TU00349_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
TU00351_DNA_act_bind	TU00351_DNA binding of activator	1 TU00351_DNA_neu --> 1 TU00351_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
TU00351_cleavage	Cleavage of TU00351_mRNA	1 TU00351_mRNA_cleav_cplx + 92 h2o --> 1 RNase_III_dim_inact + 27 amp + 1 b2606_mRNA + 1 b2607_mRNA + 1 b2608_mRNA + 1 b2609_mRNA + 21 cmp + 22 gmp + 92 h + 19 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
TU00351_cleavage_cplx	Cleavage complex formation of TU00351_mRNA (rpsPp, no_common_name_325)	1 RNase_III_dim + 1 TU00351_mRNA <==> 1 TU00351_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
TU00352_DNA_act_bind	TU00352_DNA binding of activator	1 TU00352_DNA_neu --> 1 TU00352_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
TU00352_cleavage	Cleavage of TU00352_mRNA	1 TU00352_mRNA_cleav_cplx + 306 h2o --> 1 RNase_III_dim_inact + 78 amp + 1 b3065_v3_mRNA + 1 b3066_v2_mRNA + 1 b3067_v5_mRNA + 74 cmp + 80 gmp + 306 h + 72 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
TU00352_cleavage_cplx	Cleavage complex formation of TU00352_mRNA (rpsUp1, no_common_name_324)	1 RNase_III_dim + 1 TU00352_mRNA <==> 1 TU00352_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
TU00354_DNA_act_bind	TU00354_DNA binding of activator	1 TU00354_DNA_neu --> 1 TU00354_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	2.39E-01	0.239
TU00354_cleavage	Cleavage of TU00354_mRNA	1 TU00354_mRNA_cleav_cplx + 2 h2o --> 1 RNase_III_dim_inact + b3981_mRNA + 1 b3982_mRNA + 1 gmp + 2 h	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	2.39E-01	0.239
TU00354_cleavage_cplx	Cleavage complex formation of TU00354_mRNA (secEp, no_common_name_322)	1 RNase_III_dim + 1 TU00354_mRNA <==> 1 TU00354_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	2.39E-01	0.239
TU00355_DNA_act_bind	TU00355_DNA binding of activator	1 TU00355_DNA_neu --> 1 TU00355_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.70E+01	3.70E+01	0	1.37E+01	13.7	0	1.86E-01	0.186
TU00355_cleavage	Cleavage of TU00355_mRNA , 4 nt short (b3590)	1 TU00355_mRNA_cleav_cplx + 1 h2o --> 1 RNase_III_dim_inact + b3590_mRNA + 1 b3591_mRNA + 1 h	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.70E+01	3.70E+01	0	1.37E+01	13.7	0	1.86E-01	0.186
TU00355_cleavage_cplx	Cleavage complex formation of TU00355_mRNA (selAp, no_common_name_321) , 4 nt short (b3590)	1 RNase_III_dim + 1 TU00355_mRNA <==> 1 TU00355_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.70E+01	3.70E+01	0	1.37E+01	13.7	0	1.86E-01	0.186
TU00362_DNA_act_bind	TU00362_DNA binding of activator	1 TU00362_DNA_neu --> 1 TU00362_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.75E+01	2.75E+01	0	4.85E+01	48.51944	0	1.68E-01	0.168
TU00362_cleavage	Cleavage of TU00362_mRNA , 4 nt short (b0051), 1 nt short (b0052)	1 TU00362_mRNA_cleav_cplx + 12 h2o --> 1 RNase_III_dim_inact + 4 amp + 1 b0049_mRNA + 1 b0050_mRNA + 1 b0051_mRNA + 1 b0052_mRNA + 1 b0053_mRNA + 1 cmp + 2 gmp + 12 h + 1 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.75E+01	2.75E+01	0	4.85E+01	48.51944	0	1.68E-01	0.168
TU00362_cleavage_cplx	Cleavage complex formation of TU00362_mRNA (surAp, no_common_name_314) , 4 nt short (b0051), 1 nt short (b0052)	1 RNase_III_dim + 1 TU00362_mRNA <==> 1 TU00362_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.75E+01	2.75E+01	0	4.85E+01	48.51944	0	1.68E-01	0.168
TU00366_DNA_act_bind	TU00366_DNA binding of activator	1 TU00366_DNA_neu --> 1 TU00366_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	6.79E+01	67.90817	0	1.65E-01	0.165
TU00366_cleavage	Cleavage of TU00366_mRNA	1 TU00366_mRNA_cleav_cplx + 154 h2o --> 1 RNase_III_dim_inact + 38 amp + 1 b1716_mRNA + 1 b1717_mRNA + 1 b1718_mRNA + 1 b1719_mRNA + 26 cmp + 35 gmp + 154 h + 52 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	6.79E+01	67.90817	0	1.65E-01	0.165
TU00366_cleavage_cplx	Cleavage complex formation of TU00366_mRNA (thrSp, no_common_name_310)	1 RNase_III_dim + 1 TU00366_mRNA <==> 1 TU00366_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.35E+01	4.35E+01	0	6.79E+01	67.90817	0	1.65E-01	0.165
TU00411_DNA_act_bind	TU00411_DNA binding of activator	1 TU00411_DNA_neu --> 1 TU00411_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.64E+02	2.64E+02	0	4.66E+02	465.9471	0	2.87E-01	0.287
TU00414_DNA_act_bind	TU00414_DNA binding of activator	1 TU00414_DNA_neu --> 1 TU00414_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
TU00414_cleavage	Cleavage of TU00414_mRNA	1 TU00414_mRNA_cleav_cplx + 100 h2o --> 1 RNase_III_dim_inact + 30 amp + 1 b3178_mRNA + 1 b3179_mRNA + 15 cmp + 25 gmp + 100 h + 29 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
TU00414_cleavage_cplx	Cleavage complex formation of TU00414_mRNA (rrmJp2, no_common_name_264)	1 RNase_III_dim + 1 TU00414_mRNA <==> 1 TU00414_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
TU00415_DNA_act_bind	TU00415_DNA binding of activator	1 TU00415_DNA_neu --> 1 TU00415_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
TU00415_cleavage	Cleavage of TU00415_mRNA	1 TU00415_mRNA_cleav_cplx + 134 h2o --> 1 RNase_III_dim_inact + 43 amp + 1 b1920_v1_mRNA + 1 b1921_v1_mRNA + 1 b1922_v1_mRNA + 24 cmp + 27 gmp + 134 h + 38 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
TU00415_cleavage_cplx	Cleavage complex formation of TU00415_mRNA (fliAp1, no_common_name_263)	1 RNase_III_dim + 1 TU00415_mRNA <==> 1 TU00415_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
TU00417_DNA_act_bind	TU00417_DNA binding of activator	1 TU00417_DNA_neu --> 1 TU00417_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
TU00417_cleavage	Cleavage of TU00417_mRNA	1 TU00417_mRNA_cleav_cplx + 89 h2o --> 1 RNase_III_dim_inact + 25 amp + 1 b0014_v1_mRNA + 1 b0015_v1_mRNA + 21 cmp + 21 gmp + 89 h + 21 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
TU00417_cleavage_cplx	Cleavage complex formation of TU00417_mRNA (dnaKp2, no_common_name_261)	1 RNase_III_dim + 1 TU00417_mRNA <==> 1 TU00417_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
TU00418_DNA_act_bind	TU00418_DNA binding of activator	1 TU00418_DNA_neu --> 1 TU00418_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431

TU00418_cleavage	Cleavage of TU00418_mRNA	1 TU00418_mRNA_cleav_cplx + 89 h2o --> 1 RNase_III_dim_inact + 25 amp + 1 b0014_mRNA + 1 b0015_mRNA + 21 cmp + 21 gmp + 8 h + 21 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
TU00418_cleavage_cplx	Cleavage complex formation of TU00418_mRNA (dnaKp3, no_common_name_260)	1 RNase_III_dim + 1 TU00418_mRNA <==> 1 TU00418_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
TU00426_DNA_act_bind	TU00426_DNA binding of activator	1 TU00426_DNA_neu --> 1 TU00426_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
TU00427_DNA_act_bind	TU00427_DNA binding of activator	1 TU00427_DNA_neu --> 1 TU00427_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
TU00429_DNA_act_bind	TU00429_DNA binding of activator	1 TU00429_DNA_neu --> 1 TU00429_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.39E+01	9.39E+01	0	1.66E+02	165.8223	0	2.07E-01	0.207
TU00430_DNA_act_bind	TU00430_DNA binding of activator	1 TU00430_DNA_neu --> 1 TU00430_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.19E+02	1.19E+02	0	2.10E+02	209.5896	0	9.79E-02	0.0979
TU00434_DNA_act_bind	TU00434_DNA binding of activator	1 TU00434_DNA_neu --> 1 TU00434_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
TU00434_cleavage	Cleavage of TU00434_mRNA	1 TU00434_mRNA_cleav_cplx + 306 h2o --> 1 RNase_III_dim_inact + 78 amp + 1 b3065_v2_mRNA + 1 b3066_v1_mRNA + 1 b3067_v4_mRNA + 74 cmp + 80 gmp + 306 h + 72 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
TU00434_cleavage_cplx	Cleavage complex formation of TU00434_mRNA (rpsUp2, no_common_name_244)	1 RNase_III_dim + 1 TU00434_mRNA <==> 1 TU00434_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
TU00435_DNA_act_bind	TU00435_DNA binding of activator	1 TU00435_DNA_neu --> 1 TU00435_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
TU00435_cleavage	Cleavage of TU00435_mRNA	1 TU00435_mRNA_cleav_cplx + 306 h2o --> 1 RNase_III_dim_inact + 78 amp + 1 b3065_v1_mRNA + 1 b3066_mRNA + 1 b3067_v3_mRNA + 74 cmp + 80 gmp + 306 h + 72 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
TU00435_cleavage_cplx	Cleavage complex formation of TU00435_mRNA (rpsUp3, no_common_name_243)	1 RNase_III_dim + 1 TU00435_mRNA <==> 1 TU00435_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
TU00436_DNA_act_bind	TU00436_DNA binding of activator	1 TU00436_DNA_neu --> 1 TU00436_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
TU00437_DNA_act_bind	TU00437_DNA binding of activator	1 TU00437_DNA_neu --> 1 TU00437_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
TU00438_DNA_act_bind	TU00438_DNA binding of activator	1 TU00438_DNA_neu --> 1 TU00438_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
TU00440_DNA_act_bind	TU00440_DNA binding of activator	1 TU00440_DNA_neu --> 1 TU00440_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
TU00440_cleavage	Cleavage of TU00440_mRNA	1 TU00440_mRNA_cleav_cplx + 63 h2o --> 1 RNase_III_dim_inact + 13 amp + 1 b2741_v1_mRNA + 1 b2742_mRNA + 15 cmp + 19 gmp + 63 h + 15 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
TU00440_cleavage_cplx	Cleavage complex formation of TU00440_mRNA (nlpDp2, no_common_name_238)	1 RNase_III_dim + 1 TU00440_mRNA <==> 1 TU00440_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
TU00442_DNA_act_bind	TU00442_DNA binding of activator	1 TU00442_DNA_neu --> 1 TU00442_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.51E+02	250.576	0	2.31E-01	0.231
TU00460_DNA_act_bind	TU00460_DNA binding of activator	1 TU00460_DNA_neu --> 1 TU00460_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
TU00460_cleavage	Cleavage of TU00460_mRNA , 4 nt short (b4292)	1 TU00460_mRNA_cleav_cplx + 1 h2o --> 1 RNase_III_dim_inact + b4292_mRNA + 1 b4293_mRNA + 1 h	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
TU00460_cleavage_cplx	Cleavage complex formation of TU00460_mRNA (feclp, no_common_name_220) , 4 nt short (b4292)	1 RNase_III_dim + 1 TU00460_mRNA <==> 1 TU00460_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
TU00471_DNA_act_bind	TU00471_DNA binding of activator	1 TU00471_DNA_neu --> 1 TU00471_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
TU00471_cleavage	Cleavage of TU00471_mRNA	1 TU00471_mRNA_cleav_cplx + 134 h2o --> 1 RNase_III_dim_inact + 43 amp + 1 b1920_mRNA + 1 b1921_mRNA + 1 b1922_mRNA + 24 cmp + 27 gmp + 134 h + 38 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
TU00471_cleavage_cplx	Cleavage complex formation of TU00471_mRNA (fliAp2, no_common_name_210)	1 RNase_III_dim + 1 TU00471_mRNA <==> 1 TU00471_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
TU00472_DNA_act_bind	TU00472_DNA binding of activator	1 TU00472_DNA_neu --> 1 TU00472_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	2.19E+00	2.19
TU00487_DNA_act_bind	TU00487_DNA binding of activator	1 TU00487_DNA_neu --> 1 TU00487_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
TU00487_cleavage	Cleavage of TU00487_mRNA , 4 nt short (b3206)	1 TU00487_mRNA_cleav_cplx + 188 h2o --> 1 RNase_III_dim_inact + 41 amp + 1 b3202_mRNA + 1 b3203_mRNA + 1 b3204_mRNA + 1 b3205_mRNA + 1 b3206_mRNA + 37 cmp + 52 gmp + 188 h + 54 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
TU00487_cleavage_cplx	Cleavage complex formation of TU00487_mRNA (rpoNp, no_common_name_194) , 4 nt short (b3206)	1 RNase_III_dim + 1 TU00487_mRNA <==> 1 TU00487_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
TU00489_DNA_act_bind	TU00489_DNA binding of activator	1 TU00489_DNA_neu --> 1 TU00489_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
TU00489_trimming	Cutting of stable TU00489_RNA	1 TU00489_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b0216_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
TU00489_trimming_cplx	Cutting complex formation of stable TU00489_RNA (aspV, no_common_name_192)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00489_RNA <==> 1 TU00489_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
TU00490_DNA_act_bind	TU00490_DNA binding of activator	1 TU00490_DNA_neu --> 1 TU00490_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
TU00490_trimming	Cutting of stable TU00490_RNA	1 TU00490_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b0244_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
TU00490_trimming_cplx	Cutting complex formation of stable TU00490_RNA (thrWp, no_common_name_191)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00490_RNA <==> 1 TU00490_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
TU00491_DNA_act_bind	TU00491_DNA binding of activator	1 TU00491_DNA_neu --> 1 TU00491_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
TU00491_trimming	Cutting of stable TU00491_RNA	1 TU00491_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b0536_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
TU00491_trimming_cplx	Cutting complex formation of stable TU00491_RNA (argUp, no_common_name_190)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00491_RNA <==> 1 TU00491_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
TU00492_DNA_act_bind	TU00492_DNA binding of activator	1 TU00492_DNA_neu --> 1 TU00492_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
TU00492_cutting	Cutting of stable TU00492_RNA	1 TU00492_RNA_cut_cplx + 140 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 41 amp + 1 b0743_RNA + 1 b0744_RNA + 1 b0745_RNA + 32 cmp + 3 gmp + 140 h + 1 ppi + 26 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
TU00492_cutting_cplx	Cutting complex formation of stable TU00492_RNA (lysTp, no_common_name_189)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU00492_RNA <==> 1 TU00492_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52

TU00493_DNA_act_bind	TU00493_DNA binding of activator	1 TU00493_DNA_neu --> 1 TU00493_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
TU00493_cutting	Cutting of stable TU00493_RNA	1 TU00493_RNA_cut_cplx + 6 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 1 b1665_RNA + 1 b1666_RNA + 2 cmp + 6 h + 1 ppi + 2 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
TU00493_cutting_cplx	Cutting complex formation of stable TU00493_RNA (valVp, no_common_name_188)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU00493_RNA <==> 1 TU00493_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
TU00494_DNA_act_bind	TU00494_DNA binding of activator	1 TU00494_DNA_neu --> 1 TU00494_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
TU00494_trimming	Cutting of stable TU00494_RNA	1 TU00494_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b2189_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
TU00494_trimming_cplx	Cutting complex formation of stable TU00494_RNA (proLp, no_common_name_187)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00494_RNA <==> 1 TU00494_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
TU00495_DNA_act_bind	TU00495_DNA binding of activator	1 TU00495_DNA_neu --> 1 TU00495_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
TU00495_cutting	Cutting of stable TU00495_RNA	1 TU00495_RNA_cut_cplx + 98 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 27 amp + 1 b2401_RNA + 1 b2402_RNA + 1 b2403_RNA + 1 b2404_RNA + 19 cmp + 18 gmp + 98 h + 1 ppi + 30 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
TU00495_cutting_cplx	Cutting complex formation of stable TU00495_RNA (valUp, no_common_name_186)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU00495_RNA <==> 1 TU00495_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
TU00496_DNA_act_bind	TU00496_DNA binding of activator	1 TU00496_DNA_neu --> 1 TU00496_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
TU00496_cutting	Cutting of stable TU00496_RNA	1 TU00496_RNA_cut_cplx + 69 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 28 amp + 1 b2814_RNA + 1 b2815_RNA + 1 b2816_RNA + 5 cmp + 16 gmp + 69 h + 1 ppi + 17 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
TU00496_cutting_cplx	Cutting complex formation of stable TU00496_RNA (metZp, no_common_name_185)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU00496_RNA <==> 1 TU00496_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
TU00497_DNA_act_bind	TU00497_DNA binding of activator	1 TU00497_DNA_neu --> 1 TU00497_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
TU00497_trimming	Cutting of stable TU00497_RNA	1 TU00497_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b1977_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
TU00497_trimming_cplx	Cutting complex formation of stable TU00497_RNA (asnTp, no_common_name_184)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00497_RNA <==> 1 TU00497_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
TU00498_DNA_act_bind	TU00498_DNA binding of activator	1 TU00498_DNA_neu --> 1 TU00498_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
TU00498_trimming	Cutting of stable TU00498_RNA	1 TU00498_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b1986_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
TU00498_trimming_cplx	Cutting complex formation of stable TU00498_RNA (asnUp, no_common_name_183)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00498_RNA <==> 1 TU00498_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
TU00499_DNA_act_bind	TU00499_DNA binding of activator	1 TU00499_DNA_neu --> 1 TU00499_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
TU00499_trimming	Cutting of stable TU00499_RNA	1 TU00499_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b1989_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
TU00499_trimming_cplx	Cutting complex formation of stable TU00499_RNA (asnVp, no_common_name_182)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00499_RNA <==> 1 TU00499_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
TU00500_DNA_act_bind	TU00500_DNA binding of activator	1 TU00500_DNA_neu --> 1 TU00500_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
TU00500_trimming	Cutting of stable TU00500_RNA	1 TU00500_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b2348_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
TU00500_trimming_cplx	Cutting complex formation of stable TU00500_RNA (argWp, no_common_name_181)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00500_RNA <==> 1 TU00500_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
TU00501_DNA_act_bind	TU00501_DNA binding of activator	1 TU00501_DNA_neu --> 1 TU00501_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
TU00501_trimming	Cutting of stable TU00501_RNA	1 TU00501_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b2967_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
TU00501_trimming_cplx	Cutting complex formation of stable TU00501_RNA (pheVp, no_common_name_180)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00501_RNA <==> 1 TU00501_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
TU00502_DNA_act_bind	TU00502_DNA binding of activator	1 TU00502_DNA_neu --> 1 TU00502_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
TU00502_trimming	Cutting of stable TU00502_RNA	1 TU00502_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b3069_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
TU00502_trimming_cplx	Cutting complex formation of stable TU00502_RNA (ileXp, no_common_name_179)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00502_RNA <==> 1 TU00502_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
TU00503_DNA_act_bind	TU00503_DNA binding of activator	1 TU00503_DNA_neu --> 1 TU00503_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
TU00503_cutting	Cutting of stable TU00503_RNA	1 TU00503_RNA_cut_cplx + 123 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 39 amp + 1 b3796_RNA + 1 b3797_RNA + 1 b3798_RNA + 1 b3799_RNA + 17 cmp + 26 gmp + 123 h + 1 ppi + 37 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
TU00503_cutting_cplx	Cutting complex formation of stable TU00503_RNA (argXp, no_common_name_178)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU00503_RNA <==> 1 TU00503_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
TU00504_DNA_act_bind	TU00504_DNA binding of activator	1 TU00504_DNA_neu --> 1 TU00504_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8

TU00504_cutting	Cutting of stable TU00504_RNA	1 TU00504_RNA_cut_cplx + 134 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 36 amp + 1 b3976_RNA + 1 b3977_RNA + 1 b3978_RNA + 1 b3979_RNA + 30 cmp + 34 gmp + 134 h + 1 ppi + 30 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
TU00504_cutting_cplx	Cutting complex formation of stable TU00504_RNA (thrUp, no_common_name_177)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m16 + 1 RNase_m23 + 1 RNase_m5 + 1 TU00504_RNA <==> 1 TU00504_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
TU00505_DNA_act_bind	TU00505_DNA binding of activator	1 TU00505_DNA_neu --> 1 TU00505_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
TU00505_cutting	Cutting of stable TU00505_RNA	1 TU00505_RNA_cut_cplx + 74 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 30 amp + 1 b4163_RNA + 1 b4164_RNA + 1 b4165_RNA + 17 cmp + 13 gmp + 74 h + 1 ppi + 11 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
TU00505_cutting_cplx	Cutting complex formation of stable TU00505_RNA (glyVp, no_common_name_176)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m16 + 1 RNase_m23 + 1 RNase_m5 + 1 TU00505_RNA <==> 1 TU00505_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
TU00506_DNA_act_bind	TU00506_DNA binding of activator	1 TU00506_DNA_neu --> 1 TU00506_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
TU00506_trimming	Cutting of stable TU00506_RNA	1 TU00506_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b4270_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
TU00506_trimming_cplx	Cutting complex formation of stable TU00506_RNA (leuXp, no_common_name_175)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00506_RNA <==> 1 TU00506_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
TU00507_DNA_act_bind	TU00507_DNA binding of activator	1 TU00507_DNA_neu --> 1 TU00507_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
TU00507_cutting	Cutting of stable TU00507_RNA	1 TU00507_RNA_cut_cplx + 172 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 46 amp + 1 b0664_RNA + 1 b0665_RNA + 1 b0666_RNA + 1 b0668_RNA + 1 b0670_RNA + 1 b0672_RNA + 1 b0673_RNA + 35 cmp + 29 gmp + 172 h + 1 ppi + 55 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
TU00507_cutting_cplx	Cutting complex formation of stable TU00507_RNA (metTp, no_common_name_174)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m16 + 1 RNase_m23 + 1 RNase_m5 + 1 TU00507_RNA <==> 1 TU00507_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
TU00508_DNA_act_bind	TU00508_DNA binding of activator	1 TU00508_DNA_neu --> 1 TU00508_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
TU00508_trimming	Cutting of stable TU00508_RNA	1 TU00508_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b0883_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
TU00508_trimming_cplx	Cutting complex formation of stable TU00508_RNA (serWp, no_common_name_173)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00508_RNA <==> 1 TU00508_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
TU00509_DNA_act_bind	TU00509_DNA binding of activator	1 TU00509_DNA_neu --> 1 TU00509_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
TU00509_trimming	Cutting of stable TU00509_RNA	1 TU00509_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b0971_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
TU00509_trimming_cplx	Cutting complex formation of stable TU00509_RNA (serTp, no_common_name_172)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00509_RNA <==> 1 TU00509_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
TU00510_DNA_act_bind	TU00510_DNA binding of activator	1 TU00510_DNA_neu --> 1 TU00510_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
TU00510_trimming	Cutting of stable TU00510_RNA	1 TU00510_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b1032_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
TU00510_trimming_cplx	Cutting complex formation of stable TU00510_RNA (serXp, no_common_name_171)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00510_RNA <==> 1 TU00510_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
TU00511_DNA_act_bind	TU00511_DNA binding of activator	1 TU00511_DNA_neu --> 1 TU00511_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
TU00511_cleavage	Cleavage of TU00511_mRNA	1 TU00511_mRNA_cleav_cplx + 266 h2o --> 1 RNase_III_dim_inact + 78 amp + 1 b1229_mRNA + 1 b1230_RNA_pre + 1 b1231_RNA_pre + 70 cmp + 58 gmp + 266 h + 58 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
TU00511_cleavage_cplx	Cleavage complex formation of TU00511_mRNA (tyrTp, no_common_name_170)	1 RNase_III_dim + 1 TU00511_mRNA <==> 1 TU00511_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
TU00512_DNA_act_bind	TU00512_DNA binding of activator	1 TU00512_DNA_neu --> 1 TU00512_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
TU00512_cutting	Cutting of stable TU00512_RNA	1 TU00512_RNA_cut_cplx + 69 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 17 amp + 1 b1909_RNA + 1 b1910_RNA + 1 b1911_RNA + 14 cmp + 17 gmp + 69 h + 1 ppi + 18 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
TU00512_cutting_cplx	Cutting complex formation of stable TU00512_RNA (glyWp, no_common_name_169)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m16 + 1 RNase_m23 + 1 RNase_m5 + 1 TU00512_RNA <==> 1 TU00512_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
TU00513_DNA_act_bind	TU00513_DNA binding of activator	1 TU00513_DNA_neu --> 1 TU00513_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
TU00513_trimming	Cutting of stable TU00513_RNA	1 TU00513_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b1975_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
TU00513_trimming_cplx	Cutting complex formation of stable TU00513_RNA (serUp, no_common_name_168)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00513_RNA <==> 1 TU00513_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
TU00514_DNA_act_bind	TU00514_DNA binding of activator	1 TU00514_DNA_neu --> 1 TU00514_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
TU00514_cutting	Cutting of stable TU00514_RNA	1 TU00514_RNA_cut_cplx + 41 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 12 amp + 1 b2396_RNA + 1 b2397_RNA + 10 cmp + 7 gmp + 41 h + 1 ppi + 10 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
TU00514_cutting_cplx	Cutting complex formation of stable TU00514_RNA (alaWp, no_common_name_167)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m16 + 1 RNase_m23 + 1 RNase_m5 + 1 TU00514_RNA <==> 1 TU00514_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8

TU00515_DNA_act_bind	TU00515_DNA binding of activator	1 TU00515_DNA_neu --> 1 TU00515_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
TU00515_cutting	Cutting of stable TU00515_RNA	1 TU00515_RNA_cut_cplx + 466 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 13 amp + 1 b2691_RNA + 1 b2692_RNA + 1 b2693_RNA + 1 b2694_RNA + 1 b2695_RNA + 98 cmp + 114 gmp + 466 h + 1 ppi + 118 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
TU00515_cutting_cplx	Cutting complex formation of stable TU00515_RNA (serVp, no_common_name_166)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU00515_RNA <==> 1 TU00515_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
TU00516_DNA_act_bind	TU00516_DNA binding of activator	1 TU00516_DNA_neu --> 1 TU00516_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
TU00516_trimming	Cutting of stable TU00516_RNA	1 TU00516_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b2864_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
TU00516_trimming_cplx	Cutting complex formation of stable TU00516_RNA (glyUp, no_common_name_165)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00516_RNA <==> 1 TU00516_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
TU00517_DNA_act_bind	TU00517_DNA binding of activator	1 TU00517_DNA_neu --> 1 TU00517_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
TU00517_cleavage	Cleavage of TU00517_mRNA	1 TU00517_mRNA_cleav_cplx + 260 h2o --> 1 RNase_III_dim_inact + 61 amp + 1 b3168_v1_mRNA + 1 b3169_v1_mRNA + 1 b3170_v1_mRNA + 1 b3171_v2_RNA_pre + 48 cmp + 67 gmp + 260 h + 81 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
TU00517_cleavage_cplx	Cleavage complex formation of TU00517_mRNA (metYp1, no_common_name_164)	1 RNase_III_dim + 1 TU00517_mRNA <==> 1 TU00517_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
TU00518_DNA_act_bind	TU00518_DNA binding of activator	1 TU00518_DNA_neu --> 1 TU00518_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
TU00518_trimming	Cutting of stable TU00518_RNA	1 TU00518_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b3174_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
TU00518_trimming_cplx	Cutting complex formation of stable TU00518_RNA (leuUp, no_common_name_163)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00518_RNA <==> 1 TU00518_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
TU00519_DNA_act_bind	TU00519_DNA binding of activator	1 TU00519_DNA_neu --> 1 TU00519_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
TU00519_trimming	Cutting of stable TU00519_RNA	1 TU00519_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b3545_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
TU00519_trimming_cplx	Cutting complex formation of stable TU00519_RNA (proKp, no_common_name_162)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00519_RNA <==> 1 TU00519_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
TU00520_DNA_act_bind	TU00520_DNA binding of activator	1 TU00520_DNA_neu --> 1 TU00520_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
TU00520_trimming	Cutting of stable TU00520_RNA	1 TU00520_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b4134_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
TU00520_trimming_cplx	Cutting complex formation of stable TU00520_RNA (pheUp, no_common_name_161)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU00520_RNA <==> 1 TU00520_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
TU00521_DNA_act_bind	TU00521_DNA binding of activator	1 TU00521_DNA_neu --> 1 TU00521_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
TU00521_cutting	Cutting of stable TU00521_RNA	1 TU00521_RNA_cut_cplx + 65 h2o --> 1 RNase_E_tetra_inact + 1 RNase_G_dim_inact + 1 RNase_Gen_inact + 1 RNase_III_dim_inact + 1 RNase_P_cplx_inact + 1 RNase_T_dim_inact + 1 RNase_m16_inact + 1 RNase_m23_inact + 1 RNase_m5_inact + 24 amp + 1 b4368_RNA + 1 b4369_RNA + 1 b4370_RNA + 11 cmp + 14 gmp + 65 h + 1 ppi + 13 ump	irreversible	RNA processing	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
TU00521_cutting_cplx	Cutting complex formation of stable TU00521_RNA (leuQp, no_common_name_160)	1 RNase_E_tetra + 1 RNase_G_dim + 1 RNase_Gen + 1 RNase_III_dim + 1 RNase_P_cplx + 1 RNase_T_dim + 1 RNase_m1 + 1 RNase_m23 + 1 RNase_m5 + 1 TU00521_RNA <==> 1 TU00521_RNA_cut_cplx	reversible	RNA processing	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
TU221_DNA_act_bind	TU221_DNA binding of activator	1 TU221_DNA_neu --> 1 TU221_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
TU281_DNA_act_bind	TU281_DNA binding of activator	1 TU281_DNA_neu --> 1 TU281_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
TU281_cleavage	Cleavage of TU281_mRNA , 4 nt short (b2570), 1 nt short (b2571)	1 TU281_mRNA_cleav_cplx + 35 h2o --> 1 RNase_III_dim_inact + 9 amp + 1 b2570_mRNA + 1 b2571_mRNA + 1 b2572_mRNA + 1 b2573_mRNA + 4 cmp + 12 gmp + 35 h + 7 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
TU281_cleavage_cplx	Cleavage complex formation of TU281_mRNA (rpoEp1, no_common_name_129) , 4 nt short (b2570), 1 nt short (b2571)	1 RNase_III_dim + 1 TU281_mRNA <==> 1 TU281_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
TU341_DNA_act_bind	TU341_DNA binding of activator	1 TU341_DNA_neu --> 1 TU341_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
TU341_cleavage	Cleavage of TU341_mRNA , 1 nt short (b3166)	1 TU341_mRNA_cleav_cplx + 752 h2o --> 1 RNase_III_dim_inact + 175 amp + 1 b3164_mRNA + 1 b3165_mRNA + 1 b3166_mRNA + 1 b3167_mRNA + 1 b3168_mRNA + 1 b3169_mRNA + 1 b3170_mRNA + 1 b3171_v1_RNA_pre + 148 cmp + 193 gmp + 752 + 229 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
TU341_cleavage_cplx	Cleavage complex formation of TU341_mRNA (metYp2, no_common_name_123) , 1 nt short (b3166)	1 RNase_III_dim + 1 TU341_mRNA <==> 1 TU341_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
TU343_DNA_act_bind	TU343_DNA binding of activator	1 TU343_DNA_neu --> 1 TU343_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
TU343_trimming	Cutting of stable TU343_RNA	1 TU343_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b3171_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
TU343_trimming_cplx	Cutting complex formation of stable TU343_RNA (metYp1, no_common_name_122)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 TU343_RNA <==> 1 TU343_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
TU361_DNA_act_bind	TU361_DNA binding of activator	1 TU361_DNA_neu --> 1 TU361_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	7.34E+01	73.37709	0	3.44E-01	0.344
TU361_cleavage	Cleavage of TU361_mRNA	1 TU361_mRNA_cleav_cplx + 111 h2o --> 1 RNase_III_dim_inact + 35 amp + 1 b0910_mRNA + 1 b0911_v2_mRNA + 26 cmp + 27 gmp + 111 h + 22 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	7.34E+01	73.37709	0	3.44E-01	0.344
TU361_cleavage_cplx	Cleavage complex formation of TU361_mRNA (cmkp, no_common_name_110)	1 RNase_III_dim + 1 TU361_mRNA <==> 1 TU361_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	5.39E+01	5.39E+01	0	7.34E+01	73.37709	0	3.44E-01	0.344
TU482_DNA_act_bind	TU482_DNA binding of activator	1 TU482_DNA_neu --> 1 TU482_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
TU482_cleavage	Cleavage of TU482_mRNA	1 TU482_mRNA_cleav_cplx + 95 h2o --> 1 RNase_III_dim_inact + 25 amp + 1 b3123_v1_RNA_pre + 1 b3124_mRNA + 1 b3125_mRNA + 1 b3126_mRNA + 1 b3127_mRNA + 28 cmp + 25 gmp + 95 h + 13 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499

TU482_cleavage_cplx	Cleavage complex formation of TU482_mRNA (garPp, no_common_name_92)	1 RNase_III_dim + 1 TU482_mRNA <==> 1 TU482_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
TU483_DNA_act_bind	TU483_DNA binding of activator	1 TU483_DNA_neu --> 1 TU483_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
TU483_cleavage	Cleavage of TU483_mRNA , 1 nt short (b2563_v1), 4 nt short (b2566)	1 TU483_mRNA_cleav_cplx + 26 h2o --> 1 RNase_III_dim_inact + 5 amp + 1 b2563_v1_mRNA + 1 b2564_v1_mRNA + 1 b2565_mRNA + 1 b2566_mRNA + 1 b2567_mRNA + 4 cmp + 7 gmp + 26 h + 6 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
TU483_cleavage_cplx	Cleavage complex formation of TU483_mRNA (rncp, no_common_name_91) , 1 nt short (b2563_v1), 4 nt short (b2566)	1 RNase_III_dim + 1 TU483_mRNA <==> 1 TU483_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
TU543_DNA_act_bind	TU543_DNA binding of activator	1 TU543_DNA_neu --> 1 TU543_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.81E+02	2.81E+02	0	1.08E+01	10.8	0	1.08E+01	10.8
TU543_cleav	Cutting of stable TU543_RNA	1 TU543_RNA_cleav_cplx + 1 h2o --> 1 RNase_III_dim_inact + 1 b3123_RNA + 1 h + 1 ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	2.81E+02	2.81E+02	0	1.08E+01	10.8	0	1.08E+01	10.8
TU543_cleav_cplx	Cutting complex formation of stable TU543_RNA (rnpBp, no_common_name_71)	1 RNase_III_dim + 1 TU543_RNA <==> 1 TU543_RNA_cleav_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	2.81E+02	2.81E+02	0	1.08E+01	10.8	0	1.08E+01	10.8
TU564_DNA_act_bind	TU564_DNA binding of activator	1 TU564_DNA_neu --> 1 TU564_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
TU564_cleavage	Cleavage of TU564_mRNA	1 TU564_mRNA_cleav_cplx + 160 h2o --> 1 RNase_III_dim_inact + 37 amp + 1 b0911_v1_mRNA + 1 b0912_v1_mRNA + 37 cmp + 37 gmp + 160 h + 48 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
TU564_cleavage_cplx	Cleavage complex formation of TU564_mRNA (rpsAp1, no_common_name_66)	1 RNase_III_dim + 1 TU564_mRNA <==> 1 TU564_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
TU565_DNA_act_bind	TU565_DNA binding of activator	1 TU565_DNA_neu --> 1 TU565_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
TU565_cleavage	Cleavage of TU565_mRNA	1 TU565_mRNA_cleav_cplx + 160 h2o --> 1 RNase_III_dim_inact + 37 amp + 1 b0911_mRNA + 1 b0912_mRNA + 37 cmp + 37 gmp + 160 h + 48 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
TU565_cleavage_cplx	Cleavage complex formation of TU565_mRNA (rpsAp3, no_common_name_65)	1 RNase_III_dim + 1 TU565_mRNA <==> 1 TU565_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
TU582_DNA_act_bind	TU582_DNA binding of activator	1 TU582_DNA_neu --> 1 TU582_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	4.90E-01	0.49
TU583_DNA_act_bind	TU583_DNA binding of activator	1 TU583_DNA_neu --> 1 TU583_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	4.90E-01	0.49
TU601_DNA_act_bind	TU601_DNA binding of activator	1 TU601_DNA_neu --> 1 TU601_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
TU601_cleavage	Cleavage of TU601_mRNA	1 TU601_mRNA_cleav_cplx + 52 h2o --> 1 RNase_III_dim_inact + 1 amp + 1 b1088_v1_mRNA + 1 b1089_v1_mRNA + 10 cmp + 17 gmp + 52 h + 13 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
TU601_cleavage_cplx	Cleavage complex formation of TU601_mRNA (yceDp1, no_common_name_56)	1 RNase_III_dim + 1 TU601_mRNA <==> 1 TU601_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
TU602_DNA_act_bind	TU602_DNA binding of activator	1 TU602_DNA_neu --> 1 TU602_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
TU602_cleavage	Cleavage of TU602_mRNA	1 TU602_mRNA_cleav_cplx + 52 h2o --> 1 RNase_III_dim_inact + 1 amp + 1 b1088_mRNA + 1 b1089_mRNA + 10 cmp + 17 gmp + 52 h + 13 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
TU602_cleavage_cplx	Cleavage complex formation of TU602_mRNA (yceDp2, no_common_name_55)	1 RNase_III_dim + 1 TU602_mRNA <==> 1 TU602_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
TU682_DNA_act_bind	TU682_DNA binding of activator	1 TU682_DNA_neu --> 1 TU682_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
TU682_cleavage	Cleavage of TU682_mRNA	1 TU682_mRNA_cleav_cplx + 17 h2o --> 1 RNase_III_dim_inact + 6 amp + 1 b3703_v1_mRNA + 1 b3704_v1_mRNA + 5 cmp + 2 gmp + 17 h + 3 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
TU682_cleavage_cplx	Cleavage complex formation of TU682_mRNA (rpmHp2, no_common_name_45)	1 RNase_III_dim + 1 TU682_mRNA <==> 1 TU682_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
TU743_DNA_act_bind	TU743_DNA binding of activator	1 TU743_DNA_neu --> 1 TU743_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
TU743_cleavage	Cleavage of TU743_mRNA	1 TU743_mRNA_cleav_cplx + 17 h2o --> 1 RNase_III_dim_inact + 6 amp + 1 b3703_mRNA + 1 b3704_mRNA + 5 cmp + 2 gmp + 17 h + ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
TU743_cleavage_cplx	Cleavage complex formation of TU743_mRNA (rpmHp3, no_common_name_35)	1 RNase_III_dim + 1 TU743_mRNA <==> 1 TU743_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
TU801_DNA_act_bind	TU801_DNA binding of activator	1 TU801_DNA_neu --> 1 TU801_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
TU801_cleavage	Cleavage of TU801_mRNA , 29 nt short (b4168_v1), 8 nt short (b4171_v1)	1 TU801_mRNA_cleav_cplx + 282 h2o --> 1 RNase_III_dim_inact + 78 amp + 1 b4167_v1_mRNA + 1 b4168_v1_mRNA + 1 b4169_v1_mRNA + 1 b4170_v1_mRNA + 1 b4171_v1_mRNA + 1 b4172_v1_mRNA + 1 b4173_v1_mRNA + 1 b4174_v1_mRNA + 1 b4175_v1_mRNA + 54 cmp + 77 gmp + 282 h + 65 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
TU801_cleavage_cplx	Cleavage complex formation of TU801_mRNA (yjeFp2, no_common_name_19) , 29 nt short (b4168_v1), 8 nt short (b4171_v1)	1 RNase_III_dim + 1 TU801_mRNA <==> 1 TU801_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
TU802_DNA_act_bind	TU802_DNA binding of activator	1 TU802_DNA_neu --> 1 TU802_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
TU802_cleavage	Cleavage of TU802_mRNA , 29 nt short (b4168), 8 nt short (b4171)	1 TU802_mRNA_cleav_cplx + 282 h2o --> 1 RNase_III_dim_inact + 78 amp + 1 b4167_mRNA + 1 b4168_mRNA + 1 b4169_mRNA + 1 b4170_mRNA + 1 b4171_mRNA + 1 b4172_mRNA + 1 b4173_mRNA + 1 b4174_mRNA + 1 b4175_mRNA + 54 cmp + 77 gmp + 282 h + 65 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
TU802_cleavage_cplx	Cleavage complex formation of TU802_mRNA (yjeFp3, no_common_name_18) , 29 nt short (b4168), 8 nt short (b4171)	1 RNase_III_dim + 1 TU802_mRNA <==> 1 TU802_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
TU870_DNA_act_bind	TU870_DNA binding of activator	1 TU870_DNA_neu --> 1 TU870_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	9.15E+01	9.15E+01	0	1.62E+02	161.5461	0	1.96E-01	0.196
TU870_cleavage	Cleavage of TU870_mRNA	1 TU870_mRNA_cleav_cplx + 23 h2o --> 1 RNase_III_dim_inact + 1 amp + 1 b0406_mRNA + 1 b0407_mRNA + 4 gmp + 23 h + 8 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	9.15E+01	9.15E+01	0	1.62E+02	161.5461	0	1.96E-01	0.196
TU870_cleavage_cplx	Cleavage complex formation of TU870_mRNA (tgtp, no_common_name_9)	1 RNase_III_dim + 1 TU870_mRNA <==> 1 TU870_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	9.15E+01	9.15E+01	0	1.62E+02	161.5461	0	1.96E-01	0.196
TU871_DNA_act_bind	TU871_DNA binding of activator	1 TU871_DNA_neu --> 1 TU871_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	3.39E-02	0.0339
TU872_DNA_act_bind	TU872_DNA binding of activator	1 TU872_DNA_neu --> 1 TU872_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
TU872_cleavage	Cleavage of TU872_mRNA , 8 nt short (b3384_v5), 8 nt short (b3385_v5)	1 TU872_mRNA_cleav_cplx + 276 h2o --> 1 RNase_III_dim_inact + 63 amp + 1 b3384_v5_mRNA + 1 b3385_v5_mRNA + 1 b3386_v5_mRNA + 1 b3387_v4_mRNA + 1 b3388_v2_mRNA + 1 b3389_v1_mRNA + 1 b3390_v1_mRNA + 52 cmp + 76 gmp + 276 h + 79 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104

TU872_cleavage_cplx	Cleavage complex formation of TU872_mRNA (aroKp1, no_common_name_7) , 8 nt short (b3384_v5), 8 nt short (b3385_v5)	1 RNase_III_dim + 1 TU872_mRNA <==> 1 TU872_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
TU873_DNA_act_bind	TU873_DNA binding of activator	1 TU873_DNA_neu --> 1 TU873_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
TU873_cleavage	Cleavage of TU873_mRNA , 8 nt short (b3384_v4), 8 nt short (b3385_v4)	1 TU873_mRNA_cleav_cplx + 276 h2o --> 1 RNase_III_dim_inact + 63 amp + 1 b3384_v4_mRNA + 1 b3385_v4_mRNA + 1 b3386_v4_mRNA + 1 b3387_v3_mRNA + 1 b3388_v1_mRNA + 1 b3389_mRNA + 1 b3390_mRNA + 52 cmp + 76 gmp + 276 h + 79 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
TU873_cleavage_cplx	Cleavage complex formation of TU873_mRNA (aroKp2, no_common_name_6) , 8 nt short (b3384_v4), 8 nt short (b3385_v4)	1 RNase_III_dim + 1 TU873_mRNA <==> 1 TU873_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
TU874_DNA_act_bind	TU874_DNA binding of activator	1 TU874_DNA_neu --> 1 TU874_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	2.71E+01	2.71E+01	0	4.78E+01	47.81984	0	1.74E-01	0.174
TU874_cleavage	Cleavage of TU874_mRNA , 8 nt short (b3384_v3), 8 nt short (b3385_v3)	1 TU874_mRNA_cleav_cplx + 127 h2o --> 1 RNase_III_dim_inact + 26 amp + 1 b3384_v3_mRNA + 1 b3385_v3_mRNA + 1 b3386_v3_mRNA + 1 b3387_v2_mRNA + 1 b3388_mRNA + 26 cmp + 38 gmp + 127 h + 33 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	2.71E+01	2.71E+01	0	4.78E+01	47.81984	0	1.74E-01	0.174
TU874_cleavage_cplx	Cleavage complex formation of TU874_mRNA (damXp, no_common_name_5) , 8 nt short (b3384_v3), 8 nt short (b3385_v3)	1 RNase_III_dim + 1 TU874_mRNA <==> 1 TU874_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	2.71E+01	2.71E+01	0	4.78E+01	47.81984	0	1.74E-01	0.174
TU875_DNA_act_bind	TU875_DNA binding of activator	1 TU875_DNA_neu --> 1 TU875_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
TU875_cleavage	Cleavage of TU875_mRNA , 8 nt short (b3384_v2), 8 nt short (b3385_v2)	1 TU875_mRNA_cleav_cplx + 20 h2o --> 1 RNase_III_dim_inact + 5 amp + 1 b3384_v2_mRNA + 1 b3385_v2_mRNA + 1 b3386_v2_mRNA + 1 b3387_v1_mRNA + 3 cmp + 6 gmp + 20 h + 3 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
TU875_cleavage_cplx	Cleavage complex formation of TU875_mRNA (damp1, no_common_name_4) , 8 nt short (b3384_v2), 8 nt short (b3385_v2)	1 RNase_III_dim + 1 TU875_mRNA <==> 1 TU875_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
TU876_DNA_act_bind	TU876_DNA binding of activator	1 TU876_DNA_neu --> 1 TU876_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
TU876_cleavage	Cleavage of TU876_mRNA , 8 nt short (b3384_v1), 8 nt short (b3385_v1)	1 TU876_mRNA_cleav_cplx + 20 h2o --> 1 RNase_III_dim_inact + 5 amp + 1 b3384_v1_mRNA + 1 b3385_v1_mRNA + 1 b3386_v1_mRNA + 1 b3387_mRNA + 3 cmp + 6 gmp + 20 h + 3 ump	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
TU876_cleavage_cplx	Cleavage complex formation of TU876_mRNA (damp2, no_common_name_3) , 8 nt short (b3384_v1), 8 nt short (b3385_v1)	1 RNase_III_dim + 1 TU876_mRNA <==> 1 TU876_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
TU877_DNA_act_bind	TU877_DNA binding of activator	1 TU877_DNA_neu --> 1 TU877_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	5.36E+01	5.36E+01	0	9.46E+01	94.59664	0	1.89E-01	0.189
TU877_cleavage	Cleavage of TU877_mRNA , 8 nt short (b3384), 8 nt short (b3385)	1 TU877_mRNA_cleav_cplx + 2 h2o --> 1 RNase_III_dim_inact + 1 b3384_mRNA + 1 b3385_mRNA + 1 b3386_mRNA + 2 h	irreversible	Cleavage polycistronic mRNA	0.00E+00	1.00E+09	0	5.36E+01	5.36E+01	0	9.46E+01	94.59664	0	1.89E-01	0.189
TU877_cleavage_cplx	Cleavage complex formation of TU877_mRNA (rpep, no_common_name_2) , 8 nt short (b3384), 8 nt short (b3385)	1 RNase_III_dim + 1 TU877_mRNA <==> 1 TU877_mRNA_cleav_cplx	reversible	Cleavage polycistronic mRNA	-1.00E+09	1.00E+09	0	5.36E+01	5.36E+01	0	9.46E+01	94.59664	0	1.89E-01	0.189
TYRt	L-tyrosine transport	1 tyr-L[e] <==> 1 tyr-L	reversible	Transport	-1.00E+09	1.00E+09	1.27E+04	1.26E+05	1.13E+05	9.39E+03	1.26E+05	116847.44	9.39E+03	1.17E+05	107184.64
TadA_DIM	Dimerization of TadA	2 TadA_mono <==> 1 TadA_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	6.05E+02	6.05E+02	0	1.03E+03	1033.666	0	4.52E+01	45.205
Tgt_TRIM	Trimerization of Tgt	3 Tgt_mono <==> 1 Tgt_trim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	7.00E+02	7.00E+02	0	1.21E+03	1213.858	0	3.06E+01	30.624
Tgt_trim_DIM	Dimerization of 2 Tgt_trim	2 Tgt_trim <==> 1 Tgt_hexa	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	3.50E+02	3.50E+02	0	6.07E+02	606.9291	0	1.53E+01	15.312
ThrS_RS_DIM	dimerization of threonyl-tRNA synthetase	2 ThrS_mono <==> 1 Thr_RS_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	9.61E+02	9.61E+02	0	1.41E+03	1412.256	0	1.59E+02	159.0075
Thr_RS_CHARGB	Threonyl-tRNA synthetase charging	1 Thr_RS_dim + 1 atp + 1 h2o + 1 thr-L --> 1 Thr_RS_thr_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	2.36E+05	2.36E+05	0	2.38E+05	237541.8	0	2.34E+05	233580.6
Thr_RS_CHARGa	Threonyl-tRNA synthetase charging	1 Thr_RS_dim + 2 atp + 2 h2o + 2 thr-L --> 1 Thr_RS_2thr_2amp + 2 h + 2 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	1.18E+05	1.18E+05	0	1.19E+05	118770.9	0	1.17E+05	116790.3
TrmD_DIM	Dimerization of TrmD	2 TrmD_mono <==> 1 TrmD_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	7.06E+02	7.06E+02	0	7.83E+02	782.5042	0	1.91E+02	191.0925
TrmE_DIM	Dimerization of TrmE	2 TrmE_mono <==> 1 TrmE_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.17E+03	1.17E+03	0	2.04E+03	2042.594	0	4.35E+01	43.459
TrmH_DIM	Dimerization of TrmH	2 TrmH_mono <==> 1 TrmH_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.83E+02	1.83E+02	0	2.95E+02	294.7626	0	3.83E+01	38.298
TrpS_RS_DIM	dimerization of Tryptophanyl-tRNA synthetase	2 TrpS_mono <==> 1 Trp_RS_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.30E+03	1.30E+03	0	2.24E+03	2244.478	0	6.01E+01	60.1255
Trp_RS_CHARGa	Tryptophyl-tRNA synthetase charging (tyr-D)	1 Trp_RS_dim + 2 atp + 2 h2o + 2 trp-L --> 1 Trp_RS_2trp_2amp + 2 h + 2 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	2.69E+04	2.69E+04	0	2.74E+04	27384.14	0	2.63E+04	26259.02
Trp_RS_CHARGb	Tryptophyl-tRNA synthetase charging (tyr-D)	1 Trp_RS_dim + 1 atp + 1 h2o + 1 trp-L --> 1 Trp_RS_trp_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	5.38E+04	5.38E+04	0	5.48E+04	54768.28	0	5.25E+04	52518.04
TruA_DIM	Dimerization of TruA	2 TruA_mono <==> 1 TruA_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	4.31E+02	4.31E+02	0	7.24E+02	723.5971	0	4.99E+01	49.90875
Tsf_RENAME	TEMP_Tsf	1 Tsf_mono --> 1 EF-Ts	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.54E+03	1543.06	0	2.56E+02	256.288
TyrS_RS_DIM	dimerization of tyrosyl-tRNA synthetas	2 TyrS_mono <==> 1 Tyr_RS_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	7.76E+02	7.76E+02	0	1.34E+03	1336.016	0	4.76E+01	47.568
Tyr_RS_CHARG1a	Tyrosinyl-tRNA synthetase charging	1 Tyr_RS_dim + 1 atp + 1 h2o + 1 tyr-L --> 1 Tyr_RS_tyr_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	1.27E+05	1.27E+05	0	1.29E+05	128875	0	1.17E+05	116854.6
Tyr_RS_CHARG1b	Tyrosinyl-tRNA synthetase charging	1 Tyr_RS_dim + 2 atp + 2 h2o + 2 tyr-L --> 1 Tyr_RS_2tyr_2amp + 2 h + 2 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	6.35E+04	6.35E+04	0	6.44E+04	64437.48	0	5.84E+04	58427.28
Tyr_RS_CHARG2a	Tyrosinyl-tRNA synthetase charging (tyr-D)	1 Tyr_RS_dim + 1 atp + 1 h2o + 1 tyr-D --> 1 Tyr_RS_tyr-D_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	7.10E+06	7.10E+06	0	7.41E+06	7412071	0	7.41E+06	7412071
Tyr_RS_CHARG2b	Tyrosinyl-tRNA synthetase charging (tyr-D)	1 Tyr_RS_dim + 2 atp + 2 h2o + 2 tyr-D --> 1 Tyr_RS_2tyr-D_2amp + 2 h + 2 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	0	3.55E+06	3.55E+06	0	3.71E+06	3706036	0	3.71E+06	3706036
VALtec	L-valine transport via diffusion (extracellular to cytosol)	1 val-L[e] <==> 1 val-L	reversible	Transport	-1.00E+09	1.00E+09	7.33E+04	3.76E+05	3.03E+05	5.40E+04	3.87E+05	333418.52	5.40E+04	3.38E+05	283575.22
Val_RS_CHARG	Valyl-tRNA synthetase charging	1 ValS_mono + 1 atp + 1 h2o + 1 val-L --> 1 Val_RS_val_amp + 1 h + 1 ppi	irreversible	Aminoacyl-tRNA synthetase charging	0.00E+00	1.00E+09	7.33E+04	3.77E+05	3.04E+05	5.40E+04	3.90E+05	335576.92	5.40E+04	3.39E+05	285093.62
YbbB_DIM	dimerization of YbbB	2 YbbB_mono <==> 1 YbbB_dim	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	1.27E+03	1.27E+03	0	2.21E+03	2214.226	0	4.72E+01	47.208
YheLMN_FORM	formation of YheLMN (2*YheL,2*YheM,2*YheN)	2 YheL_mono + 2 YheM_mono + 2 YheN_mono <==> 1 YheLMN_cplx	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	2.22E+02	2.22E+02	0	3.65E+02	364.5383	0	3.35E+01	33.537

ZN2t	Zn2+ tranport	1 zn2[e] <==> 1 zn2	reversible	Transport	-1.00E+09	1.00E+09	0	4.85E+03	4.85E+03	0	6.60E+03	6599.788	0	2.55E+03	2553.129
[2Fe-2S]_FORM	transfer of 2 Fe2 from IscA (tetramer) to 2 IscU (monomer)	1 IscA_tetra_Fe(2) + 2 IscU_mono_S-SH --> 1 IscA_tetra + 1 IscU_dim_2Fe(2)-2S	irreversible	Iron-sulfur cluster biosynthesis	0.00E+00	1.00E+09	0	5.57E+03	5.57E+03	0	9.38E+03	9377.848	0	6.17E+02	616.825
[2Fe-2S]_TRANSF	formation of [2Fe-2S] cluster	2 IscU_dim_2Fe(2)-2S --> 1 IscU_dim_[2Fe-2S]2 + 2 IscU_mono	irreversible	Iron-sulfur cluster biosynthesis	0.00E+00	1.00E+09	0	2.79E+03	2.79E+03	0	4.69E+03	4688.924	0	3.08E+02	308.4125
[4Fe-4S]_FORM	formation of [4Fe-4S] cluster	1 IscU_dim_[2Fe-2S]2 --> 1 IscU_dim_[4Fe-4S]	irreversible	Iron-sulfur cluster biosynthesis	0.00E+00	1.00E+09	0	2.79E+03	2.79E+03	0	4.69E+03	4688.924	0	3.08E+02	308.4125
adet	transport of ade	1 ade <==> 1 ade[e]	reversible	Transport	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.90E+02	789.686	0	8.58E+01	85.794
adocblt	transport of adocbl	1 adocbl <==> 1 adocbl[e]	reversible	Transport	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
adp_exch	adp_exch	1 adp <==> 1 adp[e]	reversible	Transport	-1.00E+09	1.00E+09	5.64E+02	7.11E+06	7.11E+06	3.86E+02	7.41E+06	7413166.4	3.86E+02	7.41E+06	7413166.4
ala1_tRNA_CHARG	charging ala1_tRNA	1 Ala_RS_ala_amp + 1 ala1_tRNA --> 1 Ala_RS_tetra_inact + 1 ala1_tRNA_ala + 1 amp	irreversible	tRNA charging	0.00E+00	1.00E+09	7.83E+04	3.88E+05	3.09E+05	5.76E+04	4.04E+05	345895.78	5.76E+04	3.52E+05	294635.08
ala2_tRNA_CHARG	charging ala2_tRNA	1 Ala_RS_ala_amp + 1 ala2_tRNA --> 1 Ala_RS_tetra_inact + 1 ala2_tRNA_ala + 1 amp	irreversible	tRNA charging	0.00E+00	1.00E+09	7.51E+03	1.23E+05	1.16E+05	5.53E+03	1.42E+05	136727.26	5.53E+03	1.05E+05	99582.36
alaT_to_ala1	alaT_to_ala1	1 alaT_tRNA --> 1 ala1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
alaU_to_ala1	alaU_to_ala1	1 alaU_tRNA --> 1 ala1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
alaV_to_ala1	alaV_to_ala1	1 alaV_tRNA --> 1 ala1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
alaW_to_ala2	alaW_to_ala2	1 alaW_tRNA --> 1 ala2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
alaX_to_ala2	alaX_to_ala2	1 alaX_tRNA --> 1 ala2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
amp_exch	amp transport	1 amp[e] <==> 1 amp	reversible	Transport	-1.00E+09	1.00E+09	-7.88E+06	-7.79E+05	7.10E+06	-7.99E+06	-5.74E+05	7412102.1	-7.99E+06	-5.74E+05	7412102.1
arg1_tRNA_CHARG	charging arg1_tRNA	1 Arg_RS_arg_amp + 1 arg1_tRNA --> 1 ArgS_mono_inact + 1 amp + 1 arg1_tRNA_ala	irreversible	tRNA charging	0.00E+00	1.00E+09	6.21E+04	2.70E+05	2.08E+05	4.57E+04	2.72E+05	225864.1	4.57E+04	2.60E+05	214349.6
argQ_to_arg1	argQ_to_arg1	1 argQ_tRNA --> 1 arg1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
argU_tRNA_CHARG	charging argU_tRNA	1 Arg_RS_arg_amp + 1 argU_tRNA --> 1 ArgS_mono_inact + 1 amp + 1 argU_tRNA_ala	irreversible	tRNA charging	0.00E+00	1.00E+09	5.07E+02	1.59E+04	1.54E+04	3.73E+02	2.10E+04	20599.27	3.73E+02	9.06E+03	8686.903
argV_to_arg1	argV_to_arg1	1 argV_tRNA --> 1 arg1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
argW_tRNA_CHARG	charging argW_tRNA	1 Arg_RS_arg_amp + 1 argW_tRNA --> 1 ArgS_mono_inact + 1 amp + 1 argW_tRNA_arg	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.14E+04	1.14E+04	0	1.33E+04	13314.72	0	7.04E+03	7036.922
argX_tRNA_CHARG	charging argX_tRNA	1 Arg_RS_arg_amp + 1 argX_tRNA --> 1 ArgS_mono_inact + 1 amp + 1 argX_tRNA_arg	irreversible	tRNA charging	0.00E+00	1.00E+09	3.38E+02	4.51E+04	4.48E+04	2.49E+02	5.26E+04	52370.69	2.49E+02	3.08E+04	30511.28
argY_to_arg1	argY_to_arg1	1 argY_tRNA --> 1 arg1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
argZ_to_arg1	argZ_to_arg1	1 argZ_tRNA --> 1 arg1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
asn1_tRNA	charging asn1 _tRNA_CHARG	1 Asn_RS_asn_amp + 1 asn1_tRNA --> 1 Asn_RS_dim_inact + 1 amp + 1 asn1_tRNA_asn	irreversible	tRNA charging	0.00E+00	1.00E+09	2.64E+04	1.77E+05	1.51E+05	1.95E+04	1.89E+05	169232.42	1.95E+04	1.63E+05	143663.82
asnT_to_asn1	asnT_to_asn1	1 asnT_tRNA --> 1 asn1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
asnU_to_asn1	asnU_to_asn1	1 asnU_tRNA --> 1 asn1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
asnV_to_asn1	asnV_to_asn1	1 asnV_tRNA --> 1 asn1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
asnW_to_asn1	asnW_to_asn1	1 asnW_tRNA --> 1 asn1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
asp1_tRNA_CHARGa	charging asp1_tRNA	1 Asp_RS_2asp_2amp + 2 asp1_tRNA --> 1 Asp_RS_dim_inact + 2 amp + 2 asp1_tRNA_asp	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.10E+05	1.10E+05	0	1.11E+05	110520.4	0	1.10E+05	110377.2
asp1_tRNA_CHARGb	charging asp1_tRNA	1 Asp_RS_asp_amp + 1 asp1_tRNA --> 1 Asp_RS_dim_inact + 1 amp + 1 asp1_tRNA_asp	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.21E+05	2.21E+05	0	2.21E+05	221040.8	0	2.21E+05	220754.4
aspT_to_asp1	aspT_to_asp1	1 aspT_tRNA --> 1 asp1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
aspU_to_asp1	aspU_to_asp1	1 aspU_tRNA --> 1 asp1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
aspV_to_asp1	aspV_to_asp1	1 aspV_tRNA --> 1 asp1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
atp_exch	atp_exch	1 atp <==> 1 atp[e]	reversible	Transport	-1.00E+09	1.00E+09	-1.51E+07	-8.80E+05	1.42E+07	-1.55E+07	-6.49E+05	14828678.9	-1.55E+07	-6.49E+05	14828679
b0014_fold_GroEL/ES_1	b0014_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b0014_m + 1 transGroES_hepta --> 7 adp + 1 b0014_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.76E+03	1.76E+03	0	2.93E+03	2933.059	0	2.54E+02	253.857
b0014_fold_GroEL/ES_2	b0014_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b0014_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 DnaK_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.76E+03	1.76E+03	0	2.93E+03	2933.059	0	2.54E+02	253.857
b0014_fold_GroEL/ES_3	b0014_m folding: GroEL/ES mediated; release of native protein	1 DnaK_GroEL.(7)ADP.transGroES --> 1 DnaK_mono + 1 GroEL.(7)ADP.transGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.76E+03	1.76E+03	0	2.93E+03	2933.059	0	2.54E+02	253.857
b0014_fold_KJE_1	b0014_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b0014_m <==> 1 b0014_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	1.76E+03	1.76E+03	0	2.93E+03	2933.059	0	2.54E+02	253.857
b0014_fold_KJE_2	b0014_m folding: KJE mediated	1 GrpE_dim + 1 b0014_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 DnaK_DnaK_GrpE_complex + 1 adp + 1 h + 1 p	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.76E+03	1.76E+03	0	2.93E+03	2933.059	0	2.54E+02	253.857
b0014_fold_KJE_3	b0014_m folding: KJE mediated	1 DnaK_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono + 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.76E+03	1.76E+03	0	2.93E+03	2933.059	0	2.54E+02	253.857
b0014_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0014_mRNA --> 1 b0014_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
b0014_mRNA_degr1	Degradation of b0014_mRNA I	1 Orn_dim + 479 atp + 1 b0014_mRNA_2 + 1 degradosome + 479 h2o <==> 479 adp + 1 b0014_mRNA_2_degr + 479 h + 479 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
b0014_mRNA_degr2	Degradation of b0014_mRNA II	1 b0014_mRNA_2_degr + 1916 h2o --> 1 Orn_dim_inact + 542 amp + 1916 atp + 475 cmp + 1 degradosome_inact + 505 gmp + 1916 h + 394 ump	irreversible	mRNA degradation	0.00E+00	7.70E-01	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
b0014_maturation1	Polypeptide b0014 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0014_aa <==> 1 b0014_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.76E+03	1.76E+03	0	2.93E+03	2933.059	0	2.54E+02	253.857
b0014_maturation2	b0014 formation	1 b0014_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0014_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.76E+03	1.76E+03	0	2.93E+03	2933.059	0	2.54E+02	253.857
b0014_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0014_v1_mRNA --> 1 b0014_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
b0014_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0014_v2_mRNA --> 1 b0014_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
b0015_fold_GroEL/ES_1	b0015_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b0015_m_Zn + 1 transGroES_hepta --> 7 adp + 1 b0015_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.95E+02	9.95E+02	0	1.69E+03	1689.861	0	9.68E+01	96.822
b0015_fold_GroEL/ES_2	b0015_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b0015_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 DnaJ_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.95E+02	9.95E+02	0	1.69E+03	1689.861	0	9.68E+01	96.822
b0015_fold_GroEL/ES_3	b0015_m folding: GroEL/ES mediated; release of native protein	1 DnaJ_GroEL.(7)ADP.transGroES --> 1 DnaJ_mono + 1 GroEL.(7)ADP.transGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.95E+02	9.95E+02	0	1.69E+03	1689.861	0	9.68E+01	96.822
b0015_ion_BIND	Binding of ions to b0015	1 b0015_m + 2 zn2 <==> 1 b0015_m_Zn	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	9.95E+02	9.95E+02	0	1.69E+03	1689.861	0	9.68E+01	96.822
b0015_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0015_mRNA --> 1 b0015_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431

b0015_mRNA_degr1	Degradation of b0015_mRNA I	1 Orn_dim + 282 atp + 1 b0015_mRNA_2 + 1 degradosome + 282 h2o <==> 282 adp + 1 b0015_mRNA_2_degr + 282 h + 282 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
b0015_mRNA_degr2	Degradation of b0015_mRNA II	1 b0015_mRNA_2_degr + 1130 h2o --> 1 Orn_dim_inact + 276 amp 278 cmp + 1 degradosome_inact + 346 gmp + 1130 h + 231 ump	irreversible	mRNA degradation	0.00E+00	4.31E-01	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
b0015_maturation1	Polypeptide b0015 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0015_aa <==> 1 b0015_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	9.95E+02	9.95E+02	0	1.69E+03	1689.861	0	9.68E+01	96.822
b0015_maturation2	b0015 formation	1 b0015_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0015_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	9.95E+02	9.95E+02	0	1.69E+03	1689.861	0	9.68E+01	96.822
b0015_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0015_v1_mRNA --> 1 b0015_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
b0015_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0015_v2_mRNA --> 1 b0015_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
b0023_fold_spon	b0023_m folding: spontanous	1 b0023_m --> 1 RpsT_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b0023_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0023_mRNA --> 1 b0023_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	2.92E+00	2.92
b0023_mRNA_degr1	Degradation of b0023_mRNA I	1 Orn_dim + 66 atp + 1 b0023_mRNA_2 + 1 degradosome + 66 h2o <==> 66 adp + 1 b0023_mRNA_2_degr + 66 h + 66 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	2.92E+00	2.92
b0023_mRNA_degr2	Degradation of b0023_mRNA II	1 b0023_mRNA_2_degr + 263 h2o --> 1 Orn_dim_inact + 89 amp + 66 cmp + 1 degradosome_inact + 57 gmp + 263 h + 51 ump + 1 utp	irreversible	mRNA degradation	0.00E+00	2.92E+00	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	2.92E+00	2.92
b0023_maturation1	Polypeptide b0023 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0023_aa <==> 1 b0023_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b0023_maturation2	b0023 formation	1 b0023_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0023_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b0023_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0023_v1_mRNA --> 1 b0023_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	2.92E+00	2.92
b0025_fold_spon	b0025_m folding: spontanous	1 b0025_m --> 1 RibF_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.15E+02	5.15E+02	0	8.10E+02	809.7958	0	1.30E+02	130.401
b0025_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0025_mRNA --> 1 b0025_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0025_mRNA_degr1	Degradation of b0025_mRNA I	1 Orn_dim + 235 atp + 1 b0025_mRNA_2 + 1 degradosome + 235 h2o <==> 235 adp + 1 b0025_mRNA_2_degr + 235 h + 235 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0025_mRNA_degr2	Degradation of b0025_mRNA II	1 b0025_mRNA_2_degr + 941 h2o --> 1 Orn_dim_inact + 210 amp + 1 atp + 227 cmp + 1 degradosome_inact + 278 gmp + 941 h + 226 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0025_maturation1	Polypeptide b0025 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0025_aa <==> 1 b0025_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.15E+02	5.15E+02	0	8.10E+02	809.7958	0	1.30E+02	130.401
b0025_maturation2	b0025 formation	1 b0025_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0025_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.15E+02	5.15E+02	0	8.10E+02	809.7958	0	1.30E+02	130.401
b0026_fold_spon	b0026_m folding: spontanous	1 b0026_m_Zn --> 1 IleS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.28E+03	1.28E+03	0	2.13E+03	2133.32	0	1.04E+02	103.6475
b0026_ion_BIND	Binding of ions to b0026	1 b0026_m + 2 zn2 <==> 1 b0026_m_Zn	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	1.28E+03	1.28E+03	0	2.13E+03	2133.32	0	1.04E+02	103.6475
b0026_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0026_mRNA --> 1 b0026_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0026_mRNA_degr1	Degradation of b0026_mRNA I	1 Orn_dim + 704 atp + 1 b0026_mRNA_2 + 1 degradosome + 704 h2o <==> 704 adp + 1 b0026_mRNA_2_degr + 704 h + 704 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0026_mRNA_degr2	Degradation of b0026_mRNA II	1 b0026_mRNA_2_degr + 2816 h2o --> 1 Orn_dim_inact + 655 amp 747 cmp + 1 degradosome_inact + 824 gmp + 2816 h + 591 ump	irreversible	mRNA degradation	0.00E+00	5.39E-01	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0026_maturation1	Polypeptide b0026 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0026_aa <==> 1 b0026_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.28E+03	1.28E+03	0	2.13E+03	2133.32	0	1.04E+02	103.6475
b0026_maturation2	b0026 formation	1 b0026_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0026_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.28E+03	1.28E+03	0	2.13E+03	2133.32	0	1.04E+02	103.6475
b0027_fold_spon	b0027_m folding: spontanous	1 b0027_m --> 1 LspA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.80E+02	2.80E+02	0	4.28E+02	427.5779	0	8.79E+01	87.8805
b0027_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0027_mRNA --> 1 b0027_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0027_mRNA_degr1	Degradation of b0027_mRNA I	1 Orn_dim + 123 atp + 1 b0027_mRNA_2 + 1 degradosome + 123 h2o <==> 123 adp + 1 b0027_mRNA_2_degr + 123 h + 123 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0027_mRNA_degr2	Degradation of b0027_mRNA II	1 b0027_mRNA_2_degr + 493 h2o --> 1 Orn_dim_inact + 91 amp + 124 cmp + 1 degradosome_inact + 141 gmp + 493 h + 138 ump	irreversible	mRNA degradation	0.00E+00	2.51E-01	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0027_maturation1	Polypeptide b0027 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0027_aa <==> 1 b0027_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.80E+02	2.80E+02	0	4.28E+02	427.5779	0	8.79E+01	87.8805
b0027_maturation2	b0027 formation	1 b0027_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0027_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.80E+02	2.80E+02	0	4.28E+02	427.5779	0	8.79E+01	87.8805
b0028_fold_spon	b0028_m folding: spontanous	1 b0028_m --> 1 FkpB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	3.73E+02	372.7892	0	7.08E+01	70.836
b0028_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0028_mRNA --> 1 b0028_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0028_mRNA_degr1	Degradation of b0028_mRNA I	1 Orn_dim + 112 atp + 1 b0028_mRNA_2 + 1 degradosome + 112 h2o <==> 112 adp + 1 b0028_mRNA_2_degr + 112 h + 112 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0028_mRNA_degr2	Degradation of b0028_mRNA II	1 b0028_mRNA_2_degr + 449 h2o --> 1 Orn_dim_inact + 100 amp + 120 cmp + 1 degradosome_inact + 125 gmp + 449 h + 105 ump	irreversible	mRNA degradation	0.00E+00	9.45E-02	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0028_maturation1	Polypeptide b0028 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0028_aa <==> 1 b0028_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.42E+02	2.42E+02	0	3.73E+02	372.7892	0	7.08E+01	70.836
b0028_maturation2	b0028 formation	1 b0028_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0028_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	3.73E+02	372.7892	0	7.08E+01	70.836
b0029_fold_spon	b0029_m folding: spontanous	1 b0029_m --> 1 IspH_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.76E+02	4.76E+02	0	7.71E+02	771.4558	0	9.21E+01	92.061
b0029_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0029_mRNA --> 1 b0029_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0029_mRNA_degr1	Degradation of b0029_mRNA I	1 Orn_dim + 237 atp + 1 b0029_mRNA_2 + 1 degradosome + 237 h2o <==> 237 adp + 1 b0029_mRNA_2_degr + 237 h + 237 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0029_mRNA_degr2	Degradation of b0029_mRNA II	1 b0029_mRNA_2_degr + 950 h2o --> 1 Orn_dim_inact + 220 amp + 228 cmp + 1 degradosome_inact + 296 gmp + 950 h + 207 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
b0029_maturation1	Polypeptide b0029 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0029_aa <==> 1 b0029_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.76E+02	4.76E+02	0	7.71E+02	771.4558	0	9.21E+01	92.061
b0029_maturation2	b0029 formation	1 b0029_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0029_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.76E+02	4.76E+02	0	7.71E+02	771.4558	0	9.21E+01	92.061
b0049_fold_spon	b0049_m folding: spontanous	1 b0049_m --> 1 ApaH_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.03E+03	1.03E+03	0	1.75E+03	1752.699	0	8.80E+01	87.968
b0049_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0049_mRNA --> 1 b0049_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.75E+01	2.75E+01	0	4.85E+01	48.51944	0	1.68E-01	0.168
b0049_mRNA_degr1	Degradation of b0049_mRNA I	1 Orn_dim + 210 atp + 1 b0049_mRNA_2 + 1 degradosome + 210 h2o <==> 210 adp + 1 b0049_mRNA_2_degr + 210 h + 210 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.90E+01	5.90E+01	0	1.04E+02	104.2137	0	1.68E-01	0.168

b0049_mRNA_degr2	Degradation of b0049_mRNA II	1 b0049_mRNA_2_degr + 842 h2o --> 1 Orn_dim_inact + 185 amp + 218 cmp + 1 degradosome_inact + 252 gmp + 842 h + 188 ump	irreversible	mRNA degradation	0.00E+00	2.99E-01	0	5.90E+01	5.90E+01	0	1.04E+02	104.2137	0	1.68E-01	0.168
b0049_maturation1	Polypeptide b0049 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0049_aa <==> 1 b0049_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.03E+03	1.03E+03	0	1.75E+03	1752.699	0	8.80E+01	87.968
b0049_maturation2	b0049 formation	1 b0049_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0049_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.03E+03	1.03E+03	0	1.75E+03	1752.699	0	8.80E+01	87.968
b0049_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0049_v2_mRNA --> 1 b0049_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.90E+01	3.90E+01	0	6.89E+01	68.92371	0	1.68E-01	0.168
b0049_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0049_v3_mRNA --> 1 b0049_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.90E+01	5.90E+01	0	1.04E+02	104.2137	0	1.68E-01	0.168
b0050_fold_spon	b0050_m folding: spontanous	1 b0050_m --> 1 ApaG_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.02E+02	5.02E+02	0	8.18E+02	818.3957	0	9.01E+01	90.076
b0050_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0050_mRNA --> 1 b0050_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.75E+01	2.75E+01	0	4.85E+01	48.51944	0	1.68E-01	0.168
b0050_mRNA_degr1	Degradation of b0050_mRNA I	1 Orn_dim + 94 atp + 1 b0050_mRNA_2 + 1 degradosome + 94 h2o <==> 94 adp + 1 b0050_mRNA_2_degr + 94 h + 94 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.90E+01	5.90E+01	0	1.04E+02	104.2137	0	1.68E-01	0.168
b0050_mRNA_degr2	Degradation of b0050_mRNA II	1 b0050_mRNA_2_degr + 377 h2o --> 1 Orn_dim_inact + 92 amp + 102 cmp + 1 degradosome_inact + 94 gmp + 377 h + 90 ump	irreversible	mRNA degradation	0.00E+00	2.34E-01	0	5.90E+01	5.90E+01	0	1.04E+02	104.2137	0	1.68E-01	0.168
b0050_maturation1	Polypeptide b0050 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0050_aa <==> 1 b0050_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.02E+02	5.02E+02	0	8.18E+02	818.3957	0	9.01E+01	90.076
b0050_maturation2	b0050 formation	1 b0050_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0050_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.02E+02	5.02E+02	0	8.18E+02	818.3957	0	9.01E+01	90.076
b0050_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0050_v2_mRNA --> 1 b0050_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.90E+01	3.90E+01	0	6.89E+01	68.92371	0	1.68E-01	0.168
b0050_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0050_v3_mRNA --> 1 b0050_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.90E+01	5.90E+01	0	1.04E+02	104.2137	0	1.68E-01	0.168
b0051_fold_spon	b0051_m folding: spontanous	1 b0051_m --> 1 KsgA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.10E+03	1.10E+03	0	1.89E+03	1891.517	0	7.92E+01	79.168
b0051_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0051_mRNA --> 1 b0051_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.75E+01	2.75E+01	0	4.85E+01	48.51944	0	1.68E-01	0.168
b0051_mRNA_degr1	Degradation of b0051_mRNA I	1 Orn_dim + 204 atp + 1 b0051_mRNA_2 + 1 degradosome + 204 h2o <==> 204 adp + 1 b0051_mRNA_2_degr + 204 h + 204 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.43E+01	6.43E+01	0	1.13E+02	113.4398	0	1.68E-01	0.168
b0051_mRNA_degr2	Degradation of b0051_mRNA II	1 b0051_mRNA_2_degr + 817 h2o --> 1 Orn_dim_inact + 195 amp + 220 cmp + 1 degradosome_inact + 215 gmp + 817 h + 188 ump	irreversible	mRNA degradation	0.00E+00	1.68E-01	0	6.43E+01	6.43E+01	0	1.13E+02	113.4398	0	1.68E-01	0.168
b0051_maturation1	Polypeptide b0051 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0051_aa <==> 1 b0051_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.10E+03	1.10E+03	0	1.89E+03	1891.517	0	7.92E+01	79.168
b0051_maturation2	b0051 formation	1 b0051_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0051_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.10E+03	1.10E+03	0	1.89E+03	1891.517	0	7.92E+01	79.168
b0051_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0051_v1_mRNA --> 1 b0051_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	1.13E+02	113.4398	0	1.68E-01	0.168
b0051_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0051_v2_mRNA --> 1 b0051_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.90E+01	3.90E+01	0	6.89E+01	68.92371	0	1.68E-01	0.168
b0051_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0051_v3_mRNA --> 1 b0051_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.90E+01	5.90E+01	0	1.04E+02	104.2137	0	1.68E-01	0.168
b0052_fold_spon	b0052_m folding: spontanous	1 b0052_m --> 1 PdxA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.31E+03	1.31E+03	0	2.24E+03	2241.617	0	8.95E+01	89.452
b0052_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0052_mRNA --> 1 b0052_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.75E+01	2.75E+01	0	4.85E+01	48.51944	0	1.68E-01	0.168
b0052_mRNA_degr1	Degradation of b0052_mRNA I	1 Orn_dim + 247 atp + 1 b0052_mRNA_2 + 1 degradosome + 247 h2o <==> 247 adp + 1 b0052_mRNA_2_degr + 247 h + 247 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.43E+01	6.43E+01	0	1.13E+02	113.4398	0	1.68E-01	0.168
b0052_mRNA_degr2	Degradation of b0052_mRNA II	1 b0052_mRNA_2_degr + 988 h2o --> 1 Orn_dim_inact + 204 amp + 277 cmp + 1 degradosome_inact + 281 gmp + 988 h + 227 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	6.43E+01	6.43E+01	0	1.13E+02	113.4398	0	1.68E-01	0.168
b0052_maturation1	Polypeptide b0052 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0052_aa <==> 1 b0052_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.31E+03	1.31E+03	0	2.24E+03	2241.617	0	8.95E+01	89.452
b0052_maturation2	b0052 formation	1 b0052_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0052_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.31E+03	1.31E+03	0	2.24E+03	2241.617	0	8.95E+01	89.452
b0052_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0052_v1_mRNA --> 1 b0052_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	1.13E+02	113.4398	0	1.68E-01	0.168
b0052_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0052_v2_mRNA --> 1 b0052_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.90E+01	3.90E+01	0	6.89E+01	68.92371	0	1.68E-01	0.168
b0053_fold_spon	b0053_m folding: spontanous	1 b0053_m --> 1 SurA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.96E+02	7.96E+02	0	1.32E+03	1321.986	0	1.13E+02	113.2
b0053_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0053_mRNA --> 1 b0053_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.75E+01	2.75E+01	0	4.85E+01	48.51944	0	1.68E-01	0.168
b0053_mRNA_degr1	Degradation of b0053_mRNA I	1 Orn_dim + 321 atp + 1 b0053_mRNA_2 + 1 degradosome + 321 h2o <==> 321 adp + 1 b0053_mRNA_2_degr + 321 h + 321 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.75E+01	2.75E+01	0	4.85E+01	48.51944	0	1.68E-01	0.168
b0053_mRNA_degr2	Degradation of b0053_mRNA II	1 b0053_mRNA_2_degr + 1286 h2o --> 1 Orn_dim_inact + 336 amp 1 atp + 344 cmp + 1 degradosome_inact + 349 gmp + 1286 h + 257 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	2.75E+01	2.75E+01	0	4.85E+01	48.51944	0	1.68E-01	0.168
b0053_maturation1	Polypeptide b0053 peptide deformylase complex	1 Def_mono + 1 b0053_aa <==> 1 b0053_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.96E+02	7.96E+02	0	1.32E+03	1321.986	0	1.13E+02	113.2
b0053_maturation2	b0053 formation	1 b0053_def_cplx + 9 h2o --> 1 Def_mono_inact + 1 ala-L + 1 asn-L + 1 b0053_m + 1 for + 1 ile-L + 1 leu-L + 1 lys-L + 1 ser-L + 1 tyr-L + 1 val-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.96E+02	7.96E+02	0	1.32E+03	1321.986	0	1.13E+02	113.2
b0058_fold_spon	b0058_m folding: spontanous	1 b0058_m --> 1 RluA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.11E+02	811.2431	0	8.91E+01	89.112
b0058_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0058_mRNA --> 1 b0058_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	6.04E+01	60.36359	0	1.86E-01	0.186
b0058_mRNA_degr1	Degradation of b0058_mRNA I	1 Orn_dim + 165 atp + 1 b0058_mRNA_2 + 1 degradosome + 165 h2o <==> 165 adp + 1 b0058_mRNA_2_degr + 165 h + 165 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	6.04E+01	60.36359	0	1.86E-01	0.186
b0058_mRNA_degr2	Degradation of b0058_mRNA II	1 b0058_mRNA_2_degr + 659 h2o --> 1 Orn_dim_inact + 161 amp + 154 cmp + 1 degradosome_inact + 202 gmp + 659 h + 143 ump	irreversible	mRNA degradation	0.00E+00	1.86E-01	0	3.42E+01	3.42E+01	0	6.04E+01	60.36359	0	1.86E-01	0.186
b0058_maturation1	Polypeptide b0058 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0058_aa <==> 1 b0058_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.97E+02	4.97E+02	0	8.11E+02	811.2431	0	8.91E+01	89.112
b0058_maturation2	b0058 formation	1 b0058_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0058_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.11E+02	811.2431	0	8.91E+01	89.112
b0059_fold_KJE_1	b0059_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b0059_m <==> 1 b0059_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.01E+03	2.01E+03	0	2.40E+03	2396.157	0	1.02E+02	102.256
b0059_fold_KJE_2	b0059_m folding: KJE mediated	1 GrpE_dim + 1 b0059_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 HepA_DnaK_GrpE_complex + 1 adp + 1 h + 1 p	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.01E+03	2.01E+03	0	2.40E+03	2396.157	0	1.02E+02	102.256
b0059_fold_KJE_3	b0059_m folding: KJE mediated	1 HepA_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 HepA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.01E+03	2.01E+03	0	2.40E+03	2396.157	0	1.02E+02	102.256
b0059_fold_spon	b0059_m folding: spontanous	1 b0059_m --> 1 HepA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.01E+03	2.01E+03	0	2.40E+03	2396.157	0	1.02E+02	102.256
b0059_mRNA_degr1	Degradation of b0059_mRNA I	1 Orn_dim + 726 atp + 1 b0059_mRNA_2 + 1 degradosome + 726 h2o <==> 726 adp + 1 b0059_mRNA_2_degr + 726 h + 726 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	6.04E+01	60.36359	0	1.86E-01	0.186
b0059_mRNA_degr2	Degradation of b0059_mRNA II	1 b0059_mRNA_2_degr + 2906 h2o --> 1 Orn_dim_inact + 676 amp 1 atp + 777 cmp + 1 degradosome_inact + 819 gmp + 2906 h + 634 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	3.42E+01	3.42E+01	0	6.04E+01	60.36359	0	1.86E-01	0.186

b0059_maturation1	Polypeptide b0059 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0059_aa <==> 1 b0059_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.01E+03	2.01E+03	0	2.40E+03	2396.157	0	1.02E+02	102.256
b0059_maturation2	b0059 formation	1 b0059_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0059_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.01E+03	2.01E+03	0	2.40E+03	2396.157	0	1.02E+02	102.256
b0059_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0059_v1_mRNA --> 1 b0059_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	6.04E+01	60.36359	0	1.86E-01	0.186
b0144_DNA_act_bind	b0144_DNA binding of activator	1 b0144_DNA_neu --> 1 b0144_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.23E+02	1.23E+02	0	2.18E+02	217.6818	0	2.03E-01	0.203
b0144_fold_GroEL/ES_1	b0144_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b0144_m + 1 transGroES_hepta --> 7 adp + 1 b0144_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.31E+03	2.31E+03	0	4.01E+03	4010.973	0	9.64E+01	96.354
b0144_fold_GroEL/ES_2	b0144_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b0144_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 YadB_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.31E+03	2.31E+03	0	4.01E+03	4010.973	0	9.64E+01	96.354
b0144_fold_GroEL/ES_3	b0144_m folding: GroEL/ES mediated; release of native protein	1 YadB_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 YadB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.31E+03	2.31E+03	0	4.01E+03	4010.973	0	9.64E+01	96.354
b0144_fold_KJE_1	b0144_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b0144_m <==> 1 b0144_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.31E+03	2.31E+03	0	4.01E+03	4010.973	0	9.64E+01	96.354
b0144_fold_KJE_2	b0144_m folding: KJE mediated	1 GrpE_dim + 1 b0144_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 YadB_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.31E+03	2.31E+03	0	4.01E+03	4010.973	0	9.64E+01	96.354
b0144_fold_KJE_3	b0144_m folding: KJE mediated	1 YadB_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 YadB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.31E+03	2.31E+03	0	4.01E+03	4010.973	0	9.64E+01	96.354
b0144_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0144_mRNA --> 1 b0144_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.23E+02	1.23E+02	0	2.18E+02	217.6818	0	2.03E-01	0.203
b0144_mRNA_degr1	Degradation of b0144_mRNA I	1 Orn_dim + 231 atp + 1 b0144_mRNA_2 + 1 degradosome + 231 h2o <==> 231 adp + 1 b0144_mRNA_2_degr + 231 h + 231 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.23E+02	1.23E+02	0	2.18E+02	217.6818	0	2.03E-01	0.203
b0144_mRNA_degr2	Degradation of b0144_mRNA II	1 b0144_mRNA_2_degr + 926 h2o --> 1 Orn_dim_inact + 208 amp + 1 atp + 259 cmp + 1 degradosome_inact + 238 gmp + 926 h + 221 ump	irreversible	mRNA degradation	0.00E+00	2.03E-01	0	1.23E+02	1.23E+02	0	2.18E+02	217.6818	0	2.03E-01	0.203
b0144_maturation1	Polypeptide b0144 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0144_aa <==> 1 b0144_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.31E+03	2.31E+03	0	4.01E+03	4010.973	0	9.64E+01	96.354
b0144_maturation2	b0144 formation	1 b0144_def_map_cplx + 12 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0144_m + 1 for + 1 glu-L + 2 leu-L + 1 lys-L + met-L + 2 phe-L + 2 pro-L + 1 tyr-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.31E+03	2.31E+03	0	4.01E+03	4010.973	0	9.64E+01	96.354
b0166_fold_spon	b0166_m folding: spontanous	1 b0166_m --> 1 DapD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.33E+02	5.33E+02	0	8.70E+02	870.2896	0	9.60E+01	95.952
b0166_mRNA_degr1	Degradation of b0166_mRNA I	1 Orn_dim + 206 atp + 1 b0166_mRNA_2 + 1 degradosome + 206 h2o <==> 206 adp + 1 b0166_mRNA_2_degr + 206 h + 206 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207
b0166_mRNA_degr2	Degradation of b0166_mRNA II	1 b0166_mRNA_2_degr + 824 h2o --> 1 Orn_dim_inact + 198 amp + 1 atp + 204 cmp + 1 degradosome_inact + 234 gmp + 824 h + 188 ump	irreversible	mRNA degradation	0.00E+00	2.91E-01	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207
b0166_maturation1	Polypeptide b0166 peptide deformylase complex	1 Def_mono + 1 b0166_aa <==> 1 b0166_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.33E+02	5.33E+02	0	8.70E+02	870.2896	0	9.60E+01	95.952
b0166_maturation2	b0166 formation	1 b0166_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b0166_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.33E+02	5.33E+02	0	8.70E+02	870.2896	0	9.60E+01	95.952
b0166_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0166_v1_mRNA --> 1 b0166_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207
b0167_fold_GroEL/ES_1	b0167_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b0167_m + 1 transGroES_hepta --> 7 adp + 1 b0167_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.54E+03	1.54E+03	0	1.99E+03	1991.064	0	1.14E+02	114.244
b0167_fold_GroEL/ES_2	b0167_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b0167_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 GlnD_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.54E+03	1.54E+03	0	1.99E+03	1991.064	0	1.14E+02	114.244
b0167_fold_GroEL/ES_3	b0167_m folding: GroEL/ES mediated; release of native protein	1 GlnD_GroEL.(7)ADP.transGroES --> 1 GlnD_mono + 1 GroEL.(7)ADP.transGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.54E+03	1.54E+03	0	1.99E+03	1991.064	0	1.14E+02	114.244
b0167_fold_KJE_1	b0167_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b0167_m <==> 1 b0167_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	1.54E+03	1.54E+03	0	1.99E+03	1991.064	0	1.14E+02	114.244
b0167_fold_KJE_2	b0167_m folding: KJE mediated	1 GrpE_dim + 1 b0167_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 GlnD_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.54E+03	1.54E+03	0	1.99E+03	1991.064	0	1.14E+02	114.244
b0167_fold_KJE_3	b0167_m folding: KJE mediated	1 GlnD_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GlnD_mono + 1 GrpE_dim_inact	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.54E+03	1.54E+03	0	1.99E+03	1991.064	0	1.14E+02	114.244
b0167_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0167_mRNA --> 1 b0167_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207
b0167_mRNA_degr1	Degradation of b0167_mRNA I	1 Orn_dim + 668 atp + 1 b0167_mRNA_2 + 1 degradosome + 668 h2o <==> 668 adp + 1 b0167_mRNA_2_degr + 668 h + 668 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207
b0167_mRNA_degr2	Degradation of b0167_mRNA II	1 b0167_mRNA_2_degr + 2672 h2o --> 1 Orn_dim_inact + 623 amp 747 cmp + 1 degradosome_inact + 695 gmp + 2672 h + 608 ump	irreversible	mRNA degradation	0.00E+00	2.34E-01	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207
b0167_maturation1	Polypeptide b0167 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0167_aa <==> 1 b0167_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.54E+03	1.54E+03	0	1.99E+03	1991.064	0	1.14E+02	114.244
b0167_maturation2	b0167 formation	1 b0167_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0167_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.54E+03	1.54E+03	0	1.99E+03	1991.064	0	1.14E+02	114.244
b0168_fold_spon	b0168_m folding: spontanous	1 b0168_m_Fe --> 1 Map_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.14E+02	5.14E+02	0	8.30E+02	829.6965	0	1.04E+02	103.755
b0168_ion_BIND	Binding of ions to b0168	1 b0168_m + 2 fe2 <==> 1 b0168_m_Fe	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	5.14E+02	5.14E+02	0	8.30E+02	829.6965	0	1.04E+02	103.755
b0168_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0168_mRNA --> 1 b0168_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207
b0168_mRNA_degr1	Degradation of b0168_mRNA I	1 Orn_dim + 198 atp + 1 b0168_mRNA_2 + 1 degradosome + 198 h2o <==> 198 adp + 1 b0168_mRNA_2_degr + 198 h + 198 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207
b0168_mRNA_degr2	Degradation of b0168_mRNA II	1 b0168_mRNA_2_degr + 794 h2o --> 1 Orn_dim_inact + 217 amp + 1 atp + 196 cmp + 1 degradosome_inact + 205 gmp + 794 h + 176 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207
b0168_maturation1	Polypeptide b0168 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0168_aa <==> 1 b0168_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.14E+02	5.14E+02	0	8.30E+02	829.6965	0	1.04E+02	103.755
b0168_maturation2	b0168 formation	1 b0168_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0168_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.14E+02	5.14E+02	0	8.30E+02	829.6965	0	1.04E+02	103.755
b0169_fold_spon	b0169_m folding: spontanous	1 b0169_m --> 1 RpsB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b0169_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0169_mRNA --> 1 b0169_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.50E+01	7.50E+01	0	8.09E+01	80.94127	0	5.18E-01	0.518
b0169_mRNA_degr1	Degradation of b0169_mRNA I	1 Orn_dim + 181 atp + 1 b0169_mRNA_2 + 1 degradosome + 181 h2o <==> 181 adp + 1 b0169_mRNA_2_degr + 181 h + 181 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.50E+01	7.50E+01	0	8.09E+01	80.94127	0	5.18E-01	0.518
b0169_mRNA_degr2	Degradation of b0169_mRNA II	1 b0169_mRNA_2_degr + 725 h2o --> 1 Orn_dim_inact + 186 amp + 1 atp + 184 cmp + 1 degradosome_inact + 189 gmp + 725 h + 166 ump	irreversible	mRNA degradation	0.00E+00	5.18E-01	0	7.50E+01	7.50E+01	0	8.09E+01	80.94127	0	5.18E-01	0.518
b0169_maturation1	Polypeptide b0169 peptide deformylase complex	1 Def_mono + 1 b0169_aa <==> 1 b0169_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b0169_maturation2	b0169 formation	1 b0169_def_cplx + 2 h2o --> 1 Def_mono_inact + 1 b0169_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72

b0170_fold_GroEL/ES_1	b0170_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b0170_m + 1 transGroES_hepta --> 7 adp + 1 b0170_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.54E+03	1543.06	0	2.56E+02	256.288
b0170_fold_GroEL/ES_2	b0170_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b0170_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 Tsf_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.54E+03	1543.06	0	2.56E+02	256.288
b0170_fold_GroEL/ES_3	b0170_m folding: GroEL/ES mediated; release of native protein	1 Tsf_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 Tsf_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.54E+03	1543.06	0	2.56E+02	256.288
b0170_fold_KJE_1	b0170_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b0170_m <==> 1 b0170_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.54E+03	1543.06	0	2.56E+02	256.288
b0170_fold_KJE_2	b0170_m folding: KJE mediated	1 GrpE_dim + 1 b0170_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 Tsf_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.54E+03	1543.06	0	2.56E+02	256.288
b0170_fold_KJE_3	b0170_m folding: KJE mediated	1 Tsf_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 Tsf_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.54E+03	1543.06	0	2.56E+02	256.288
b0170_fold_spon	b0170_m folding: spontanous	1 b0170_m --> 1 Tsf_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.54E+03	1543.06	0	2.56E+02	256.288
b0170_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0170_mRNA --> 1 b0170_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.50E+01	7.50E+01	0	8.09E+01	80.94127	0	5.18E-01	0.518
b0170_mRNA_degr1	Degradation of b0170_mRNA I	1 Orn_dim + 213 atp + 1 b0170_mRNA_2 + 1 degradosome + 213 h2o <==> 213 adp + 1 b0170_mRNA_2_degr + 213 h + 213 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.50E+01	7.50E+01	0	8.09E+01	80.94127	0	5.18E-01	0.518
b0170_mRNA_degr2	Degradation of b0170_mRNA II	1 b0170_mRNA_2_degr + 851 h2o --> 1 Orn_dim_inact + 247 amp + 186 cmp + 1 degradosome_inact + 239 gmp + 851 h + 180 ump	irreversible	mRNA degradation	0.00E+00	5.18E-01	0	7.50E+01	7.50E+01	0	8.09E+01	80.94127	0	5.18E-01	0.518
b0170_maturation1	Polypeptide b0170 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0170_aa <==> 1 b0170_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.54E+03	1543.06	0	2.56E+02	256.288
b0170_maturation2	b0170 formation	1 b0170_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0170_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.54E+03	1543.06	0	2.56E+02	256.288
b0172_fold_GroEL/ES_1	b0172_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b0172_m + 1 transGroES_hepta --> 7 adp + 1 b0172_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.65E+03	2.65E+03	0	4.53E+03	4528.892	0	1.96E+02	195.99
b0172_fold_GroEL/ES_2	b0172_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b0172_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 Rrf_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.65E+03	2.65E+03	0	4.53E+03	4528.892	0	1.96E+02	195.99
b0172_fold_GroEL/ES_3	b0172_m folding: GroEL/ES mediated; release of native protein	1 Rrf_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 Rrf_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.65E+03	2.65E+03	0	4.53E+03	4528.892	0	1.96E+02	195.99
b0172_fold_KJE_1	b0172_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b0172_m <==> 1 b0172_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.65E+03	2.65E+03	0	4.53E+03	4528.892	0	1.96E+02	195.99
b0172_fold_KJE_2	b0172_m folding: KJE mediated	1 GrpE_dim + 1 b0172_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 Rrf_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.65E+03	2.65E+03	0	4.53E+03	4528.892	0	1.96E+02	195.99
b0172_fold_KJE_3	b0172_m folding: KJE mediated	1 Rrf_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 Rrf_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.65E+03	2.65E+03	0	4.53E+03	4528.892	0	1.96E+02	195.99
b0172_fold_spon	b0172_m folding: spontanous	1 b0172_m --> 1 Rrf_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.65E+03	2.65E+03	0	4.53E+03	4528.892	0	1.96E+02	195.99
b0172_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0172_mRNA --> 1 b0172_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+02	2.46E+02	0	4.34E+02	433.6892	0	3.99E-01	0.399
b0172_mRNA_degr1	Degradation of b0172_mRNA I	1 Orn_dim + 139 atp + 1 b0172_mRNA_2 + 1 degradosome + 139 h2o <==> 139 adp + 1 b0172_mRNA_2_degr + 139 h + 139 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.46E+02	2.46E+02	0	4.34E+02	433.6892	0	3.99E-01	0.399
b0172_mRNA_degr2	Degradation of b0172_mRNA II	1 b0172_mRNA_2_degr + 557 h2o --> 1 Orn_dim_inact + 163 amp + 130 cmp + 1 degradosome_inact + 153 gmp + 1 gtp + 557 h + 111 ump	irreversible	mRNA degradation	0.00E+00	3.99E-01	0	2.46E+02	2.46E+02	0	4.34E+02	433.6892	0	3.99E-01	0.399
b0172_maturation1	Polypeptide b0172 peptide deformylase complex	1 Def_mono + 1 b0172_aa <==> 1 b0172_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.65E+03	2.65E+03	0	4.53E+03	4528.892	0	1.96E+02	195.99
b0172_maturation2	b0172 formation	1 b0172_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b0172_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.65E+03	2.65E+03	0	4.53E+03	4528.892	0	1.96E+02	195.99
b0188_fold_spon	b0188_m folding: spontanous	1 b0188_m --> 1 TilS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.46E+03	2.46E+03	0	3.29E+03	3290.823	0	9.59E+01	95.9
b0188_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0188_mRNA --> 1 b0188_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.48E+01	9.48E+01	0	1.67E+02	167.2985	0	1.66E-01	0.166
b0188_mRNA_degr1	Degradation of b0188_mRNA I	1 Orn_dim + 324 atp + 1 b0188_mRNA_2 + 1 degradosome + 324 h2o <==> 324 adp + 1 b0188_mRNA_2_degr + 324 h + 324 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.48E+01	9.48E+01	0	1.67E+02	167.2985	0	1.66E-01	0.166
b0188_mRNA_degr2	Degradation of b0188_mRNA II	1 b0188_mRNA_2_degr + 1298 h2o --> 1 Orn_dim_inact + 264 amp 1 atp + 337 cmp + 1 degradosome_inact + 417 gmp + 1298 h + 280 ump	irreversible	mRNA degradation	0.00E+00	1.66E-01	0	9.48E+01	9.48E+01	0	1.67E+02	167.2985	0	1.66E-01	0.166
b0188_maturation1	Polypeptide b0188 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0188_aa <==> 1 b0188_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.46E+03	2.46E+03	0	3.29E+03	3290.823	0	9.59E+01	95.9
b0188_maturation2	b0188 formation	1 b0188_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0188_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.46E+03	2.46E+03	0	3.29E+03	3290.823	0	9.59E+01	95.9
b0194_fold_KJE_1	b0194_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b0194_m <==> 1 b0194_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.49E+03	2.49E+03	0	4.11E+03	4107.15	0	1.14E+02	114.411
b0194_fold_KJE_2	b0194_m folding: KJE mediated	1 GrpE_dim + 1 b0194_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 ProS_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.49E+03	2.49E+03	0	4.11E+03	4107.15	0	1.14E+02	114.411
b0194_fold_KJE_3	b0194_m folding: KJE mediated	1 ProS_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 ProS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.49E+03	2.49E+03	0	4.11E+03	4107.15	0	1.14E+02	114.411
b0194_fold_spon	b0194_m folding: spontanous	1 b0194_m --> 1 ProS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.49E+03	2.49E+03	0	4.11E+03	4107.15	0	1.14E+02	114.411
b0194_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0194_mRNA --> 1 b0194_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.21E+01	7.21E+01	0	1.27E+02	127.2677	0	2.07E-01	0.207
b0194_mRNA_degr1	Degradation of b0194_mRNA I	1 Orn_dim + 429 atp + 1 b0194_mRNA_2 + 1 degradosome + 429 h2o <==> 429 adp + 1 b0194_mRNA_2_degr + 429 h + 429 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.21E+01	7.21E+01	0	1.27E+02	127.2677	0	2.07E-01	0.207
b0194_mRNA_degr2	Degradation of b0194_mRNA II	1 b0194_mRNA_2_degr + 1718 h2o --> 1 Orn_dim_inact + 411 amp 1 atp + 443 cmp + 1 degradosome_inact + 494 gmp + 1718 h + 370 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	7.21E+01	7.21E+01	0	1.27E+02	127.2677	0	2.07E-01	0.207
b0194_maturation1	Polypeptide b0194 peptide deformylase complex	1 Def_mono + 1 b0194_aa <==> 1 b0194_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.49E+03	2.49E+03	0	4.11E+03	4107.15	0	1.14E+02	114.411
b0194_maturation2	b0194 formation	1 b0194_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b0194_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.49E+03	2.49E+03	0	4.11E+03	4107.15	0	1.14E+02	114.411
b0201_RNA_10_modif_1	b0201_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 RsmB_mono + 1 amet + 1 b0201_RNA_10 <==> 1 b0201_RNA_10_RsmB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_10_modif_2	b0201_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 b0201_RNA_10_RsmB_mono --> 1 RsmB_mono_inact + 1 ahcys + 1 h + 1 rrsH	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_1_modif_1	b0201_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 MeT_16S_1402 + 2 amet + 1 b0201_RNA_1 <==> 1 b0201_RNA_1_MeT_16S_1402	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_1_modif_2	b0201_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 b0201_RNA_1_MeT_16S_1402 --> 1 MeT_16S_1402_inact + 2 ahcys + 1 b0201_RNA_2 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_2_modif_1	b0201_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 MeT_16S_1407 + 1 amet + 1 b0201_RNA_2 <==> 1 b0201_RNA_2_MeT_16S_1407	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0

b0201_RNA_2_modif_2	b0201_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 b0201_RNA_2_MeT_16S_1407 --> 1 MeT_16S_1407_inact + 1 ahcys + 1 b0201_RNA_3 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_3_modif_1	b0201_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 YggJ_mono + 1 amet + 1 b0201_RNA_3 <==> 1 b0201_RNA_3_YggJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_3_modif_2	b0201_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 b0201_RNA_3_YggJ_mono --> 1 YggJ_mono_inact + 1 ahcys + 1 b0201_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_4_modif_1	b0201_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 MeT_16S_1516 + 1 amet + 1 b0201_RNA_4 <==> 1 b0201_RNA_4_MeT_16S_1516	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_4_modif_2	b0201_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 b0201_RNA_4_MeT_16S_1516 --> 1 MeT_16S_1516_inact + 1 ahcys + 1 b0201_RNA_5 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_5_modif_1	b0201_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b0201_RNA_5 <==> 1 b0201_RNA_5_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_5_modif_2	b0201_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 b0201_RNA_5_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b0201_RNA_6 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_6_modif_1	b0201_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b0201_RNA_6 <==> 1 b0201_RNA_6_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_6_modif_2	b0201_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 b0201_RNA_6_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b0201_RNA_7 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_7_modif_1	b0201_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 RsuA_mono + 1 b0201_RNA_7 <==> 1 b0201_RNA_7_RsuA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_7_modif_2	b0201_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 b0201_RNA_7_RsuA_mono --> 1 RsuA_mono_inact + 1 b0201_RNA_8	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_8_modif_1	b0201_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 MeT_16S_527 + 1 amet + 1 b0201_RNA_8 <==> 1 b0201_RNA_8_MeT_16S_527	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_8_modif_2	b0201_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 b0201_RNA_8_MeT_16S_527 --> 1 MeT_16S_527_inact + 1 ahcy + 1 b0201_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_9_modif_1	b0201_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 MeT_16S_966 + 1 amet + 1 b0201_RNA_9 <==> 1 b0201_RNA_9_MeT_16S_966	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_9_modif_2	b0201_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 b0201_RNA_9_MeT_16S_966 --> 1 MeT_16S_966_inact + 1 ahcy + 1 b0201_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_modif_1	b0201_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 RsmC_mono + 1 amet + 1 b0201_RNA <==> 1 b0201_RNA_RsmC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_RNA_modif_2	b0201_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 b0201_RNA_RsmC_mono --> 1 RsmC_mono_inact + 1 ahcys + 1 b0201_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0201_v1_RNA_10_modif_1	b0201_v1_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 RsmB_mono + 1 amet + 1 b0201_v1_RNA_10 <==> 1 b0201_v1_RNA_10_RsmB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_10_modif_2	b0201_v1_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 b0201_v1_RNA_10_RsmB_mono --> 1 RsmB_mono_inact + 1 ahcys + 1 h + 1 rrsH	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_1_modif_1	b0201_v1_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 MeT_16S_1402 + 2 amet + 1 b0201_v1_RNA_1 <==> 1 b0201_v1_RNA_1_MeT_16S_1402	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_1_modif_2	b0201_v1_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 b0201_v1_RNA_1_MeT_16S_1402 --> 1 MeT_16S_1402_inact + 2 ahcys + 1 b0201_v1_RNA_2 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_2_modif_1	b0201_v1_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 MeT_16S_1407 + 1 amet + 1 b0201_v1_RNA_2 <==> 1 b0201_v1_RNA_2_MeT_16S_1407	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_2_modif_2	b0201_v1_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 b0201_v1_RNA_2_MeT_16S_1407 --> 1 MeT_16S_1407_inact + 1 ahcys + 1 b0201_v1_RNA_3 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_3_modif_1	b0201_v1_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 YggJ_mono + 1 amet + 1 b0201_v1_RNA_3 <==> 1 b0201_v1_RNA_3_YggJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_3_modif_2	b0201_v1_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 b0201_v1_RNA_3_YggJ_mono --> 1 YggJ_mono_inact + 1 ahcys + 1 b0201_v1_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_4_modif_1	b0201_v1_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 MeT_16S_1516 + 1 amet + 1 b0201_v1_RNA_4 <==> 1 b0201_v1_RNA_4_MeT_16S_1516	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_4_modif_2	b0201_v1_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 b0201_v1_RNA_4_MeT_16S_1516 --> 1 MeT_16S_1516_inact + 1 ahcys + 1 b0201_v1_RNA_5 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_5_modif_1	b0201_v1_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b0201_v1_RNA_5 <==> 1 b0201_v1_RNA_5_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_5_modif_2	b0201_v1_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 b0201_v1_RNA_5_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b0201_v1_RNA_6 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_6_modif_1	b0201_v1_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b0201_v1_RNA_6 <==> 1 b0201_v1_RNA_6_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_6_modif_2	b0201_v1_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 b0201_v1_RNA_6_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b0201_v1_RNA_7 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_7_modif_1	b0201_v1_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 RsuA_mono + 1 b0201_v1_RNA_7 <==> 1 b0201_v1_RNA_7_RsuA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_7_modif_2	b0201_v1_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 b0201_v1_RNA_7_RsuA_mono --> 1 RsuA_mono_inact + 1 b0201_v1_RNA_8	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_8_modif_1	b0201_v1_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 MeT_16S_527 + 1 amet + 1 b0201_v1_RNA_8 <==> 1 b0201_v1_RNA_8_MeT_16S_527	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_8_modif_2	b0201_v1_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 b0201_v1_RNA_8_MeT_16S_527 --> 1 MeT_16S_527_inact + 1 ahcys + 1 b0201_v1_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_9_modif_1	b0201_v1_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 MeT_16S_966 + 1 amet + 1 b0201_v1_RNA_9 <==> 1 b0201_v1_RNA_9_MeT_16S_966	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_9_modif_2	b0201_v1_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 b0201_v1_RNA_9_MeT_16S_966 --> 1 MeT_16S_966_inact + 1 ahcys + 1 b0201_v1_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0201_v1_RNA_modif_1	b0201_v1_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 RsmC_mono + 1 amet + 1 b0201_v1_RNA <==> 1 b0201_v1_RNA_RsmC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54

b0201_v1_RNA_modif_2	b0201_v1_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 b0201_v1_RNA_RsmC_mono --> 1 RsmC_mono_inact + 1 ahcys + 1 b0201_v1_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_tRNA_20A_MODIF_1	modification of position 20A nt (D) in ileV by Dus_gen	1 Dus_gen + 1 b0202_tRNA_1 + 1 h + 1 nadph <==> 1 b0202_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_20A_MODIF_2	modification of position 20A nt (D) in ileV by Dus_gen	1 b0202_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0202_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_20_MODIF_1	modification of position 20 nt (D) in ileV by Dus_gen	1 Dus_gen + 1 b0202_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0202_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_20_MODIF_2	modification of position 20 nt (D) in ileV by Dus_gen	1 b0202_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0202_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in ileV by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0202_tRNA_2 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0202_tRNA_2_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in ileV by Up_tRNA_pos_37_t6A	1 b0202_tRNA_2_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0202_tRNA_3 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in ileV by YggH_mono	1 YggH_mono + 1 amet + 1 b0202_tRNA_3 <==> 1 b0202_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in ileV by YggH_mono	1 b0202_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0202_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in ileV by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b0202_tRNA_4 <==> 1 b0202_tRNA_4_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in ileV by AcpT_tRNA_pos_47_acp3U	1 b0202_tRNA_4_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b0202_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in ileV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0202_tRNA_5 <==> 1 b0202_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in ileV by TrmA_mono	1 b0202_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0202_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_55_MODIF_1	modification of position 55 nt (Y) in ileV by TruB_mono	1 TruB_mono + 1 b0202_tRNA_6 <==> 1 b0202_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_55_MODIF_2	modification of position 55 nt (Y) in ileV by TruB_mono	1 b0202_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b0202_tRNA_7	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_65_MODIF_1	modification of position 65 nt (Y) in ileV by YqcB_mono	1 YqcB_mono + 1 b0202_tRNA_7 <==> 1 b0202_tRNA_7_YqcB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_65_MODIF_2	modification of position 65 nt (Y) in ileV by YqcB_mono	1 b0202_tRNA_7_YqcB_mono_cplx --> 1 YqcB_mono_inact + 1 ileV_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_tRNA_Mg_BIND	Binding of two Mg2 to b0202_tRNA	1 b0202_RNA + 2 mg2 <==> 1 b0202_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0202_v1_tRNA_20A_MODIF_1	modification of position 20A nt (D) in ileV by Dus_gen	1 Dus_gen + 1 b0202_v1_tRNA_1 + 1 h + 1 nadph <==> 1 b0202_v1_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_20A_MODIF_2	modification of position 20A nt (D) in ileV by Dus_gen	1 b0202_v1_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0202_v1_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_20_MODIF_1	modification of position 20 nt (D) in ileV by Dus_gen	1 Dus_gen + 1 b0202_v1_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0202_v1_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_20_MODIF_2	modification of position 20 nt (D) in ileV by Dus_gen	1 b0202_v1_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0202_v1_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in ileV by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0202_v1_tRNA_2 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0202_v1_tRNA_2_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in ileV by Up_tRNA_pos_37_t6A	1 b0202_v1_tRNA_2_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0202_v1_tRNA_3 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in ileV by YggH_mono	1 YggH_mono + 1 amet + 1 b0202_v1_tRNA_3 <==> 1 b0202_v1_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in ileV by YggH_mono	1 b0202_v1_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0202_v1_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in ileV by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b0202_v1_tRNA_4 <==> 1 b0202_v1_tRNA_4_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in ileV by AcpT_tRNA_pos_47_acp3U	1 b0202_v1_tRNA_4_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b0202_v1_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in ileV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0202_v1_tRNA_5 <==> 1 b0202_v1_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in ileV by TrmA_mono	1 b0202_v1_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0202_v1_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_55_MODIF_1	modification of position 55 nt (Y) in ileV by TruB_mono	1 TruB_mono + 1 b0202_v1_tRNA_6 <==> 1 b0202_v1_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_55_MODIF_2	modification of position 55 nt (Y) in ileV by TruB_mono	1 b0202_v1_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b0202_v1_tRNA_7	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_65_MODIF_1	modification of position 65 nt (Y) in ileV by YqcB_mono	1 YqcB_mono + 1 b0202_v1_tRNA_7 <==> 1 b0202_v1_tRNA_7_YqcB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_65_MODIF_2	modification of position 65 nt (Y) in ileV by YqcB_mono	1 b0202_v1_tRNA_7_YqcB_mono_cplx --> 1 YqcB_mono_inact + 1 ileV_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0202_v1_tRNA_Mg_BIND	Binding of two Mg2 to b0202_v1_tRNA	1 b0202_v1_RNA + 2 mg2 <==> 1 b0202_v1_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0203_tRNA_17_MODIF_1	modification of position 17 nt (D) in alaV by Dus_gen	1 Dus_gen + 1 b0203_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0203_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0203_tRNA_17_MODIF_2	modification of position 17 nt (D) in alaV by Dus_gen	1 b0203_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0203_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0203_tRNA_34_MODIF_1	modification of position 34 nt (cmo5U) in alaV by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 HyL_tRNA_pos_34_ho5U + 1 YecO_mono + 1 YecP_mono + 1 amet + 1 b0203_tRNA_1 + 2 chor <==> 1 b0203_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0203_tRNA_34_MODIF_2	modification of position 34 nt (cmo5U) in alaV by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 b0203_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx --> 1 C10H8O5 + 1 C9H9O4 + 1 HyL_tRNA_pos_34_ho5U_inact + 1 YecO_mono_inact + 1 YecP_mono_inact + 1 ahcys + 1 b0203_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0203_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in alaV by YggH_mono	1 YggH_mono + 1 amet + 1 b0203_tRNA_2 <==> 1 b0203_tRNA_2_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0203_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in alaV by YggH_mono	1 b0203_tRNA_2_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0203_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0203_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in alaV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0203_tRNA_3 <==> 1 b0203_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0203_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in alaV by TrmA_mono	1 b0203_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0203_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0203_tRNA_55_MODIF_1	modification of position 55 nt (Y) in alaV by TruB_mono	1 TruB_mono + 1 b0203_tRNA_4 <==> 1 b0203_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0203_tRNA_55_MODIF_2	modification of position 55 nt (Y) in alaV by TruB_mono	1 b0203_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 alaV_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0203_tRNA_Mg_BIND	Binding of two Mg2 to b0203_tRNA	1 b0203_RNA + 2 mg2 <==> 1 b0203_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0203_v1_tRNA_17_MODIF_1	modification of position 17 nt (D) in alaV by Dus_gen	1 Dus_gen + 1 b0203_v1_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0203_v1_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0203_v1_tRNA_17_MODIF_2	modification of position 17 nt (D) in alaV by Dus_gen	1 b0203_v1_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0203_v1_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0203_v1_tRNA_34_MODIF_1	modification of position 34 nt (cmo5U) in alaV by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 HyL_tRNA_pos_34_ho5U + 1 YecO_mono + 1 YecP_mono + 1 amet + 1 b0203_v1_tRNA_1 + 2 chor <==> 1 b0203_v1_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54

b0203_v1_tRNA_34_MODIF_2	modification of position 34 nt (cmo5U) in alaV by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 b0203_v1_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx --> 1 C10H8O5 + 1 C9H9O4 + 1 HyL_tRNA_pos_34_ho5U_inact + 1 YecO_mono_inact + 1 YecP_mono_inact + 1 ahcys + 1 b0203_v1_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0203_v1_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in alaV by YggH_mono	1 YggH_mono + 1 amet + 1 b0203_v1_tRNA_2 <==> 1 b0203_v1_tRNA_2_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0203_v1_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in alaV by YggH_mono	1 b0203_v1_tRNA_2_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0203_v1_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0203_v1_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in alaV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0203_v1_tRNA_3 <==> 1 b0203_v1_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0203_v1_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in alaV by TrmA_mono	1 b0203_v1_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0203_v1_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0203_v1_tRNA_55_MODIF_1	modification of position 55 nt (Y) in alaV by TruB_mono	1 TruB_mono + 1 b0203_v1_tRNA_4 <==> 1 b0203_v1_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0203_v1_tRNA_55_MODIF_2	modification of position 55 nt (Y) in alaV by TruB_mono	1 b0203_v1_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 alaV_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0203_v1_tRNA_Mg_BIND	Binding of two Mg2 to b0203_v1_tRNA	1 b0203_v1_RNA + 2 mg2 <==> 1 b0203_v1_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_RNA_10_modif_1	b0204_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 MeT_23S_2445 + 1 amet + 1 b0204_RNA_10 <==> 1 b0204_RNA_10_MeT_23S_2445	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_10_modif_2	b0204_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 b0204_RNA_10_MeT_23S_2445 --> 1 MeT_23S_2445_inact + 1 ahcys + 1 b0204_RNA_11 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_11_a_modif_1	b0204_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 DU_23S_2449 + 1 b0204_RNA_11 + 1 h + 1 nadh <==> 1 b0204_RNA_11_DU_23S_2449_a	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_11_a_modif_2	b0204_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 b0204_RNA_11_DU_23S_2449_a --> 1 DU_23S_2449_inact + 1 b0204_RNA_12 + 1 nad	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_11_b_modif_1	b0204_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 DU_23S_2449 + 1 b0204_RNA_11 + 1 h + 1 nadph <==> 1 b0204_RNA_11_DU_23S_2449_b	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_11_b_modif_2	b0204_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 b0204_RNA_11_DU_23S_2449_b --> 1 DU_23S_2449_inact + 1 b0204_RNA_12 + 1 nadp	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_12_modif_1	b0204_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 YmfC_mono + 1 b0204_RNA_12 <==> 1 b0204_RNA_12_YmfC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_12_modif_2	b0204_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 b0204_RNA_12_YmfC_mono --> 1 YmfC_mono_inact + 1 b0204_RNA_13	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_13_modif_1	b0204_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 MeT_23S_2498 + 1 amet + 1 b0204_RNA_13 <==> 1 b0204_RNA_13_MeT_23S_2498	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_13_modif_2	b0204_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 b0204_RNA_13_MeT_23S_2498 --> 1 MeT_23S_2498_inact + 1 ahcys + 1 b0204_RNA_14 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_14_modif_1	b0204_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 MeT_23S_2503 + 1 amet + 1 b0204_RNA_14 <==> 1 b0204_RNA_14_MeT_23S_2503	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_14_modif_2	b0204_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 b0204_RNA_14_MeT_23S_2503 --> 1 MeT_23S_2503_inact + 1 ahcys + 1 b0204_RNA_15 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_15_modif_1	b0204_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 RluC_mono + 1 b0204_RNA_15 <==> 1 b0204_RNA_15_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_15_modif_2	b0204_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 b0204_RNA_15_RluC_mono --> 1 RluC_mono_inact + 1 b0204_RNA_16	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_16_modif_1	b0204_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 RrmJ_mono + 1 amet + 1 b0204_RNA_16 <==> 1 b0204_RNA_16_RrmJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_16_modif_2	b0204_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 b0204_RNA_16_RrmJ_mono --> 1 RrmJ_mono_inact + 1 ahcys + b0204_RNA_17 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_17_modif_1	b0204_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 RluC_mono + 1 b0204_RNA_17 <==> 1 b0204_RNA_17_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_17_modif_2	b0204_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 b0204_RNA_17_RluC_mono --> 1 RluC_mono_inact + 1 b0204_RNA_18	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_18_modif_1	b0204_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 YjbC_mono + 1 b0204_RNA_18 <==> 1 b0204_RNA_18_YjbC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_18_modif_2	b0204_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 b0204_RNA_18_YjbC_mono --> 1 YjbC_mono_inact + 1 b0204_RNA_19	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_19_modif_1	b0204_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 RluB_mono + 1 b0204_RNA_19 <==> 1 b0204_RNA_19_RluB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_19_modif_2	b0204_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 b0204_RNA_19_RluB_mono --> 1 RluB_mono_inact + 1 b0204_RNA_20	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_1_modif_1	b0204_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 MeT_23S_1835 + 1 amet + 1 b0204_RNA_1 <==> 1 b0204_RNA_1_MeT_23S_1835	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_1_modif_2	b0204_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 b0204_RNA_1_MeT_23S_1835 --> 1 MeT_23S_1835_inact + 1 ahcys + 1 b0204_RNA_2 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_20_modif_1	b0204_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 RrmA_dim + 1 amet + 1 b0204_RNA_20 <==> 1 b0204_RNA_20_RrmA_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_20_modif_2	b0204_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 b0204_RNA_20_RrmA_dim --> 1 RrmA_dim_inact + 1 ahcys + 1 b0204_RNA_21 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_21_modif_1	b0204_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 RluA_mono + 1 b0204_RNA_21 <==> 1 b0204_RNA_21_RluA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_21_modif_2	b0204_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 b0204_RNA_21_RluA_mono --> 1 RluA_mono_inact + 1 b0204_RNA_22	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_22_modif_1	b0204_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 RumB_mono + 1 amet + 1 b0204_RNA_22 <==> 1 b0204_RNA_22_RumB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_22_modif_2	b0204_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 b0204_RNA_22_RumB_mono --> 1 RumB_mono_inact + 1 ahcys + 1 b0204_RNA_23 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_23_modif_1	b0204_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 RluC_mono + 1 b0204_RNA_23 <==> 1 b0204_RNA_23_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_23_modif_2	b0204_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 b0204_RNA_23_RluC_mono --> 1 RluC_mono_inact + 1 rrlH	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0

b0204_RNA_2_modif_1	b0204_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 RluD_mono + 1 b0204_RNA_2 <==> 1 b0204_RNA_2_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_2_modif_2	b0204_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 b0204_RNA_2_RluD_mono --> 1 RluD_mono_inact + 1 b0204_RNA_3	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_3_modif_1	b0204_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 RluD_mono + 1 amet + 1 b0204_RNA_3 <==> 1 b0204_RNA_3_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_3_modif_2	b0204_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 b0204_RNA_3_RluD_mono --> 1 RluD_mono_inact + 1 ahcys + 1 b0204_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_4_modif_1	b0204_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 RluD_mono + 1 b0204_RNA_4 <==> 1 b0204_RNA_4_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_4_modif_2	b0204_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 b0204_RNA_4_RluD_mono --> 1 RluD_mono_inact + 1 b0204_RNA_5	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_5_modif_1	b0204_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 RumA_mono + 1 amet + 1 b0204_RNA_5 <==> 1 b0204_RNA_5_RumA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_5_modif_2	b0204_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 b0204_RNA_5_RumA_mono --> 1 RumA_mono_inact + 1 ahcys + 1 b0204_RNA_6 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_6_modif_1	b0204_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 MeT_23S_1962 + 1 amet + 1 b0204_RNA_6 <==> 1 b0204_RNA_6_MeT_23S_1962	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_6_modif_2	b0204_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 b0204_RNA_6_MeT_23S_1962 --> 1 MeT_23S_1962_inact + 1 ahcys + 1 b0204_RNA_7 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_7_modif_1	b0204_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 MeT_23S_2030 + 1 amet + 1 b0204_RNA_7 <==> 1 b0204_RNA_7_MeT_23S_2030	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_7_modif_2	b0204_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 b0204_RNA_7_MeT_23S_2030 --> 1 MeT_23S_2030_inact + 1 ahcys + 1 b0204_RNA_8 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_8_modif_1	b0204_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 MeT_23S_2069 + 1 amet + 1 b0204_RNA_8 <==> 1 b0204_RNA_8_MeT_23S_2069	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_8_modif_2	b0204_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 b0204_RNA_8_MeT_23S_2069 --> 1 MeT_23S_2069_inact + 1 ahcys + 1 b0204_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_9_modif_1	b0204_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 RlmB_dim + 1 amet + 1 b0204_RNA_9 <==> 1 b0204_RNA_9_RlmB_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_9_modif_2	b0204_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 b0204_RNA_9_RlmB_dim --> 1 RlmB_dim_inact + 1 ahcys + 1 b0204_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_modif_1	b0204_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 MeT_23S_1618 + 1 amet + 1 b0204_RNA <==> 1 b0204_RNA_MeT_23S_1618	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_RNA_modif_2	b0204_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 b0204_RNA_MeT_23S_1618 --> 1 MeT_23S_1618_inact + 1 ahcy + 1 b0204_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b0204_v1_RNA_10_modif_1	b0204_v1_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 MeT_23S_2445 + 1 amet + 1 b0204_v1_RNA_10 <==> 1 b0204_v1_RNA_10_MeT_23S_2445	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_10_modif_2	b0204_v1_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 b0204_v1_RNA_10_MeT_23S_2445 --> 1 MeT_23S_2445_inact + 1 ahcys + 1 b0204_v1_RNA_11 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_11_a_modif_1	b0204_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 DU_23S_2449 + 1 b0204_v1_RNA_11 + 1 h + 1 nadh <==> 1 b0204_v1_RNA_11_DU_23S_2449_a	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_11_a_modif_2	b0204_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 b0204_v1_RNA_11_DU_23S_2449_a --> 1 DU_23S_2449_inact + 1 b0204_v1_RNA_12 + 1 nad	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_11_b_modif_1	b0204_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 DU_23S_2449 + 1 b0204_v1_RNA_11 + 1 h + 1 nadph <==> 1 b0204_v1_RNA_11_DU_23S_2449_b	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_11_b_modif_2	b0204_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 b0204_v1_RNA_11_DU_23S_2449_b --> 1 DU_23S_2449_inact + 1 b0204_v1_RNA_12 + 1 nadp	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_12_modif_1	b0204_v1_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 YmfC_mono + 1 b0204_v1_RNA_12 <==> 1 b0204_v1_RNA_12_YmfC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_12_modif_2	b0204_v1_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 b0204_v1_RNA_12_YmfC_mono --> 1 YmfC_mono_inact + 1 b0204_v1_RNA_13	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_13_modif_1	b0204_v1_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 MeT_23S_2498 + 1 amet + 1 b0204_v1_RNA_13 <==> 1 b0204_v1_RNA_13_MeT_23S_2498	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_13_modif_2	b0204_v1_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 b0204_v1_RNA_13_MeT_23S_2498 --> 1 MeT_23S_2498_inact + 1 ahcys + 1 b0204_v1_RNA_14 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_14_modif_1	b0204_v1_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 MeT_23S_2503 + 1 amet + 1 b0204_v1_RNA_14 <==> 1 b0204_v1_RNA_14_MeT_23S_2503	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_14_modif_2	b0204_v1_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 b0204_v1_RNA_14_MeT_23S_2503 --> 1 MeT_23S_2503_inact + 1 ahcys + 1 b0204_v1_RNA_15 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_15_modif_1	b0204_v1_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 RluC_mono + 1 b0204_v1_RNA_15 <==> 1 b0204_v1_RNA_15_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_15_modif_2	b0204_v1_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 b0204_v1_RNA_15_RluC_mono --> 1 RluC_mono_inact + 1 b0204_v1_RNA_16	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_16_modif_1	b0204_v1_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 RrmJ_mono + 1 amet + 1 b0204_v1_RNA_16 <==> 1 b0204_v1_RNA_16_RrmJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_16_modif_2	b0204_v1_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 b0204_v1_RNA_16_RrmJ_mono --> 1 RrmJ_mono_inact + 1 ahcys + 1 b0204_v1_RNA_17 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_17_modif_1	b0204_v1_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 RluC_mono + 1 b0204_v1_RNA_17 <==> 1 b0204_v1_RNA_17_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_17_modif_2	b0204_v1_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 b0204_v1_RNA_17_RluC_mono --> 1 RluC_mono_inact + 1 b0204_v1_RNA_18	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_18_modif_1	b0204_v1_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 YjbC_mono + 1 b0204_v1_RNA_18 <==> 1 b0204_v1_RNA_18_YjbC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_18_modif_2	b0204_v1_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 b0204_v1_RNA_18_YjbC_mono --> 1 YjbC_mono_inact + 1 b0204_v1_RNA_19	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54

b0204_v1_RNA_19_modif_1	b0204_v1_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 RluB_mono + 1 b0204_v1_RNA_19 <==> 1 b0204_v1_RNA_19_RluB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_19_modif_2	b0204_v1_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 b0204_v1_RNA_19_RluB_mono --> 1 RluB_mono_inact + 1 b0204_v1_RNA_20	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_1_modif_1	b0204_v1_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 MeT_23S_1835 + 1 amet + 1 b0204_v1_RNA_1 <==> 1 b0204_v1_RNA_1_MeT_23S_1835	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_1_modif_2	b0204_v1_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 b0204_v1_RNA_1_MeT_23S_1835 --> 1 MeT_23S_1835_inact + 1 ahcys + 1 b0204_v1_RNA_2 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_20_modif_1	b0204_v1_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 RrmA_dim + 1 amet + 1 b0204_v1_RNA_20 <==> 1 b0204_v1_RNA_20_RrmA_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_20_modif_2	b0204_v1_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 b0204_v1_RNA_20_RrmA_dim --> 1 RrmA_dim_inact + 1 ahcys + 1 b0204_v1_RNA_21 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_21_modif_1	b0204_v1_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 RluA_mono + 1 b0204_v1_RNA_21 <==> 1 b0204_v1_RNA_21_RluA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_21_modif_2	b0204_v1_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 b0204_v1_RNA_21_RluA_mono --> 1 RluA_mono_inact + 1 b0204_v1_RNA_22	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_22_modif_1	b0204_v1_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 RumB_mono + 1 amet + 1 b0204_v1_RNA_22 <==> 1 b0204_v1_RNA_22_RumB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_22_modif_2	b0204_v1_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 b0204_v1_RNA_22_RumB_mono --> 1 RumB_mono_inact + 1 ahcys + 1 b0204_v1_RNA_23 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_23_modif_1	b0204_v1_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 RluC_mono + 1 b0204_v1_RNA_23 <==> 1 b0204_v1_RNA_23_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_23_modif_2	b0204_v1_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 b0204_v1_RNA_23_RluC_mono --> 1 RluC_mono_inact + 1 rrlH	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_2_modif_1	b0204_v1_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 RluD_mono + 1 b0204_v1_RNA_2 <==> 1 b0204_v1_RNA_2_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_2_modif_2	b0204_v1_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 b0204_v1_RNA_2_RluD_mono --> 1 RluD_mono_inact + 1 b0204_v1_RNA_3	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_3_modif_1	b0204_v1_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 RluD_mono + 1 amet + 1 b0204_v1_RNA_3 <==> 1 b0204_v1_RNA_3_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_3_modif_2	b0204_v1_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 b0204_v1_RNA_3_RluD_mono --> 1 RluD_mono_inact + 1 ahcys + 1 b0204_v1_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_4_modif_1	b0204_v1_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 RluD_mono + 1 b0204_v1_RNA_4 <==> 1 b0204_v1_RNA_4_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_4_modif_2	b0204_v1_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 b0204_v1_RNA_4_RluD_mono --> 1 RluD_mono_inact + 1 b0204_v1_RNA_5	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_5_modif_1	b0204_v1_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 RumA_mono + 1 amet + 1 b0204_v1_RNA_5 <==> 1 b0204_v1_RNA_5_RumA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_5_modif_2	b0204_v1_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 b0204_v1_RNA_5_RumA_mono --> 1 RumA_mono_inact + 1 ahcy + 1 b0204_v1_RNA_6 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_6_modif_1	b0204_v1_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 MeT_23S_1962 + 1 amet + 1 b0204_v1_RNA_6 <==> 1 b0204_v1_RNA_6_MeT_23S_1962	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_6_modif_2	b0204_v1_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 b0204_v1_RNA_6_MeT_23S_1962 --> 1 MeT_23S_1962_inact + 1 ahcys + 1 b0204_v1_RNA_7 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_7_modif_1	b0204_v1_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 MeT_23S_2030 + 1 amet + 1 b0204_v1_RNA_7 <==> 1 b0204_v1_RNA_7_MeT_23S_2030	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_7_modif_2	b0204_v1_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 b0204_v1_RNA_7_MeT_23S_2030 --> 1 MeT_23S_2030_inact + 1 ahcys + 1 b0204_v1_RNA_8 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_8_modif_1	b0204_v1_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 MeT_23S_2069 + 1 amet + 1 b0204_v1_RNA_8 <==> 1 b0204_v1_RNA_8_MeT_23S_2069	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_8_modif_2	b0204_v1_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 b0204_v1_RNA_8_MeT_23S_2069 --> 1 MeT_23S_2069_inact + 1 ahcys + 1 b0204_v1_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_9_modif_1	b0204_v1_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 RlmB_dim + 1 amet + 1 b0204_v1_RNA_9 <==> 1 b0204_v1_RNA_9_RlmB_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_9_modif_2	b0204_v1_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 b0204_v1_RNA_9_RlmB_dim --> 1 RlmB_dim_inact + 1 ahcys + 1 b0204_v1_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_modif_1	b0204_v1_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 MeT_23S_1618 + 1 amet + 1 b0204_v1_RNA <==> 1 b0204_v1_RNA_MeT_23S_1618	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0204_v1_RNA_modif_2	b0204_v1_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 b0204_v1_RNA_MeT_23S_1618 --> 1 MeT_23S_1618_inact + 1 ahcys + 1 b0204_v1_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
b0206_DNA_act_bind	b0206_DNA binding of activator	1 b0206_DNA_neu --> 1 b0206_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_16_MODIF_1	modification of position 16 nt (D) in aspU by Dus_gen	1 Dus_gen + 1 b0206_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0206_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_16_MODIF_2	modification of position 16 nt (D) in aspU by Dus_gen	1 b0206_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0206_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_20A_MODIF_1	modification of position 20A nt (D) in aspU by Dus_gen	1 Dus_gen + 1 b0206_tRNA_2 + 1 h + 1 nadph <==> 1 b0206_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_20A_MODIF_2	modification of position 20A nt (D) in aspU by Dus_gen	1 b0206_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0206_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_20_MODIF_1	modification of position 20 nt (D) in aspU by Dus_gen	1 Dus_gen + 1 b0206_tRNA_1 + 1 h + 1 nadph <==> 1 b0206_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_20_MODIF_2	modification of position 20 nt (D) in aspU by Dus_gen	1 b0206_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0206_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_34_MODIF_1	modification of position 34 nt (Q) in aspU by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 EoR_tRNA_pos34_Q + 1 QueA_mono + 1 Tgt_hexa + 1 adocbl + 1 amet + 1 b0206_tRNA_3 + 1 h + 1 nadh + 1 pre_Q1 <==> 1 b0206_tRNA_3_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_34_MODIF_2	modification of position 34 nt (Q) in aspU by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 b0206_tRNA_3_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx > 1 EoR_tRNA_pos34_Q_inact + 1 QueA_mono_inact + 1 Tgt_hexa_inact + 1 ade + 1 adocbl + 1 b0206_tRNA_4 + 1 gua + 2 h 1 h2o + 1 met-L + 1 nad	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in aspU by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b0206_tRNA_4 <==> 1 b0206_tRNA_4_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52

b0206_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in aspU by MeT_tRNA_pos_37_m2A	1 b0206_tRNA_4_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b0206_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in aspU by YggH_mono	1 YggH_mono + 1 amet + 1 b0206_tRNA_5 <==> 1 b0206_tRNA_5_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in aspU by YggH_mono	1 b0206_tRNA_5_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0206_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in aspU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0206_tRNA_6 <==> 1 b0206_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in aspU by TrmA_mono	1 b0206_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0206_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_55_MODIF_1	modification of position 55 nt (Y) in aspU by TruB_mono	1 TruB_mono + 1 b0206_tRNA_7 <==> 1 b0206_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_55_MODIF_2	modification of position 55 nt (Y) in aspU by TruB_mono	1 b0206_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b0206_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_65_MODIF_1	modification of position 65 nt (Y) in aspU by YqcB_mono	1 YqcB_mono + 1 b0206_tRNA_8 <==> 1 b0206_tRNA_8_YqcB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_65_MODIF_2	modification of position 65 nt (Y) in aspU by YqcB_mono	1 b0206_tRNA_8_YqcB_mono_cplx --> 1 YqcB_mono_inact + 1 b0206_tRNA_9	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in aspU by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b0206_tRNA_9 + 1 mg2 + 1 trdrd <==> 1 b0206_tRNA_9_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in aspU by ThiI_mono	1 b0206_tRNA_9_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 aspU_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_tRNA_Mg_BIND	Binding of two Mg2 to b0206_tRNA	1 b0206_RNA + 2 mg2 <==> 1 b0206_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_trimming	Cutting of stable b0206_RNA	1 b0206_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b0206_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0206_trimming_cplx	Cutting complex formation of stable b0206_RNA (, b0206)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 b0206_RNA_pre <==> 1 b0206_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
b0216_tRNA_16_MODIF_1	modification of position 16 nt (D) in aspV by Dus_gen	1 Dus_gen + 1 b0216_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0216_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_16_MODIF_2	modification of position 16 nt (D) in aspV by Dus_gen	1 b0216_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0216_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_20A_MODIF_1	modification of position 20A nt (D) in aspV by Dus_gen	1 Dus_gen + 1 b0216_tRNA_2 + 1 h + 1 nadph <==> 1 b0216_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_20A_MODIF_2	modification of position 20A nt (D) in aspV by Dus_gen	1 b0216_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0216_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_20_MODIF_1	modification of position 20 nt (D) in aspV by Dus_gen	1 Dus_gen + 1 b0216_tRNA_1 + 1 h + 1 nadph <==> 1 b0216_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_20_MODIF_2	modification of position 20 nt (D) in aspV by Dus_gen	1 b0216_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0216_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_34_MODIF_1	modification of position 34 nt (Q) in aspV by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 EoR_tRNA_pos34_Q + 1 QueA_mono + 1 Tgt_hexa + 1 adocbl + 1 amet + 1 b0216_tRNA_3 + 1 h + 1 nadh + 1 pre_Q1 <==> 1 b0216_tRNA_3_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_34_MODIF_2	modification of position 34 nt (Q) in aspV by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 b0216_tRNA_3_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx --> 1 EoR_tRNA_pos34_Q_inact + 1 QueA_mono_inact + 1 Tgt_hexa_inact + 1 ade + 1 adocbl + 1 b0216_tRNA_4 + 1 gua + 2 h + 1 h2o + 1 met-L + 1 nad	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in aspV by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b0216_tRNA_4 <==> 1 b0216_tRNA_4_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in aspV by MeT_tRNA_pos_37_m2A	1 b0216_tRNA_4_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b0216_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in aspV by YggH_mono	1 YggH_mono + 1 amet + 1 b0216_tRNA_5 <==> 1 b0216_tRNA_5_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in aspV by YggH_mono	1 b0216_tRNA_5_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0216_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in aspV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0216_tRNA_6 <==> 1 b0216_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in aspV by TrmA_mono	1 b0216_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0216_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_55_MODIF_1	modification of position 55 nt (Y) in aspV by TruB_mono	1 TruB_mono + 1 b0216_tRNA_7 <==> 1 b0216_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_55_MODIF_2	modification of position 55 nt (Y) in aspV by TruB_mono	1 b0216_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b0216_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_65_MODIF_1	modification of position 65 nt (Y) in aspV by YqcB_mono	1 YqcB_mono + 1 b0216_tRNA_8 <==> 1 b0216_tRNA_8_YqcB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_65_MODIF_2	modification of position 65 nt (Y) in aspV by YqcB_mono	1 b0216_tRNA_8_YqcB_mono_cplx --> 1 YqcB_mono_inact + 1 b0216_tRNA_9	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in aspV by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b0216_tRNA_9 + 1 mg2 + 1 trdrd <==> 1 b0216_tRNA_9_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in aspV by ThiI_mono	1 b0216_tRNA_9_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 aspV_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0216_tRNA_Mg_BIND	Binding of two Mg2 to b0216_tRNA	1 b0216_RNA + 2 mg2 <==> 1 b0216_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
b0244_tRNA_16_MODIF_1	modification of position 16 nt (D) in thrW by Dus_gen	1 Dus_gen + 1 b0244_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0244_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
b0244_tRNA_16_MODIF_2	modification of position 16 nt (D) in thrW by Dus_gen	1 b0244_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0244_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
b0244_tRNA_17_MODIF_1	modification of position 17 nt (D) in thrW by Dus_gen	1 Dus_gen + 1 b0244_tRNA_1 + 1 h + 1 nadph <==> 1 b0244_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
b0244_tRNA_17_MODIF_2	modification of position 17 nt (D) in thrW by Dus_gen	1 b0244_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0244_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
b0244_tRNA_20_MODIF_1	modification of position 20 nt (D) in thrW by Dus_gen	1 Dus_gen + 1 b0244_tRNA_2 + 1 h + 1 nadph <==> 1 b0244_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
b0244_tRNA_20_MODIF_2	modification of position 20 nt (D) in thrW by Dus_gen	1 b0244_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0244_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
b0244_tRNA_37_MODIF_1	modification of position 37 nt (m6t6A) in thrW by Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A	1 MeT_tRNA_pos_37_m6t6A + 1 Up_tRNA_pos_37_t6A + 1 amet + atp + 1 b0244_tRNA_3 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0244_tRNA_3_Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
b0244_tRNA_37_MODIF_2	modification of position 37 nt (m6t6A) in thrW by Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A	1 b0244_tRNA_3_Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A_cplx --> 1 MeT_tRNA_pos_37_m6t6A_inact + 1 Up_tRNA_pos_37_t6A_inact + 1 ahcys + 1 amp + 1 b0244_tRNA_4 + 2 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
b0244_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in thrW by YggH_mono	1 YggH_mono + 1 amet + 1 b0244_tRNA_4 <==> 1 b0244_tRNA_4_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
b0244_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in thrW by YggH_mono	1 b0244_tRNA_4_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0244_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
b0244_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in thrW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0244_tRNA_5 <==> 1 b0244_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
b0244_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in thrW by TrmA_mono	1 b0244_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0244_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
b0244_tRNA_55_MODIF_1	modification of position 55 nt (Y) in thrW by TruB_mono	1 TruB_mono + 1 b0244_tRNA_6 <==> 1 b0244_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
b0244_tRNA_55_MODIF_2	modification of position 55 nt (Y) in thrW by TruB_mono	1 b0244_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 thrW_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
b0244_tRNA_Mg_BIND	Binding of two Mg2 to b0244_tRNA	1 b0244_RNA + 2 mg2 <==> 1 b0244_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38

b0405_fold_spon	b0405_m folding: spontanous	1 b0405_m --> 1 QueA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.30E+03	2.30E+03	0	4.02E+03	4019.263	0	6.35E+01	63.478
b0405_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0405_mRNA --> 1 b0405_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	3.39E-02	0.0339
b0405_mRNA_degr1	Degradation of b0405_mRNA I	1 Orn_dim + 267 atp + 1 b0405_mRNA_2 + 1 degradosome + 267 h2o <==> 267 adp + 1 b0405_mRNA_2_degr + 267 h + 267 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	3.39E-02	0.0339
b0405_mRNA_degr2	Degradation of b0405_mRNA II	1 b0405_mRNA_2_degr + 1070 h2o --> 1 Orn_dim_inact + 245 amp + 1 atp + 285 cmp + 1 degradosome_inact + 295 gmp + 1070 h + 245 ump	irreversible	mRNA degradation	0.00E+00	3.39E-02	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	3.39E-02	0.0339
b0405_maturation1	Polypeptide b0405 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0405_aa <==> 1 b0405_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.30E+03	2.30E+03	0	4.02E+03	4019.263	0	6.35E+01	63.478
b0405_maturation2	b0405 formation	1 b0405_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0405_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.30E+03	2.30E+03	0	4.02E+03	4019.263	0	6.35E+01	63.478
b0406_fold_spon	b0406_m folding: spontanous	1 b0406_m_Zn --> 1 Tgt_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.10E+03	2.10E+03	0	3.64E+03	3641.575	0	9.19E+01	91.872
b0406_ion_BIND	Binding of ions to b0406	1 b0406_m + 1 zn2 <==> 1 b0406_m_Zn	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	2.10E+03	2.10E+03	0	3.64E+03	3641.575	0	9.19E+01	91.872
b0406_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0406_mRNA --> 1 b0406_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.15E+01	9.15E+01	0	1.62E+02	161.5461	0	1.96E-01	0.196
b0406_mRNA_degr1	Degradation of b0406_mRNA I	1 Orn_dim + 282 atp + 1 b0406_mRNA_2 + 1 degradosome + 282 h2o <==> 282 adp + 1 b0406_mRNA_2_degr + 282 h + 282 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.15E+01	9.15E+01	0	1.62E+02	161.5461	0	1.96E-01	0.196
b0406_mRNA_degr2	Degradation of b0406_mRNA II	1 b0406_mRNA_2_degr + 1127 h2o --> 1 Orn_dim_inact + 267 amp + 1 atp + 274 cmp + 1 degradosome_inact + 305 gmp + 1127 h + 281 ump	irreversible	mRNA degradation	0.00E+00	2.57E-01	0	9.15E+01	9.15E+01	0	1.62E+02	161.5461	0	1.96E-01	0.196
b0406_maturation1	Polypeptide b0406 peptide deformylase complex	1 Def_mono + 1 b0406_aa <==> 1 b0406_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.10E+03	2.10E+03	0	3.64E+03	3641.575	0	9.19E+01	91.872
b0406_maturation2	b0406 formation	1 b0406_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b0406_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.10E+03	2.10E+03	0	3.64E+03	3641.575	0	9.19E+01	91.872
b0407_fold_spon	b0407_m folding: spontanous	1 b0407_m --> 1 YajC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.56E+02	6.56E+02	0	1.08E+03	1076.077	0	1.08E+02	107.976
b0407_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0407_mRNA --> 1 b0407_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.15E+01	9.15E+01	0	1.62E+02	161.5461	0	1.96E-01	0.196
b0407_mRNA_degr1	Degradation of b0407_mRNA I	1 Orn_dim + 83 atp + 1 b0407_mRNA_2 + 1 degradosome + 83 h2o <==> 83 adp + 1 b0407_mRNA_2_degr + 83 h + 83 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.15E+01	9.15E+01	0	1.62E+02	161.5461	0	1.96E-01	0.196
b0407_mRNA_degr2	Degradation of b0407_mRNA II	1 b0407_mRNA_2_degr + 332 h2o --> 1 Orn_dim_inact + 84 amp + 75 cmp + 1 degradosome_inact + 90 gmp + 332 h + 84 ump	irreversible	mRNA degradation	0.00E+00	1.96E-01	0	9.15E+01	9.15E+01	0	1.62E+02	161.5461	0	1.96E-01	0.196
b0407_maturation1	Polypeptide b0407 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0407_aa <==> 1 b0407_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.56E+02	6.56E+02	0	1.08E+03	1076.077	0	1.08E+02	107.976
b0407_maturation2	b0407 formation	1 b0407_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0407_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.56E+02	6.56E+02	0	1.08E+03	1076.077	0	1.08E+02	107.976
b0413_fold_spon	b0413_m folding: spontanous	1 b0413_m --> 1 YbaD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.62E+02	4.62E+02	0	7.65E+02	765.4876	0	6.59E+01	65.8504
b0413_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0413_mRNA --> 1 b0413_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
b0413_mRNA_degr1	Degradation of b0413_mRNA I	1 Orn_dim + 112 atp + 1 b0413_mRNA_2 + 1 degradosome + 112 h2o <==> 112 adp + 1 b0413_mRNA_2_degr + 112 h + 112 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
b0413_mRNA_degr2	Degradation of b0413_mRNA II	1 b0413_mRNA_2_degr + 449 h2o --> 1 Orn_dim_inact + 110 amp + 1 atp + 100 cmp + 1 degradosome_inact + 131 gmp + 449 h + 108 ump	irreversible	mRNA degradation	0.00E+00	9.13E-02	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
b0413_maturation1	Polypeptide b0413 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0413_aa <==> 1 b0413_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.62E+02	4.62E+02	0	7.65E+02	765.4876	0	6.59E+01	65.8504
b0413_maturation2	b0413 formation	1 b0413_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0413_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.62E+02	4.62E+02	0	7.65E+02	765.4876	0	6.59E+01	65.8504
b0414_fold_spon	b0414_m folding: spontanous	1 b0414_m --> 1 RibD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.13E+03	1.13E+03	0	1.93E+03	1929.185	0	9.26E+01	92.6373
b0414_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0414_mRNA --> 1 b0414_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
b0414_mRNA_degr1	Degradation of b0414_mRNA I	1 Orn_dim + 276 atp + 1 b0414_mRNA_2 + 1 degradosome + 276 h2o <==> 276 adp + 1 b0414_mRNA_2_degr + 276 h + 276 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
b0414_mRNA_degr2	Degradation of b0414_mRNA II	1 b0414_mRNA_2_degr + 1103 h2o --> 1 Orn_dim_inact + 256 amp 289 cmp + 1 degradosome_inact + 322 gmp + 1103 h + 237 ump	irreversible	mRNA degradation	0.00E+00	3.17E-01	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
b0414_maturation1	Polypeptide b0414 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0414_aa <==> 1 b0414_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.13E+03	1.13E+03	0	1.93E+03	1929.185	0	9.26E+01	92.6373
b0414_maturation2	b0414 formation	1 b0414_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0414_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.13E+03	1.13E+03	0	1.93E+03	1929.185	0	9.26E+01	92.6373
b0415_fold_spon	b0415_m folding: spontanous	1 b0415_m --> 1 RibE_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.49E+02	5.49E+02	0	8.91E+02	890.5136	0	1.03E+02	103.4217
b0415_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0415_mRNA --> 1 b0415_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
b0415_mRNA_degr1	Degradation of b0415_mRNA I	1 Orn_dim + 117 atp + 1 b0415_mRNA_2 + 1 degradosome + 117 h2o <==> 117 adp + 1 b0415_mRNA_2_degr + 117 h + 117 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
b0415_mRNA_degr2	Degradation of b0415_mRNA II	1 b0415_mRNA_2_degr + 470 h2o --> 1 Orn_dim_inact + 117 amp + 113 cmp + 1 degradosome_inact + 133 gmp + 470 h + 108 ump	irreversible	mRNA degradation	0.00E+00	3.08E-01	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
b0415_maturation1	Polypeptide b0415 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0415_aa <==> 1 b0415_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.49E+02	5.49E+02	0	8.91E+02	890.5136	0	1.03E+02	103.4217
b0415_maturation2	b0415 formation	1 b0415_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0415_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.49E+02	5.49E+02	0	8.91E+02	890.5136	0	1.03E+02	103.4217
b0416_fold_spon	b0416_m folding: spontanous	1 b0416_m --> 1 NusB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.98E+02	4.98E+02	0	8.02E+02	801.9676	0	1.02E+02	102.3304
b0416_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0416_mRNA --> 1 b0416_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
b0416_mRNA_degr1	Degradation of b0416_mRNA I	1 Orn_dim + 105 atp + 1 b0416_mRNA_2 + 1 degradosome + 105 h2o <==> 105 adp + 1 b0416_mRNA_2_degr + 105 h + 105 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
b0416_mRNA_degr2	Degradation of b0416_mRNA II	1 b0416_mRNA_2_degr + 419 h2o --> 1 Orn_dim_inact + 107 amp + 111 cmp + 1 degradosome_inact + 115 gmp + 419 h + 87 ump	irreversible	mRNA degradation	0.00E+00	3.17E-01	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
b0416_maturation1	Polypeptide b0416 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0416_aa <==> 1 b0416_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.98E+02	4.98E+02	0	8.02E+02	801.9676	0	1.02E+02	102.3304
b0416_maturation2	b0416 formation	1 b0416_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0416_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.98E+02	4.98E+02	0	8.02E+02	801.9676	0	1.02E+02	102.3304
b0423_fold_spon	b0423_m folding: spontanous	1 b0423_m --> 1 Thil_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.50E+03	4501.697	0	9.73E+01	97.328
b0423_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0423_mRNA --> 1 b0423_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	1.57E+02	157.4849	0	1.86E-01	0.186
b0423_mRNA_degr1	Degradation of b0423_mRNA I	1 Orn_dim + 362 atp + 1 b0423_mRNA_2 + 1 degradosome + 362 h2o <==> 362 adp + 1 b0423_mRNA_2_degr + 362 h + 362 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.92E+01	8.92E+01	0	1.57E+02	157.4849	0	1.86E-01	0.186
b0423_mRNA_degr2	Degradation of b0423_mRNA II	1 b0423_mRNA_2_degr + 1448 h2o --> 1 Orn_dim_inact + 348 amp 1 atp + 358 cmp + 1 degradosome_inact + 398 gmp + 1448 h + 344 ump	irreversible	mRNA degradation	0.00E+00	1.86E-01	0	8.92E+01	8.92E+01	0	1.57E+02	157.4849	0	1.86E-01	0.186

b0423_maturation1	Polypeptide b0423 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0423_aa <==> 1 b0423_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.59E+03	2.59E+03	0	4.50E+03	4501.697	0	9.73E+01	97.328
b0423_maturation2	b0423 formation	1 b0423_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0423_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.50E+03	4501.697	0	9.73E+01	97.328
b0436_fold_GroEL/ES_1	b0436_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b0436_m + 1 transGroES_hepta --> 7 adp + 1 b0436_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
b0436_fold_GroEL/ES_2	b0436_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b0436_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 Tig_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
b0436_fold_GroEL/ES_3	b0436_m folding: GroEL/ES mediated; release of native protein	1 Tig_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 Tig_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
b0436_fold_KJE_1	b0436_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b0436_m <==> 1 b0436_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
b0436_fold_KJE_2	b0436_m folding: KJE mediated	1 GrpE_dim + 1 b0436_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 Tig_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
b0436_fold_KJE_3	b0436_m folding: KJE mediated	1 Tig_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 Tig_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
b0436_fold_spon	b0436_m folding: spontanous	1 b0436_m --> 1 Tig_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
b0436_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0436_mRNA --> 1 b0436_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	3.08E-01	0.308
b0436_mRNA_degr1	Degradation of b0436_mRNA I	1 Orn_dim + 324 atp + 1 b0436_mRNA_2 + 1 degradosome + 324 h2o <==> 324 adp + 1 b0436_mRNA_2_degr + 324 h + 324 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	3.08E-01	0.308
b0436_mRNA_degr2	Degradation of b0436_mRNA II	1 b0436_mRNA_2_degr + 1298 h2o --> 1 Orn_dim_inact + 374 amp + 1 atp + 298 cmp + 1 degradosome_inact + 367 gmp + 1298 h + 259 ump	irreversible	mRNA degradation	0.00E+00	3.08E-01	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	3.08E-01	0.308
b0436_maturation1	Polypeptide b0436 peptide deformylase complex	1 Def_mono + 1 b0436_aa <==> 1 b0436_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b0436_maturation2	b0436 formation	1 b0436_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b0436_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b0436_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0436_v1_mRNA --> 1 b0436_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	3.08E-01	0.308
b0503_DNA_act_bind	b0503_DNA binding of activator	1 b0503_DNA_neu --> 1 b0503_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.17E+02	1.17E+02	0	2.07E+02	206.5187	0	1.36E-01	0.136
b0503_fold_GroEL/ES_1	b0503_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b0503_m + 1 transGroES_hepta --> 7 adp + 1 b0503_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.55E+03	2.55E+03	0	4.43E+03	4428.452	0	9.44E+01	94.416
b0503_fold_GroEL/ES_2	b0503_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b0503_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 YbbB_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.55E+03	2.55E+03	0	4.43E+03	4428.452	0	9.44E+01	94.416
b0503_fold_GroEL/ES_3	b0503_m folding: GroEL/ES mediated; release of native protein	1 YbbB_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 YbbB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.55E+03	2.55E+03	0	4.43E+03	4428.452	0	9.44E+01	94.416
b0503_fold_KJE_1	b0503_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b0503_m <==> 1 b0503_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.55E+03	2.55E+03	0	4.43E+03	4428.452	0	9.44E+01	94.416
b0503_fold_KJE_2	b0503_m folding: KJE mediated	1 GrpE_dim + 1 b0503_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 YbbB_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.55E+03	2.55E+03	0	4.43E+03	4428.452	0	9.44E+01	94.416
b0503_fold_KJE_3	b0503_m folding: KJE mediated	1 YbbB_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 YbbB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.55E+03	2.55E+03	0	4.43E+03	4428.452	0	9.44E+01	94.416
b0503_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0503_mRNA --> 1 b0503_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.17E+02	1.17E+02	0	2.07E+02	206.5187	0	1.36E-01	0.136
b0503_mRNA_degr1	Degradation of b0503_mRNA I	1 Orn_dim + 273 atp + 1 b0503_mRNA_2 + 1 degradosome + 273 h2o <==> 273 adp + 1 b0503_mRNA_2_degr + 273 h + 273 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.17E+02	1.17E+02	0	2.07E+02	206.5187	0	1.36E-01	0.136
b0503_mRNA_degr2	Degradation of b0503_mRNA II	1 b0503_mRNA_2_degr + 1094 h2o --> 1 Orn_dim_inact + 256 amp + 1 atp + 273 cmp + 1 degradosome_inact + 336 gmp + 1094 h + 229 ump	irreversible	mRNA degradation	0.00E+00	1.36E-01	0	1.17E+02	1.17E+02	0	2.07E+02	206.5187	0	1.36E-01	0.136
b0503_maturation1	Polypeptide b0503 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0503_aa <==> 1 b0503_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.55E+03	2.55E+03	0	4.43E+03	4428.452	0	9.44E+01	94.416
b0503_maturation2	b0503 formation	1 b0503_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0503_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.55E+03	2.55E+03	0	4.43E+03	4428.452	0	9.44E+01	94.416
b0526_fold_spon	b0526_m folding: spontanous	1 b0526_m_Zn --> 1 CysS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.57E+03	2.57E+03	0	4.46E+03	4461.759	0	9.49E+01	94.932
b0526_ion_BIND	Binding of ions to b0526	1 b0526_m + 1 zn2 <==> 1 b0526_m_Zn	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	2.57E+03	2.57E+03	0	4.46E+03	4461.759	0	9.49E+01	94.932
b0526_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0526_mRNA --> 1 b0526_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.76E-01	0.276
b0526_mRNA_degr1	Degradation of b0526_mRNA I	1 Orn_dim + 346 atp + 1 b0526_mRNA_2 + 1 degradosome + 346 h2o <==> 346 adp + 1 b0526_mRNA_2_degr + 346 h + 346 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.76E-01	0.276
b0526_mRNA_degr2	Degradation of b0526_mRNA II	1 b0526_mRNA_2_degr + 1385 h2o --> 1 Orn_dim_inact + 335 amp + 1 atp + 348 cmp + 1 degradosome_inact + 407 gmp + 1385 h + 295 ump	irreversible	mRNA degradation	0.00E+00	2.76E-01	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.76E-01	0.276
b0526_maturation1	Polypeptide b0526 peptide deformylase complex	1 Def_mono + 1 b0526_aa <==> 1 b0526_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.57E+03	2.57E+03	0	4.46E+03	4461.759	0	9.49E+01	94.932
b0526_maturation2	b0526 formation	1 b0526_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b0526_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.57E+03	2.57E+03	0	4.46E+03	4461.759	0	9.49E+01	94.932
b0536_tRNA_32_MODIF_1	modification of position 32 nt (s2C) in argU by YdaO_mono	1 IscS_dim_S-SH + 1 YdaO_mono + 1 atp + 1 b0536_tRNA_Mg2 + 1 mg2 + 1 trdrd <==> 1 b0536_tRNA_Mg2_YdaO_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
b0536_tRNA_32_MODIF_2	modification of position 32 nt (s2C) in argU by YdaO_mono	1 b0536_tRNA_Mg2_YdaO_mono_cplx --> 1 IscS_dim_S-H + 1 YdaO_mono_inact + 1 amp + 1 b0536_tRNA_1 + 1 h + 1 mg2 + 1 pp + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
b0536_tRNA_34_MODIF_1	modification of position 34 nt (mnm5U) in argU by TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 TrmC_mono + 1 TrmE_dim + 1 amet + 1 b0536_tRNA_1 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o <==> 1 b0536_tRNA_1_TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
b0536_tRNA_34_MODIF_2	modification of position 34 nt (mnm5U) in argU by TrmE_dim-GidA_mono-TrmC_mono	1 b0536_tRNA_1_TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 ahcys + 1 b0536_tRNA_2 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 3 h + 1 pi + 1 thf	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
b0536_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in argU by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0536_tRNA_2 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0536_tRNA_2_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
b0536_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in argU by Up_tRNA_pos_37_t6A	1 b0536_tRNA_2_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0536_tRNA_3 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
b0536_tRNA_40_MODIF_1	modification of position 40 nt (Y) in argU by TruA_dim	1 TruA_dim + 1 b0536_tRNA_3 <==> 1 b0536_tRNA_3_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
b0536_tRNA_40_MODIF_2	modification of position 40 nt (Y) in argU by TruA_dim	1 b0536_tRNA_3_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0536_tRNA_4	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
b0536_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in argU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0536_tRNA_4 <==> 1 b0536_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
b0536_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in argU by TrmA_mono	1 b0536_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0536_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
b0536_tRNA_55_MODIF_1	modification of position 55 nt (Y) in argU by TruB_mono	1 TruB_mono + 1 b0536_tRNA_5 <==> 1 b0536_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24

b0536_tRNA_55_MODIF_2	modification of position 55 nt (Y) in argU by TruB_mono	1 b0536_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 argU_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
b0536_tRNA_Mg_BIND	Binding of two Mg2 to b0536_tRNA	1 b0536_RNA + 2 mg2 <==> 1 b0536_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
b0638_fold_spon	b0638_m folding: spontanous	1 b0638_m --> 1 CobC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.12E+02	3.12E+02	0	5.05E+02	504.8618	0	6.22E+01	62.216
b0638_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0638_mRNA --> 1 b0638_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0638_mRNA_degr1	Degradation of b0638_mRNA I	1 Orn_dim + 153 atp + 1 b0638_mRNA_2 + 1 degradosome + 153 h2o <==> 153 adp + 1 b0638_mRNA_2_degr + 153 h + 153 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0638_mRNA_degr2	Degradation of b0638_mRNA II	1 b0638_mRNA_2_degr + 611 h2o --> 1 Orn_dim_inact + 148 amp + 153 cmp + 1 degradosome_inact + 160 gmp + 611 h + 151 ump	irreversible	mRNA degradation	0.00E+00	1.46E-01	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0638_maturation1	Polypeptide b0638 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0638_aa <==> 1 b0638_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.12E+02	3.12E+02	0	5.05E+02	504.8618	0	6.22E+01	62.216
b0638_maturation2	b0638 formation	1 b0638_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0638_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.12E+02	3.12E+02	0	5.05E+02	504.8618	0	6.22E+01	62.216
b0639_fold_spon	b0639_m folding: spontanous	1 b0639_m --> 1 NadD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.48E+02	3.48E+02	0	5.58E+02	558.1984	0	7.53E+01	75.312
b0639_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0639_mRNA --> 1 b0639_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0639_mRNA_degr1	Degradation of b0639_mRNA I	1 Orn_dim + 160 atp + 1 b0639_mRNA_2 + 1 degradosome + 160 h2o <==> 160 adp + 1 b0639_mRNA_2_degr + 160 h + 160 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0639_mRNA_degr2	Degradation of b0639_mRNA II	1 b0639_mRNA_2_degr + 641 h2o --> 1 Orn_dim_inact + 168 amp + 169 cmp + 1 degradosome_inact + 152 gmp + 641 h + 153 ump	irreversible	mRNA degradation	0.00E+00	1.63E-01	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0639_maturation1	Polypeptide b0639 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0639_aa <==> 1 b0639_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.48E+02	3.48E+02	0	5.58E+02	558.1984	0	7.53E+01	75.312
b0639_maturation2	b0639 formation	1 b0639_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0639_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.48E+02	3.48E+02	0	5.58E+02	558.1984	0	7.53E+01	75.312
b0640_fold_spon	b0640_m folding: spontanous	1 b0640_m --> 1 HolA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.39E+02	5.39E+02	0	8.89E+02	889.3306	0	8.45E+01	84.52
b0640_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0640_mRNA --> 1 b0640_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0640_mRNA_degr1	Degradation of b0640_mRNA I	1 Orn_dim + 257 atp + 1 b0640_mRNA_2 + 1 degradosome + 257 h2o <==> 257 adp + 1 b0640_mRNA_2_degr + 257 h + 257 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0640_mRNA_degr2	Degradation of b0640_mRNA II	1 b0640_mRNA_2_degr + 1030 h2o --> 1 Orn_dim_inact + 240 amp 262 cmp + 1 degradosome_inact + 278 gmp + 1030 h + 251 ump	irreversible	mRNA degradation	0.00E+00	3.37E-01	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0640_maturation1	Polypeptide b0640 peptide deformylase complex	1 Def_mono + 1 b0640_aa <==> 1 b0640_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.39E+02	5.39E+02	0	8.89E+02	889.3306	0	8.45E+01	84.52
b0640_maturation2	b0640 formation	1 b0640_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b0640_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.39E+02	5.39E+02	0	8.89E+02	889.3306	0	8.45E+01	84.52
b0641_fold_spon	b0641_m folding: spontanous	1 b0641_m --> 1 RlpB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.42E+02	3.42E+02	0	5.35E+02	534.5618	0	9.19E+01	91.916
b0641_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0641_mRNA --> 1 b0641_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0641_mRNA_degr1	Degradation of b0641_mRNA I	1 Orn_dim + 145 atp + 1 b0641_mRNA_2 + 1 degradosome + 145 h2o <==> 145 adp + 1 b0641_mRNA_2_degr + 145 h + 145 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0641_mRNA_degr2	Degradation of b0641_mRNA II	1 b0641_mRNA_2_degr + 581 h2o --> 1 Orn_dim_inact + 145 amp + 150 cmp + 1 degradosome_inact + 154 gmp + 581 h + 133 ump	irreversible	mRNA degradation	0.00E+00	4.14E-01	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0641_maturation1	Polypeptide b0641 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0641_aa <==> 1 b0641_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.42E+02	3.42E+02	0	5.35E+02	534.5618	0	9.19E+01	91.916
b0641_maturation2	b0641 formation	1 b0641_def_map_cplx + 19 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 3 ala-L + 1 arg-L + 1 b0641_m + 1 for + 1 gly + 1 ile-L + 6 leu-L + 1 met-L + 1 ser-L + 2 thr-L + 1 tyr-L + 1 val-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.42E+02	3.42E+02	0	5.35E+02	534.5618	0	9.19E+01	91.916
b0642_fold_KJE_1	b0642_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b0642_m_Zn <==> 1 b0642_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	1.25E+03	1.25E+03	0	2.13E+03	2127.826	0	1.16E+02	115.8
b0642_fold_KJE_2	b0642_m folding: KJE mediated	1 GrpE_dim + 1 b0642_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 LeuS_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.25E+03	1.25E+03	0	2.13E+03	2127.826	0	1.16E+02	115.8
b0642_fold_KJE_3	b0642_m folding: KJE mediated	1 LeuS_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 LeuS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.25E+03	1.25E+03	0	2.13E+03	2127.826	0	1.16E+02	115.8
b0642_fold_spon	b0642_m folding: spontanous	1 b0642_m_Zn --> 1 LeuS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.25E+03	1.25E+03	0	2.13E+03	2127.826	0	1.16E+02	115.8
b0642_ion_BIND	Binding of ions to b0642	1 b0642_m + 1 zn2 <==> 1 b0642_m_Zn	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	1.25E+03	1.25E+03	0	2.13E+03	2127.826	0	1.16E+02	115.8
b0642_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0642_mRNA --> 1 b0642_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0642_mRNA_degr1	Degradation of b0642_mRNA I	1 Orn_dim + 645 atp + 1 b0642_mRNA_2 + 1 degradosome + 645 h2o <==> 645 adp + 1 b0642_mRNA_2_degr + 645 h + 645 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0642_mRNA_degr2	Degradation of b0642_mRNA II	1 b0642_mRNA_2_degr + 2582 h2o --> 1 Orn_dim_inact + 660 amp 1 atp + 654 cmp + 1 degradosome_inact + 724 gmp + 2582 h + 544 ump	irreversible	mRNA degradation	0.00E+00	4.90E-01	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
b0642_maturation1	Polypeptide b0642 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0642_aa <==> 1 b0642_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.25E+03	1.25E+03	0	2.13E+03	2127.826	0	1.16E+02	115.8
b0642_maturation2	b0642 formation	1 b0642_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0642_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.25E+03	1.25E+03	0	2.13E+03	2127.826	0	1.16E+02	115.8
b0661_fold_spon	b0661_m folding: spontanous	1 b0661_m_FeS --> 1 MiaB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.40E+03	2.40E+03	0	4.16E+03	4160.365	0	9.54E+01	95.364
b0661_iron_sulfur_BIND1	Incorporation of [4Fe-4S]2+ in b0661	1 IscU_dim_[4Fe-4S] + 1 b0661_m <==> 1 b0661_m_IscU_cplx	reversible	Iron-sulfur cluster incorporation	-1.00E+09	1.00E+09	0	2.40E+03	2.40E+03	0	4.16E+03	4160.365	0	9.54E+01	95.364
b0661_iron_sulfur_BIND2	Incorporation of [4Fe-4S]2+ in b0661	1 b0661_m_IscU_cplx <==> 2 IscU_mono + 1 b0661_m_FeS	reversible	Iron-sulfur cluster incorporation	-1.00E+09	1.00E+09	0	2.40E+03	2.40E+03	0	4.16E+03	4160.365	0	9.54E+01	95.364
b0661_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0661_mRNA --> 1 b0661_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.54E+01	8.54E+01	0	1.51E+02	150.7476	0	1.92E-01	0.192
b0661_mRNA_degr1	Degradation of b0661_mRNA I	1 Orn_dim + 356 atp + 1 b0661_mRNA_2 + 1 degradosome + 356 h2o <==> 356 adp + 1 b0661_mRNA_2_degr + 356 h + 356 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.54E+01	8.54E+01	0	1.51E+02	150.7476	0	1.92E-01	0.192
b0661_mRNA_degr2	Degradation of b0661_mRNA II	1 b0661_mRNA_2_degr + 1424 h2o --> 1 Orn_dim_inact + 344 amp 1 atp + 374 cmp + 1 degradosome_inact + 398 gmp + 1424 h + 308 ump	irreversible	mRNA degradation	0.00E+00	1.92E-01	0	8.54E+01	8.54E+01	0	1.51E+02	150.7476	0	1.92E-01	0.192
b0661_maturation1	Polypeptide b0661 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0661_aa <==> 1 b0661_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.40E+03	2.40E+03	0	4.16E+03	4160.365	0	9.54E+01	95.364
b0661_maturation2	b0661 formation	1 b0661_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0661_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.40E+03	2.40E+03	0	4.16E+03	4160.365	0	9.54E+01	95.364
b0664_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in glnX by TrmH_dim	1 TrmH_dim + 1 amet + 1 b0664_tRNA_Mg2 <==> 1 b0664_tRNA_Mg2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in glnX by TrmH_dim	1 b0664_tRNA_Mg2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b0664_tRNA_1 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_20_MODIF_1	modification of position 20 nt (D) in glnX by Dus_gen	1 Dus_gen + 1 b0664_tRNA_1 + 1 h + 1 nadph <==> 1 b0664_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79

b0664_tRNA_20_MODIF_2	modification of position 20 nt (D) in glnX by Dus_gen	1 b0664_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0664_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_32_MODIF_1	modification of position 32 nt (Um) in glnX by MeT_tRNA_pos_32_Um	1 MeT_tRNA_pos_32_Um + 1 amet + 1 b0664_tRNA_2 <==> 1 b0664_tRNA_2_MeT_tRNA_pos_32_Um_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_32_MODIF_2	modification of position 32 nt (Um) in glnX by MeT_tRNA_pos_32_Um	1 b0664_tRNA_2_MeT_tRNA_pos_32_Um_cplx --> 1 MeT_tRNA_pos_32_Um_inact + 1 ahcys + 1 b0664_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in glnX by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b0664_tRNA_3 <==> 1 b0664_tRNA_3_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in glnX by MeT_tRNA_pos_37_m2A	1 b0664_tRNA_3_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b0664_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_38_MODIF_1	modification of position 38 nt (Y) in glnX by TruA_dim	1 TruA_dim + 1 b0664_tRNA_4 <==> 1 b0664_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_38_MODIF_2	modification of position 38 nt (Y) in glnX by TruA_dim	1 b0664_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0664_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in glnX by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0664_tRNA_5 <==> 1 b0664_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in glnX by TrmA_mono	1 b0664_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0664_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_55_MODIF_1	modification of position 55 nt (Y) in glnX by TruB_mono	1 TruB_mono + 1 b0664_tRNA_6 <==> 1 b0664_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_55_MODIF_2	modification of position 55 nt (Y) in glnX by TruB_mono	1 b0664_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b0664_tRNA_7	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in glnX by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b0664_tRNA_7 + 1 mg2 + 1 trdrd <==> 1 b0664_tRNA_7_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in glnX by ThiI_mono	1 b0664_tRNA_7_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 glnX_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0664_tRNA_Mg_BIND	Binding of two Mg2 to b0664_tRNA	1 b0664_RNA + 2 mg2 <==> 1 b0664_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in glnV by TrmH_dim	1 TrmH_dim + 1 amet + 1 b0665_tRNA_Mg2 <==> 1 b0665_tRNA_Mg2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in glnV by TrmH_dim	1 b0665_tRNA_Mg2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b0665_tRNA_1 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_20_MODIF_1	modification of position 20 nt (D) in glnV by Dus_gen	1 Dus_gen + 1 b0665_tRNA_1 + 1 h + 1 nadph <==> 1 b0665_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_20_MODIF_2	modification of position 20 nt (D) in glnV by Dus_gen	1 b0665_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0665_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_32_MODIF_1	modification of position 32 nt (Um) in glnV by MeT_tRNA_pos_32_Um	1 MeT_tRNA_pos_32_Um + 1 amet + 1 b0665_tRNA_2 <==> 1 b0665_tRNA_2_MeT_tRNA_pos_32_Um_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_32_MODIF_2	modification of position 32 nt (Um) in glnV by MeT_tRNA_pos_32_Um	1 b0665_tRNA_2_MeT_tRNA_pos_32_Um_cplx --> 1 MeT_tRNA_pos_32_Um_inact + 1 ahcys + 1 b0665_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in glnV by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b0665_tRNA_3 <==> 1 b0665_tRNA_3_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in glnV by MeT_tRNA_pos_37_m2A	1 b0665_tRNA_3_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b0665_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_38_MODIF_1	modification of position 38 nt (Y) in glnV by TruA_dim	1 TruA_dim + 1 b0665_tRNA_4 <==> 1 b0665_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_38_MODIF_2	modification of position 38 nt (Y) in glnV by TruA_dim	1 b0665_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0665_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in glnV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0665_tRNA_5 <==> 1 b0665_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in glnV by TrmA_mono	1 b0665_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0665_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_55_MODIF_1	modification of position 55 nt (Y) in glnV by TruB_mono	1 TruB_mono + 1 b0665_tRNA_6 <==> 1 b0665_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_55_MODIF_2	modification of position 55 nt (Y) in glnV by TruB_mono	1 b0665_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b0665_tRNA_7	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in glnV by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b0665_tRNA_7 + 1 mg2 + 1 trdrd <==> 1 b0665_tRNA_7_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in glnV by ThiI_mono	1 b0665_tRNA_7_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 glnV_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0665_tRNA_Mg_BIND	Binding of two Mg2 to b0665_tRNA	1 b0665_RNA + 2 mg2 <==> 1 b0665_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_16_MODIF_1	modification of position 16 nt (D) in metU by DusA_mono	1 DusA_mono + 1 b0666_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0666_tRNA_Mg2_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_16_MODIF_2	modification of position 16 nt (D) in metU by DusA_mono	1 b0666_tRNA_Mg2_DusA_mono_cplx --> 1 DusA_mono + 1 b0666_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_17_MODIF_1	modification of position 17 nt (D) in metU by DusA_mono	1 DusA_mono + 1 b0666_tRNA_1 + 1 h + 1 nadph <==> 1 b0666_tRNA_1_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_17_MODIF_2	modification of position 17 nt (D) in metU by DusA_mono	1 b0666_tRNA_1_DusA_mono_cplx --> 1 DusA_mono + 1 b0666_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in metU by TrmH_dim	1 TrmH_dim + 1 amet + 1 b0666_tRNA_2 <==> 1 b0666_tRNA_2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in metU by TrmH_dim	1 b0666_tRNA_2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b0666_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_20A_MODIF_1	modification of position 20A nt (D) in metU by DusA_mono	1 DusA_mono + 1 b0666_tRNA_4 + 1 h + 1 nadph <==> 1 b0666_tRNA_4_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_20A_MODIF_2	modification of position 20A nt (D) in metU by DusA_mono	1 b0666_tRNA_4_DusA_mono_cplx --> 1 DusA_mono + 1 b0666_tRNA_5 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_20_MODIF_1	modification of position 20 nt (D) in metU by DusA_mono	1 DusA_mono + 1 b0666_tRNA_3 + 1 h + 1 nadph <==> 1 b0666_tRNA_3_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_20_MODIF_2	modification of position 20 nt (D) in metU by DusA_mono	1 b0666_tRNA_3_DusA_mono_cplx --> 1 DusA_mono + 1 b0666_tRNA_4 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_34_MODIF_1	modification of position 34 nt (ac4C) in metU by AcT_tRNA_pos_34_ac4C	1 AcT_tRNA_pos_34_ac4C + 1 accoa + 1 b0666_tRNA_5 <==> 1 b0666_tRNA_5_AcT_tRNA_pos_34_ac4C_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_34_MODIF_2	modification of position 34 nt (ac4C) in metU by AcT_tRNA_pos_34_ac4C	1 b0666_tRNA_5_AcT_tRNA_pos_34_ac4C_cplx --> 1 AcT_tRNA_pos_34_ac4C_inact + 1 b0666_tRNA_6 + 1 coa	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in metU by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0666_tRNA_6 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0666_tRNA_6_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in metU by Up_tRNA_pos_37_t6A	1 b0666_tRNA_6_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0666_tRNA_7 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_39_MODIF_1	modification of position 39 nt (Y) in metU by TruA_dim	1 TruA_dim + 1 b0666_tRNA_7 <==> 1 b0666_tRNA_7_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_39_MODIF_2	modification of position 39 nt (Y) in metU by TruA_dim	1 b0666_tRNA_7_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0666_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in metU by YggH_mono	1 YggH_mono + 1 amet + 1 b0666_tRNA_8 <==> 1 b0666_tRNA_8_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in metU by YggH_mono	1 b0666_tRNA_8_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0666_tRNA_9 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in metU by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b0666_tRNA_9 <==> 1 b0666_tRNA_9_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79

b0666_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in metU by AcpT_tRNA_pos_47_acp3U	1 b0666_tRNA_9_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b0666_tRNA_10 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in metU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0666_tRNA_10 <==> 1 b0666_tRNA_10_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in metU by TrmA_mono	1 b0666_tRNA_10_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0666_tRNA_11 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_55_MODIF_1	modification of position 55 nt (Y) in metU by TruB_mono	1 TruB_mono + 1 b0666_tRNA_11 <==> 1 b0666_tRNA_11_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_55_MODIF_2	modification of position 55 nt (Y) in metU by TruB_mono	1 b0666_tRNA_11_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b0666_tRNA_12	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in metU by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b0666_tRNA_12 + 1 mg2 + 1 trdrd <==> 1 b0666_tRNA_12_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in metU by ThiI_mono	1 b0666_tRNA_12_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 metU_tRNA + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0666_tRNA_Mg_BIND	Binding of two Mg2 to b0666_tRNA	1 b0666_RNA + 2 mg2 <==> 1 b0666_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in glnW by TrmH_dim	1 TrmH_dim + 1 amet + 1 b0668_tRNA_Mg2 <==> 1 b0668_tRNA_Mg2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in glnW by TrmH_dim	1 b0668_tRNA_Mg2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b0668_tRNA_1 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_20_MODIF_1	modification of position 20 nt (D) in glnW by Dus_gen	1 Dus_gen + 1 b0668_tRNA_1 + 1 h + 1 nadph <==> 1 b0668_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_20_MODIF_2	modification of position 20 nt (D) in glnW by Dus_gen	1 b0668_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0668_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_32_MODIF_1	modification of position 32 nt (Um) in glnW by MeT_tRNA_pos_32_Um	1 MeT_tRNA_pos_32_Um + 1 amet + 1 b0668_tRNA_2 <==> 1 b0668_tRNA_2_MeT_tRNA_pos_32_Um_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_32_MODIF_2	modification of position 32 nt (Um) in glnW by MeT_tRNA_pos_32_Um	1 b0668_tRNA_2_MeT_tRNA_pos_32_Um_cplx --> 1 MeT_tRNA_pos_32_Um_inact + 1 ahcys + 1 b0668_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in glnW by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b0668_tRNA_3 <==> 1 b0668_tRNA_3_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in glnW by MeT_tRNA_pos_37_m2A	1 b0668_tRNA_3_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b0668_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_38_MODIF_1	modification of position 38 nt (Y) in glnW by TruA_dim	1 TruA_dim + 1 b0668_tRNA_4 <==> 1 b0668_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_38_MODIF_2	modification of position 38 nt (Y) in glnW by TruA_dim	1 b0668_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0668_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_39_MODIF_1	modification of position 39 nt (Y) in glnW by TruA_dim	1 TruA_dim + 1 b0668_tRNA_5 <==> 1 b0668_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_39_MODIF_2	modification of position 39 nt (Y) in glnW by TruA_dim	1 b0668_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0668_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in glnW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0668_tRNA_6 <==> 1 b0668_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in glnW by TrmA_mono	1 b0668_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0668_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_55_MODIF_1	modification of position 55 nt (Y) in glnW by TruB_mono	1 TruB_mono + 1 b0668_tRNA_7 <==> 1 b0668_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_55_MODIF_2	modification of position 55 nt (Y) in glnW by TruB_mono	1 b0668_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b0668_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in glnW by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b0668_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b0668_tRNA_8_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in glnW by ThiI_mono	1 b0668_tRNA_8_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 glnW_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0668_tRNA_Mg_BIND	Binding of two Mg2 to b0668_tRNA	1 b0668_RNA + 2 mg2 <==> 1 b0668_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in glnU by TrmH_dim	1 TrmH_dim + 1 amet + 1 b0670_tRNA_Mg2 <==> 1 b0670_tRNA_Mg2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in glnU by TrmH_dim	1 b0670_tRNA_Mg2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b0670_tRNA_1 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_20_MODIF_1	modification of position 20 nt (D) in glnU by Dus_gen	1 Dus_gen + 1 b0670_tRNA_1 + 1 h + 1 nadph <==> 1 b0670_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_20_MODIF_2	modification of position 20 nt (D) in glnU by Dus_gen	1 b0670_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0670_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_32_MODIF_1	modification of position 32 nt (Um) in glnU by MeT_tRNA_pos_32_Um	1 MeT_tRNA_pos_32_Um + 1 amet + 1 b0670_tRNA_2 <==> 1 b0670_tRNA_2_MeT_tRNA_pos_32_Um_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_32_MODIF_2	modification of position 32 nt (Um) in glnU by MeT_tRNA_pos_32_Um	1 b0670_tRNA_2_MeT_tRNA_pos_32_Um_cplx --> 1 MeT_tRNA_pos_32_Um_inact + 1 ahcys + 1 b0670_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in glnU by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b0670_tRNA_3 <==> 1 b0670_tRNA_3_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in glnU by MeT_tRNA_pos_37_m2A	1 b0670_tRNA_3_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b0670_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_38_MODIF_1	modification of position 38 nt (Y) in glnU by TruA_dim	1 TruA_dim + 1 b0670_tRNA_4 <==> 1 b0670_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_38_MODIF_2	modification of position 38 nt (Y) in glnU by TruA_dim	1 b0670_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0670_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_39_MODIF_1	modification of position 39 nt (Y) in glnU by TruA_dim	1 TruA_dim + 1 b0670_tRNA_5 <==> 1 b0670_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_39_MODIF_2	modification of position 39 nt (Y) in glnU by TruA_dim	1 b0670_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0670_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in glnU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0670_tRNA_6 <==> 1 b0670_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in glnU by TrmA_mono	1 b0670_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0670_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_55_MODIF_1	modification of position 55 nt (Y) in glnU by TruB_mono	1 TruB_mono + 1 b0670_tRNA_7 <==> 1 b0670_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_55_MODIF_2	modification of position 55 nt (Y) in glnU by TruB_mono	1 b0670_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b0670_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in glnU by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b0670_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b0670_tRNA_8_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in glnU by ThiI_mono	1 b0670_tRNA_8_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 glnU_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0670_tRNA_Mg_BIND	Binding of two Mg2 to b0670_tRNA	1 b0670_RNA + 2 mg2 <==> 1 b0670_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0672_tRNA_16_MODIF_1	modification of position 16 nt (D) in leuW by Dus_gen	1 Dus_gen + 1 b0672_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0672_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0672_tRNA_16_MODIF_2	modification of position 16 nt (D) in leuW by Dus_gen	1 b0672_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0672_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0672_tRNA_17_MODIF_1	modification of position 17 nt (D) in leuW by Dus_gen	1 Dus_gen + 1 b0672_tRNA_1 + 1 h + 1 nadph <==> 1 b0672_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0672_tRNA_17_MODIF_2	modification of position 17 nt (D) in leuW by Dus_gen	1 b0672_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0672_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0672_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in leuW by TrmH_dim	1 TrmH_dim + 1 amet + 1 b0672_tRNA_2 <==> 1 b0672_tRNA_2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79

b0672_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in leuW by TrmH_dim	1 b0672_tRNA_2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b0672_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0672_tRNA_20_MODIF_1	modification of position 20 nt (D) in leuW by Dus_gen	1 Dus_gen + 1 b0672_tRNA_3 + 1 h + 1 nadph <==> 1 b0672_tRNA_3_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0672_tRNA_20_MODIF_2	modification of position 20 nt (D) in leuW by Dus_gen	1 b0672_tRNA_3_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0672_tRNA_4 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0672_tRNA_38_MODIF_1	modification of position 38 nt (Y) in leuW by TruA_dim	1 TruA_dim + 1 b0672_tRNA_4 <==> 1 b0672_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0672_tRNA_38_MODIF_2	modification of position 38 nt (Y) in leuW by TruA_dim	1 b0672_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0672_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0672_tRNA_55_MODIF_1	modification of position 55 nt (Y) in leuW by TruB_mono	1 TruB_mono + 1 b0672_tRNA_5 <==> 1 b0672_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0672_tRNA_55_MODIF_2	modification of position 55 nt (Y) in leuW by TruB_mono	1 b0672_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 leuW_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0672_tRNA_Mg_BIND	Binding of two Mg2 to b0672_tRNA	1 b0672_RNA + 2 mg2 <==> 1 b0672_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_16_MODIF_1	modification of position 16 nt (D) in metT by DusA_mono	1 DusA_mono + 1 b0673_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0673_tRNA_Mg2_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_16_MODIF_2	modification of position 16 nt (D) in metT by DusA_mono	1 b0673_tRNA_Mg2_DusA_mono_cplx --> 1 DusA_mono + 1 b0673_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_17_MODIF_1	modification of position 17 nt (D) in metT by DusA_mono	1 DusA_mono + 1 b0673_tRNA_1 + 1 h + 1 nadph <==> 1 b0673_tRNA_1_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_17_MODIF_2	modification of position 17 nt (D) in metT by DusA_mono	1 b0673_tRNA_1_DusA_mono_cplx --> 1 DusA_mono + 1 b0673_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in metT by TrmH_dim	1 TrmH_dim + 1 amet + 1 b0673_tRNA_2 <==> 1 b0673_tRNA_2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in metT by TrmH_dim	1 b0673_tRNA_2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b0673_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_20A_MODIF_1	modification of position 20A nt (D) in metT by DusA_mono	1 DusA_mono + 1 b0673_tRNA_4 + 1 h + 1 nadph <==> 1 b0673_tRNA_4_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_20A_MODIF_2	modification of position 20A nt (D) in metT by DusA_mono	1 b0673_tRNA_4_DusA_mono_cplx --> 1 DusA_mono + 1 b0673_tRNA_5 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_20_MODIF_1	modification of position 20 nt (D) in metT by DusA_mono	1 DusA_mono + 1 b0673_tRNA_3 + 1 h + 1 nadph <==> 1 b0673_tRNA_3_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_20_MODIF_2	modification of position 20 nt (D) in metT by DusA_mono	1 b0673_tRNA_3_DusA_mono_cplx --> 1 DusA_mono + 1 b0673_tRNA_4 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_34_MODIF_1	modification of position 34 nt (ac4C) in metT by AcT_tRNA_pos_34_ac4C	1 AcT_tRNA_pos_34_ac4C + 1 accoa + 1 b0673_tRNA_5 <==> 1 b0673_tRNA_5_AcT_tRNA_pos_34_ac4C_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_34_MODIF_2	modification of position 34 nt (ac4C) in metT by AcT_tRNA_pos_34_ac4C	1 b0673_tRNA_5_AcT_tRNA_pos_34_ac4C_cplx --> 1 AcT_tRNA_pos_34_ac4C_inact + 1 b0673_tRNA_6 + 1 coa	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in metT by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0673_tRNA_6 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0673_tRNA_6_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in metT by Up_tRNA_pos_37_t6A	1 b0673_tRNA_6_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0673_tRNA_7 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_39_MODIF_1	modification of position 39 nt (Y) in metT by TruA_dim	1 TruA_dim + 1 b0673_tRNA_7 <==> 1 b0673_tRNA_7_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_39_MODIF_2	modification of position 39 nt (Y) in metT by TruA_dim	1 b0673_tRNA_7_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0673_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in metT by YggH_mono	1 YggH_mono + 1 amet + 1 b0673_tRNA_8 <==> 1 b0673_tRNA_8_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in metT by YggH_mono	1 b0673_tRNA_8_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0673_tRNA_9 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in metT by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b0673_tRNA_9 <==> 1 b0673_tRNA_9_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in metT by AcpT_tRNA_pos_47_acp3U	1 b0673_tRNA_9_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b0673_tRNA_10 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in metT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0673_tRNA_10 <==> 1 b0673_tRNA_10_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in metT by TrmA_mono	1 b0673_tRNA_10_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0673_tRNA_11 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_55_MODIF_1	modification of position 55 nt (Y) in metT by TruB_mono	1 TruB_mono + 1 b0673_tRNA_11 <==> 1 b0673_tRNA_11_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_55_MODIF_2	modification of position 55 nt (Y) in metT by TruB_mono	1 b0673_tRNA_11_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b0673_tRNA_12	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in metT by Thil_mono	1 IscS_dim_S-SH + 1 Thil_mono + 1 atp + 1 b0673_tRNA_12 + 1 mg2 + 1 trdrd <==> 1 b0673_tRNA_12_Thil_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in metT by Thil_mono	1 b0673_tRNA_12_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 h + 1 metT_tRNA + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0673_tRNA_Mg_BIND	Binding of two Mg2 to b0673_tRNA	1 b0673_RNA + 2 mg2 <==> 1 b0673_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
b0680_fold_KJE_1	b0680_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b0680_m <==> 1 b0680_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.60E+03	2.60E+03	0	4.29E+03	4285.722	0	2.02E+02	201.728
b0680_fold_KJE_2	b0680_m folding: KJE mediated	1 GrpE_dim + 1 b0680_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 GlnS_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.60E+03	2.60E+03	0	4.29E+03	4285.722	0	2.02E+02	201.728
b0680_fold_KJE_3	b0680_m folding: KJE mediated	1 GlnS_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GlnS_mono + 1 GrpE_dim_inact	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.60E+03	2.60E+03	0	4.29E+03	4285.722	0	2.02E+02	201.728
b0680_fold_spon	b0680_m folding: spontanous	1 b0680_m --> 1 GlnS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.60E+03	2.60E+03	0	4.29E+03	4285.722	0	2.02E+02	201.728
b0680_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0680_mRNA --> 1 b0680_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.55E+01	7.55E+01	0	1.33E+02	133.2851	0	4.14E-01	0.414
b0680_mRNA_degr1	Degradation of b0680_mRNA I	1 Orn_dim + 416 atp + 1 b0680_mRNA_2 + 1 degradosome + 416 h2o <==> 416 adp + 1 b0680_mRNA_2_degr + 416 h + 416 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.55E+01	7.55E+01	0	1.33E+02	133.2851	0	4.14E-01	0.414
b0680_mRNA_degr2	Degradation of b0680_mRNA II	1 b0680_mRNA_2_degr + 1664 h2o --> 1 Orn_dim_inact + 414 amp + 1 atp + 423 cmp + 1 degradosome_inact + 451 gmp + 1664 h + 376 ump	irreversible	mRNA degradation	0.00E+00	4.14E-01	0	7.55E+01	7.55E+01	0	1.33E+02	133.2851	0	4.14E-01	0.414
b0680_maturation1	Polypeptide b0680 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0680_aa <==> 1 b0680_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.60E+03	2.60E+03	0	4.29E+03	4285.722	0	2.02E+02	201.728
b0680_maturation2	b0680 formation	1 b0680_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0680_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.60E+03	2.60E+03	0	4.29E+03	4285.722	0	2.02E+02	201.728
b0680_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0680_v1_mRNA --> 1 b0680_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.55E+01	7.55E+01	0	1.33E+02	133.2851	0	4.14E-01	0.414
b0743_tRNA_16_MODIF_1	modification of position 16 nt (D) in lysT by Dus_gen	1 Dus_gen + 1 b0743_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0743_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_16_MODIF_2	modification of position 16 nt (D) in lysT by Dus_gen	1 b0743_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0743_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_17_MODIF_1	modification of position 17 nt (D) in lysT by Dus_gen	1 Dus_gen + 1 b0743_tRNA_1 + 1 h + 1 nadph <==> 1 b0743_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_17_MODIF_2	modification of position 17 nt (D) in lysT by Dus_gen	1 b0743_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0743_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_20_MODIF_1	modification of position 20 nt (D) in lysT by Dus_gen	1 Dus_gen + 1 b0743_tRNA_2 + 1 h + 1 nadph <==> 1 b0743_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_20_MODIF_2	modification of position 20 nt (D) in lysT by Dus_gen	1 b0743_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0743_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52

b0743_tRNA_34_MODIF_1	modification of position 34 nt (mnm5s2U) in lysT by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 IscS_dim_S-SH + 1 TrmC_mono + 1 TrmE_dim + 1 TrmU_mono + 1 YccK_mono + 1 YheLMN_cplx + 1 YhhP_mono + 1 amet + 1 atp + 1 b0743_tRNA_3 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o + 1 mg2 + 1 trdrd <==> 1 b0743_tRNA_3_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mon TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_34_MODIF_2	modification of position 34 nt (mnm5s2U) in lysT by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 b0743_tRNA_3_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 IscS_dim_S-H + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 TrmU_mono_inact + 1 YccK_mono_inact + 1 YheLMN_cplx_inact + 1 YhhP_mono_inact + 1 ahcys + 1 amp + 1 b0743_tRNA_4 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 4 h + 1 mg2 + 1 pi + 1 ppi + 1 thf + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_34_MODIF_3	replacement of sulfur with selenium: b0743_tRNA_4	1 YbbB_dim + 1 b0743_tRNA_4 + 1 h2o + 1 selnp <==> 1 b0743_tRNA_4_YbbB_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_34_MODIF_4	replacement of sulfur with selenium: b0743_tRNA_4	1 b0743_tRNA_4_YbbB_dim_cplx --> 1 YbbB_dim_inact + 1 b0743_tRNA_4_Se + 1 h + 1 h2s + 1 pi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in lysT by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0743_tRNA_4 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0743_tRNA_4_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_37_MODIF_1_Se	modification of position 37 nt (t6A) in lysT by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0743_tRNA_4_Se + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0743_tRNA_4_Se_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in lysT by Up_tRNA_pos_37_t6A	1 b0743_tRNA_4_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0743_tRNA_5 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_37_MODIF_2_Se	modification of position 37 nt (t6A) in lysT by Up_tRNA_pos_37_t6A	1 b0743_tRNA_4_Se_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0743_tRNA_5_Se + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_39_MODIF_1	modification of position 39 nt (Y) in lysT by TruA_dim	1 TruA_dim + 1 b0743_tRNA_5 <==> 1 b0743_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_39_MODIF_1_Se	modification of position 39 nt (Y) in lysT by TruA_dim	1 TruA_dim + 1 b0743_tRNA_5_Se <==> 1 b0743_tRNA_5_Se_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_39_MODIF_2	modification of position 39 nt (Y) in lysT by TruA_dim	1 b0743_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0743_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_39_MODIF_2_Se	modification of position 39 nt (Y) in lysT by TruA_dim	1 b0743_tRNA_5_Se_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0743_tRNA_6_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in lysT by YggH_mono	1 YggH_mono + 1 amet + 1 b0743_tRNA_6 <==> 1 b0743_tRNA_6_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_46_MODIF_1_Se	modification of position 46 nt (m7G) in lysT by YggH_mono	1 YggH_mono + 1 amet + 1 b0743_tRNA_6_Se <==> 1 b0743_tRNA_6_Se_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in lysT by YggH_mono	1 b0743_tRNA_6_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0743_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_46_MODIF_2_Se	modification of position 46 nt (m7G) in lysT by YggH_mono	1 b0743_tRNA_6_Se_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0743_tRNA_7_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in lysT by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b0743_tRNA_7 <==> 1 b0743_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_47_MODIF_1_Se	modification of position 47 nt (acp3U) in lysT by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b0743_tRNA_7_Se <==> 1 b0743_tRNA_7_Se_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in lysT by AcpT_tRNA_pos_47_acp3U	1 b0743_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b0743_tRNA_8 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_47_MODIF_2_Se	modification of position 47 nt (acp3U) in lysT by AcpT_tRNA_pos_47_acp3U	1 b0743_tRNA_7_Se_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b0743_tRNA_8_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in lysT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0743_tRNA_8 <==> 1 b0743_tRNA_8_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_54_MODIF_1_Se	modification of position 54 nt (m5U) in lysT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0743_tRNA_8_Se <==> 1 b0743_tRNA_8_Se_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in lysT by TrmA_mono	1 b0743_tRNA_8_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0743_tRNA_9 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_54_MODIF_2_Se	modification of position 54 nt (m5U) in lysT by TrmA_mono	1 b0743_tRNA_8_Se_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0743_tRNA_9_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_55_MODIF_1	modification of position 55 nt (Y) in lysT by TruB_mono	1 TruB_mono + 1 b0743_tRNA_9 <==> 1 b0743_tRNA_9_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_55_MODIF_1_Se	modification of position 55 nt (Y) in lysT by TruB_mono	1 TruB_mono + 1 b0743_tRNA_9_Se <==> 1 b0743_tRNA_9_Se_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_55_MODIF_2	modification of position 55 nt (Y) in lysT by TruB_mono	1 b0743_tRNA_9_TruB_mono_cplx --> 1 TruB_mono_inact + 1 lysT_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_55_MODIF_2_Se	modification of position 55 nt (Y) in lysT by TruB_mono	1 b0743_tRNA_9_Se_TruB_mono_cplx --> 1 TruB_mono_inact + 1 lysT_tRNA_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0743_tRNA_Mg_BIND	Binding of two Mg2 to b0743_tRNA	1 b0743_RNA + 2 mg2 <==> 1 b0743_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_17_MODIF_1	modification of position 17 nt (D) in valT by Dus_gen	1 Dus_gen + 1 b0744_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0744_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_17_MODIF_2	modification of position 17 nt (D) in valT by Dus_gen	1 b0744_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0744_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_34_MODIF_1	modification of position 34 nt (cmo5U) in valT by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 HyL_tRNA_pos_34_ho5U + 1 YecO_mono + 1 YecP_mono + 1 amet + 1 b0744_tRNA_1 + 2 chor <==> 1 b0744_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_34_MODIF_2	modification of position 34 nt (cmo5U) in valT by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 b0744_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx --> 1 C10H8O5 + 1 C9H9O4 + 1 HyL_tRNA_pos_34_ho5U_inact + 1 YecO_mono_inact + 1 YecP_mono_inact + 1 ahcys + 1 b0744_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_37_MODIF_1	modification of position 37 nt (m6A) in valT by MeT_tRNA_pos_37_m6A	1 MeT_tRNA_pos_37_m6A + 1 amet + 1 b0744_tRNA_2 <==> 1 b0744_tRNA_2_MeT_tRNA_pos_37_m6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_37_MODIF_2	modification of position 37 nt (m6A) in valT by MeT_tRNA_pos_37_m6A	1 b0744_tRNA_2_MeT_tRNA_pos_37_m6A_cplx --> 1 MeT_tRNA_pos_37_m6A_inact + 1 ahcys + 1 b0744_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in valT by YggH_mono	1 YggH_mono + 1 amet + 1 b0744_tRNA_3 <==> 1 b0744_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in valT by YggH_mono	1 b0744_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0744_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in valT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0744_tRNA_4 <==> 1 b0744_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in valT by TrmA_mono	1 b0744_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0744_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_55_MODIF_1	modification of position 55 nt (Y) in valT by TruB_mono	1 TruB_mono + 1 b0744_tRNA_5 <==> 1 b0744_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_55_MODIF_2	modification of position 55 nt (Y) in valT by TruB_mono	1 b0744_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b0744_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in valT by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b0744_tRNA_6 + 1 mg2 + 1 trdrd <==> 1 b0744_tRNA_6_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in valT by ThiI_mono	1 b0744_tRNA_6_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 trdox + 1 valT_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0744_tRNA_Mg_BIND	Binding of two Mg2 to b0744_tRNA	1 b0744_RNA + 2 mg2 <==> 1 b0744_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_16_MODIF_1	modification of position 16 nt (D) in lysW by Dus_gen	1 Dus_gen + 1 b0745_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0745_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52

b0745_tRNA_16_MODIF_2	modification of position 16 nt (D) in lysW by Dus_gen	1 b0745_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0745_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_17_MODIF_1	modification of position 17 nt (D) in lysW by Dus_gen	1 Dus_gen + 1 b0745_tRNA_1 + 1 h + 1 nadph <==> 1 b0745_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_17_MODIF_2	modification of position 17 nt (D) in lysW by Dus_gen	1 b0745_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0745_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_20_MODIF_1	modification of position 20 nt (D) in lysW by Dus_gen	1 Dus_gen + 1 b0745_tRNA_2 + 1 h + 1 nadph <==> 1 b0745_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_20_MODIF_2	modification of position 20 nt (D) in lysW by Dus_gen	1 b0745_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0745_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_34_MODIF_1	modification of position 34 nt (mnm5s2U) in lysW by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 lscS_dim_S-SH + 1 TrmC_mono + 1 TrmE_dim + 1 TrmU_mono + 1 YccK_mono + 1 YheLMN_cplx + 1 YhhP_mono + 1 amet + 1 atp + 1 b0745_tRNA_3 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o + 1 mg2 + 1 trdrd <==> 1 b0745_tRNA_3_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mon TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_34_MODIF_2	modification of position 34 nt (mnm5s2U) in lysW by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 b0745_tRNA_3_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 lscS_dim_S-H + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 TrmU_mono_inact + 1 YccK_mono_inact + 1 YheLMN_cplx_inact + 1 YhhP_mono_inact + 1 ahcys + 1 amp + 1 b0745_tRNA_4 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 4 h + 1 mg2 + 1 pi + 1 ppi + 1 thf + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_34_MODIF_3	replacement of sulfur with selenium: b0745_tRNA_4	1 YbbB_dim + 1 b0745_tRNA_4 + 1 h2o + 1 selnp <==> 1 b0745_tRNA_4_YbbB_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_34_MODIF_4	replacement of sulfur with selenium: b0745_tRNA_4	1 b0745_tRNA_4_YbbB_dim_cplx --> 1 YbbB_dim_inact + 1 b0745_tRNA_4_Se + 1 h + 1 h2s + 1 pi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in lysW by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0745_tRNA_4 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0745_tRNA_4_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_37_MODIF_1_Se	modification of position 37 nt (t6A) in lysW by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0745_tRNA_4_Se + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0745_tRNA_4_Se_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in lysW by Up_tRNA_pos_37_t6A	1 b0745_tRNA_4_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0745_tRNA_5 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_37_MODIF_2_Se	modification of position 37 nt (t6A) in lysW by Up_tRNA_pos_37_t6A	1 b0745_tRNA_4_Se_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0745_tRNA_5_Se + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_39_MODIF_1	modification of position 39 nt (Y) in lysW by TruA_dim	1 TruA_dim + 1 b0745_tRNA_5 <==> 1 b0745_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_39_MODIF_1_Se	modification of position 39 nt (Y) in lysW by TruA_dim	1 TruA_dim + 1 b0745_tRNA_5_Se <==> 1 b0745_tRNA_5_Se_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_39_MODIF_2	modification of position 39 nt (Y) in lysW by TruA_dim	1 b0745_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0745_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_39_MODIF_2_Se	modification of position 39 nt (Y) in lysW by TruA_dim	1 b0745_tRNA_5_Se_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0745_tRNA_6_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in lysW by YggH_mono	1 YggH_mono + 1 amet + 1 b0745_tRNA_6 <==> 1 b0745_tRNA_6_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_46_MODIF_1_Se	modification of position 46 nt (m7G) in lysW by YggH_mono	1 YggH_mono + 1 amet + 1 b0745_tRNA_6_Se <==> 1 b0745_tRNA_6_Se_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in lysW by YggH_mono	1 b0745_tRNA_6_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0745_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_46_MODIF_2_Se	modification of position 46 nt (m7G) in lysW by YggH_mono	1 b0745_tRNA_6_Se_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0745_tRNA_7_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in lysW by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b0745_tRNA_7 <==> 1 b0745_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_47_MODIF_1_Se	modification of position 47 nt (acp3U) in lysW by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b0745_tRNA_7_Se <==> 1 b0745_tRNA_7_Se_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in lysW by AcpT_tRNA_pos_47_acp3U	1 b0745_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b0745_tRNA_8 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_47_MODIF_2_Se	modification of position 47 nt (acp3U) in lysW by AcpT_tRNA_pos_47_acp3U	1 b0745_tRNA_7_Se_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b0745_tRNA_8_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in lysW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0745_tRNA_8 <==> 1 b0745_tRNA_8_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_54_MODIF_1_Se	modification of position 54 nt (m5U) in lysW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0745_tRNA_8_Se <==> 1 b0745_tRNA_8_Se_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in lysW by TrmA_mono	1 b0745_tRNA_8_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0745_tRNA_9 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_54_MODIF_2_Se	modification of position 54 nt (m5U) in lysW by TrmA_mono	1 b0745_tRNA_8_Se_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0745_tRNA_9_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_55_MODIF_1	modification of position 55 nt (Y) in lysW by TruB_mono	1 TruB_mono + 1 b0745_tRNA_9 <==> 1 b0745_tRNA_9_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_55_MODIF_1_Se	modification of position 55 nt (Y) in lysW by TruB_mono	1 TruB_mono + 1 b0745_tRNA_9_Se <==> 1 b0745_tRNA_9_Se_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_55_MODIF_2	modification of position 55 nt (Y) in lysW by TruB_mono	1 b0745_tRNA_9_TruB_mono_cplx --> 1 TruB_mono_inact + 1 lysW_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_55_MODIF_2_Se	modification of position 55 nt (Y) in lysW by TruB_mono	1 b0745_tRNA_9_Se_TruB_mono_cplx --> 1 TruB_mono_inact + 1 lysW_tRNA_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0745_tRNA_Mg_BIND	Binding of two Mg2 to b0745_tRNA	1 b0745_RNA + 2 mg2 <==> 1 b0745_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
b0746_tRNA_17_MODIF_1	modification of position 17 nt (D) in valZ by Dus_gen	1 Dus_gen + 1 b0746_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0746_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0746_tRNA_17_MODIF_2	modification of position 17 nt (D) in valZ by Dus_gen	1 b0746_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0746_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0746_tRNA_34_MODIF_1	modification of position 34 nt (cmo5U) in valZ by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 HyL_tRNA_pos_34_ho5U + 1 YecO_mono + 1 YecP_mono + 1 amet + 1 b0746_tRNA_1 + 2 chor <==> 1 b0746_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0746_tRNA_34_MODIF_2	modification of position 34 nt (cmo5U) in valZ by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 b0746_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx --> 1 C10H8O5 + 1 C9H9O4 + 1 HyL_tRNA_pos_34_ho5U_inact + 1 YecO_mono_inact + 1 YecP_mono_inact + 1 ahcys + 1 b0746_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0746_tRNA_37_MODIF_1	modification of position 37 nt (m6A) in valZ by MeT_tRNA_pos_37_m6A	1 MeT_tRNA_pos_37_m6A + 1 amet + 1 b0746_tRNA_2 <==> 1 b0746_tRNA_2_MeT_tRNA_pos_37_m6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0746_tRNA_37_MODIF_2	modification of position 37 nt (m6A) in valZ by MeT_tRNA_pos_37_m6A	1 b0746_tRNA_2_MeT_tRNA_pos_37_m6A_cplx --> 1 MeT_tRNA_pos_37_m6A_inact + 1 ahcys + 1 b0746_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0746_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in valZ by YggH_mono	1 YggH_mono + 1 amet + 1 b0746_tRNA_3 <==> 1 b0746_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0746_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in valZ by YggH_mono	1 b0746_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0746_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0746_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in valZ by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0746_tRNA_4 <==> 1 b0746_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0746_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in valZ by TrmA_mono	1 b0746_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0746_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0746_tRNA_55_MODIF_1	modification of position 55 nt (Y) in val by TruB_mono	1 TruB_mono + 1 b0746_tRNA_5 <==> 1 b0746_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51

b0746_tRNA_55_MODIF_2	modification of position 55 nt (Y) in val by TruB_mono	1 b0746_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b0746_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0746_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in valZ by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b0746_tRNA_6 + 1 mg2 + 1 trdrd <==> 1 b0746_tRNA_6_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0746_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in valZ by ThiI_mono	1 b0746_tRNA_6_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 trdox + 1 valZ_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0746_tRNA_Mg_BIND	Binding of two Mg2 to b0746_tRNA	1 b0746_RNA + 2 mg2 <==> 1 b0746_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_16_MODIF_1	modification of position 16 nt (D) in lysY by Dus_gen	1 Dus_gen + 1 b0747_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0747_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_16_MODIF_2	modification of position 16 nt (D) in lysY by Dus_gen	1 b0747_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0747_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_17_MODIF_1	modification of position 17 nt (D) in lysY by Dus_gen	1 Dus_gen + 1 b0747_tRNA_1 + 1 h + 1 nadph <==> 1 b0747_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_17_MODIF_2	modification of position 17 nt (D) in lysY by Dus_gen	1 b0747_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0747_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_20_MODIF_1	modification of position 20 nt (D) in lysY by Dus_gen	1 Dus_gen + 1 b0747_tRNA_2 + 1 h + 1 nadph <==> 1 b0747_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_20_MODIF_2	modification of position 20 nt (D) in lysY by Dus_gen	1 b0747_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0747_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_34_MODIF_1	modification of position 34 nt (mnm5s2U) in lysY by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 IscS_dim_S-SH + 1 TrmC_mono + 1 TrmE_dim + 1 TrmU_mono + 1 YccK_mono + 1 YheLMN_cplx + 1 YhhP_mono + 1 amet + 1 atp + 1 b0747_tRNA_3 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o + 1 mg2 + 1 trdrd <==> 1 b0747_tRNA_3_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mon TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_34_MODIF_2	modification of position 34 nt (mnm5s2U) in lysY by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 b0747_tRNA_3_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 IscS_dim_S-H + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 TrmU_mono_inact + 1 YccK_mono_inact + 1 YheLMN_cplx_inact + 1 YhhP_mono_inact + 1 ahcys + 1 amp + 1 b0747_tRNA_4 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 4 h + 1 mg2 + 1 pi + 1 ppi + 1 thf + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_34_MODIF_3	replacement of sulfur with selenium: b0747_tRNA_4	1 YbbB_dim + 1 b0747_tRNA_4 + 1 h2o + 1 selnp <==> 1 b0747_tRNA_4_YbbB_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_34_MODIF_4	replacement of sulfur with selenium: b0747_tRNA_4	1 b0747_tRNA_4_YbbB_dim_cplx --> 1 YbbB_dim_inact + 1 b0747_tRNA_4_Se + 1 h + 1 h2s + 1 pi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in lysY by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0747_tRNA_4 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0747_tRNA_4_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_37_MODIF_1_Se	modification of position 37 nt (t6A) in lysY by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0747_tRNA_4_Se + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0747_tRNA_4_Se_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in lysY by Up_tRNA_pos_37_t6A	1 b0747_tRNA_4_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0747_tRNA_5 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_37_MODIF_2_Se	modification of position 37 nt (t6A) in lysY by Up_tRNA_pos_37_t6A	1 b0747_tRNA_4_Se_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0747_tRNA_5_Se + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_39_MODIF_1	modification of position 39 nt (Y) in lysY by TruA_dim	1 TruA_dim + 1 b0747_tRNA_5 <==> 1 b0747_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_39_MODIF_1_Se	modification of position 39 nt (Y) in lysY by TruA_dim	1 TruA_dim + 1 b0747_tRNA_5_Se <==> 1 b0747_tRNA_5_Se_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_39_MODIF_2	modification of position 39 nt (Y) in lysY by TruA_dim	1 b0747_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0747_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_39_MODIF_2_Se	modification of position 39 nt (Y) in lysY by TruA_dim	1 b0747_tRNA_5_Se_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0747_tRNA_6_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in lysY by YggH_mono	1 YggH_mono + 1 amet + 1 b0747_tRNA_6 <==> 1 b0747_tRNA_6_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_46_MODIF_1_Se	modification of position 46 nt (m7G) in lysY by YggH_mono	1 YggH_mono + 1 amet + 1 b0747_tRNA_6_Se <==> 1 b0747_tRNA_6_Se_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in lysY by YggH_mono	1 b0747_tRNA_6_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0747_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_46_MODIF_2_Se	modification of position 46 nt (m7G) in lysY by YggH_mono	1 b0747_tRNA_6_Se_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0747_tRNA_7_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in lysY by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b0747_tRNA_7 <==> 1 b0747_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_47_MODIF_1_Se	modification of position 47 nt (acp3U) in lysY by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b0747_tRNA_7_Se <==> 1 b0747_tRNA_7_Se_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in lysY by AcpT_tRNA_pos_47_acp3U	1 b0747_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b0747_tRNA_8 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_47_MODIF_2_Se	modification of position 47 nt (acp3U) in lysY by AcpT_tRNA_pos_47_acp3U	1 b0747_tRNA_7_Se_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b0747_tRNA_8_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in lysY by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0747_tRNA_8 <==> 1 b0747_tRNA_8_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_54_MODIF_1_Se	modification of position 54 nt (m5U) in lysY by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0747_tRNA_8_Se <==> 1 b0747_tRNA_8_Se_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in lysY by TrmA_mono	1 b0747_tRNA_8_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0747_tRNA_9 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_54_MODIF_2_Se	modification of position 54 nt (m5U) in lysY by TrmA_mono	1 b0747_tRNA_8_Se_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0747_tRNA_9_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_55_MODIF_1	modification of position 55 nt (Y) in lysY by TruB_mono	1 TruB_mono + 1 b0747_tRNA_9 <==> 1 b0747_tRNA_9_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_55_MODIF_1_Se	modification of position 55 nt (Y) in lysY by TruB_mono	1 TruB_mono + 1 b0747_tRNA_9_Se <==> 1 b0747_tRNA_9_Se_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_55_MODIF_2	modification of position 55 nt (Y) in lysY by TruB_mono	1 b0747_tRNA_9_TruB_mono_cplx --> 1 TruB_mono_inact + 1 lysY_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_55_MODIF_2_Se	modification of position 55 nt (Y) in lysY by TruB_mono	1 b0747_tRNA_9_Se_TruB_mono_cplx --> 1 TruB_mono_inact + 1 lysY_tRNA_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0747_tRNA_Mg_BIND	Binding of two Mg2 to b0747_tRNA	1 b0747_RNA + 2 mg2 <==> 1 b0747_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_16_MODIF_1	modification of position 16 nt (D) in lysZ by Dus_gen	1 Dus_gen + 1 b0748_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0748_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_16_MODIF_2	modification of position 16 nt (D) in lysZ by Dus_gen	1 b0748_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0748_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_17_MODIF_1	modification of position 17 nt (D) in lysZ by Dus_gen	1 Dus_gen + 1 b0748_tRNA_1 + 1 h + 1 nadph <==> 1 b0748_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_17_MODIF_2	modification of position 17 nt (D) in lysZ by Dus_gen	1 b0748_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0748_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_20_MODIF_1	modification of position 20 nt (D) in lysZ by Dus_gen	1 Dus_gen + 1 b0748_tRNA_2 + 1 h + 1 nadph <==> 1 b0748_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_20_MODIF_2	modification of position 20 nt (D) in lysZ by Dus_gen	1 b0748_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0748_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_34_MODIF_1	modification of position 34 nt (mnm5s2U) in lysZ by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 IscS_dim_S-SH + 1 TrmC_mono + 1 TrmE_dim + 1 TrmU_mono + 1 YccK_mono + 1 YheLMN_cplx + 1 YhhP_mono + 1 amet + 1 atp + 1 b0748_tRNA_3 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o + 1 mg2 + 1 trdrd <==> 1 b0748_tRNA_3_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mon TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51

b0748_tRNA_34_MODIF_2	modification of position 34 nt (mnm5s2U) in lysZ by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 b0748_tRNA_3_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 IscS_dim_S-H + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 TrmU_mono_inact + 1 YccK_mono_inact + 1 YheLMN_cplx_inact + 1 YhhP_mono_inact + 1 ahcys + 1 amp + 1 b0748_tRNA_4 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 4 h + 1 mg2 + 1 pi + 1 ppi + 1 thf + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_34_MODIF_3	replacement of sulfur with selenium: b0748_tRNA_4	1 YbbB_dim + 1 b0748_tRNA_4 + 1 h2o + 1 selnp <==> 1 b0748_tRNA_4_YbbB_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_34_MODIF_4	replacement of sulfur with selenium: b0748_tRNA_4	1 b0748_tRNA_4_YbbB_dim_cplx --> 1 YbbB_dim_inact + 1 b0748_tRNA_4_Se + 1 h + 1 h2s + 1 pi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in lysZ by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0748_tRNA_4 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0748_tRNA_4_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_37_MODIF_1_Se	modification of position 37 nt (t6A) in lysZ by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0748_tRNA_4_Se + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0748_tRNA_4_Se_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in lysZ by Up_tRNA_pos_37_t6A	1 b0748_tRNA_4_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0748_tRNA_5 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_37_MODIF_2_Se	modification of position 37 nt (t6A) in lysZ by Up_tRNA_pos_37_t6A	1 b0748_tRNA_4_Se_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0748_tRNA_5_Se + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_39_MODIF_1	modification of position 39 nt (Y) in lysZ by TruA_dim	1 TruA_dim + 1 b0748_tRNA_5 <==> 1 b0748_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_39_MODIF_1_Se	modification of position 39 nt (Y) in lysZ by TruA_dim	1 TruA_dim + 1 b0748_tRNA_5_Se <==> 1 b0748_tRNA_5_Se_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_39_MODIF_2	modification of position 39 nt (Y) in lysZ by TruA_dim	1 b0748_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0748_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_39_MODIF_2_Se	modification of position 39 nt (Y) in lysZ by TruA_dim	1 b0748_tRNA_5_Se_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0748_tRNA_6_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in lysZ by YggH_mono	1 YggH_mono + 1 amet + 1 b0748_tRNA_6 <==> 1 b0748_tRNA_6_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_46_MODIF_1_Se	modification of position 46 nt (m7G) in lysZ by YggH_mono	1 YggH_mono + 1 amet + 1 b0748_tRNA_6_Se <==> 1 b0748_tRNA_6_Se_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in lysZ by YggH_mono	1 b0748_tRNA_6_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0748_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_46_MODIF_2_Se	modification of position 46 nt (m7G) in lysZ by YggH_mono	1 b0748_tRNA_6_Se_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0748_tRNA_7_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in lysZ by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b0748_tRNA_7 <==> 1 b0748_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_47_MODIF_1_Se	modification of position 47 nt (acp3U) in lysZ by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b0748_tRNA_7_Se <==> 1 b0748_tRNA_7_Se_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in lysZ by AcpT_tRNA_pos_47_acp3U	1 b0748_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b0748_tRNA_8 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_47_MODIF_2_Se	modification of position 47 nt (acp3U) in lysZ by AcpT_tRNA_pos_47_acp3U	1 b0748_tRNA_7_Se_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b0748_tRNA_8_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in lysZ by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0748_tRNA_8 <==> 1 b0748_tRNA_8_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_54_MODIF_1_Se	modification of position 54 nt (m5U) in lysZ by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0748_tRNA_8_Se <==> 1 b0748_tRNA_8_Se_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in lysZ by TrmA_mono	1 b0748_tRNA_8_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0748_tRNA_9 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_54_MODIF_2_Se	modification of position 54 nt (m5U) in lysZ by TrmA_mono	1 b0748_tRNA_8_Se_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0748_tRNA_9_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_55_MODIF_1	modification of position 55 nt (Y) in lysZ by TruB_mono	1 TruB_mono + 1 b0748_tRNA_9 <==> 1 b0748_tRNA_9_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_55_MODIF_1_Se	modification of position 55 nt (Y) in lysZ by TruB_mono	1 TruB_mono + 1 b0748_tRNA_9_Se <==> 1 b0748_tRNA_9_Se_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_55_MODIF_2	modification of position 55 nt (Y) in lysZ by TruB_mono	1 b0748_tRNA_9_TruB_mono_cplx --> 1 TruB_mono_inact + 1 lysZ_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_55_MODIF_2_Se	modification of position 55 nt (Y) in lysZ by TruB_mono	1 b0748_tRNA_9_Se_TruB_mono_cplx --> 1 TruB_mono_inact + 1 lysZ_tRNA_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0748_tRNA_Mg_BIND	Binding of two Mg2 to b0748_tRNA	1 b0748_RNA + 2 mg2 <==> 1 b0748_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_16_MODIF_1	modification of position 16 nt (D) in lysQ by Dus_gen	1 Dus_gen + 1 b0749_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b0749_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_16_MODIF_2	modification of position 16 nt (D) in lysQ by Dus_gen	1 b0749_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0749_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_17_MODIF_1	modification of position 17 nt (D) in lysQ by Dus_gen	1 Dus_gen + 1 b0749_tRNA_1 + 1 h + 1 nadph <==> 1 b0749_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_17_MODIF_2	modification of position 17 nt (D) in lysQ by Dus_gen	1 b0749_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0749_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_20_MODIF_1	modification of position 20 nt (D) in lysQ by Dus_gen	1 Dus_gen + 1 b0749_tRNA_2 + 1 h + 1 nadph <==> 1 b0749_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_20_MODIF_2	modification of position 20 nt (D) in lysQ by Dus_gen	1 b0749_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0749_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_34_MODIF_1	modification of position 34 nt (mnm5s2U) in lysQ by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 IscS_dim_S-SH + 1 TrmC_mono + 1 TrmE_dim + 1 TrmU_mono + 1 YccK_mono + 1 YheLMN_cplx + 1 YhhP_mono + 1 amet + 1 atp + 1 b0749_tRNA_3 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o + 1 mg2 + 1 trdrd <==> 1 b0749_tRNA_3_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mon TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_34_MODIF_2	modification of position 34 nt (mnm5s2U) in lysQ by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 b0749_tRNA_3_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 IscS_dim_S-H + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 TrmU_mono_inact + 1 YccK_mono_inact + 1 YheLMN_cplx_inact + 1 YhhP_mono_inact + 1 ahcys + 1 amp + 1 b0749_tRNA_4 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 4 h + 1 mg2 + 1 pi + 1 ppi + 1 thf + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_34_MODIF_3	replacement of sulfur with selenium: b0749_tRNA_4	1 YbbB_dim + 1 b0749_tRNA_4 + 1 h2o + 1 selnp <==> 1 b0749_tRNA_4_YbbB_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_34_MODIF_4	replacement of sulfur with selenium: b0749_tRNA_4	1 b0749_tRNA_4_YbbB_dim_cplx --> 1 YbbB_dim_inact + 1 b0749_tRNA_4_Se + 1 h + 1 h2s + 1 pi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in lysQ by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0749_tRNA_4 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0749_tRNA_4_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_37_MODIF_1_Se	modification of position 37 nt (t6A) in lysQ by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b0749_tRNA_4_Se + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b0749_tRNA_4_Se_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in lysQ by Up_tRNA_pos_37_t6A	1 b0749_tRNA_4_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0749_tRNA_5 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_37_MODIF_2_Se	modification of position 37 nt (t6A) in lysQ by Up_tRNA_pos_37_t6A	1 b0749_tRNA_4_Se_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b0749_tRNA_5_Se + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_39_MODIF_1	modification of position 39 nt (Y) in lysQ by TruA_dim	1 TruA_dim + 1 b0749_tRNA_5 <==> 1 b0749_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51

b0749_tRNA_39_MODIF_1_Se	modification of position 39 nt (Y) in lysQ by TruA_dim	1 TruA_dim + 1 b0749_tRNA_5_Se <==> 1 b0749_tRNA_5_Se_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_39_MODIF_2	modification of position 39 nt (Y) in lysQ by TruA_dim	1 b0749_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0749_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_39_MODIF_2_Se	modification of position 39 nt (Y) in lysQ by TruA_dim	1 b0749_tRNA_5_Se_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0749_tRNA_6_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in lysQ by YggH_mono	1 YggH_mono + 1 amet + 1 b0749_tRNA_6 <==> 1 b0749_tRNA_6_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_46_MODIF_1_Se	modification of position 46 nt (m7G) in lysQ by YggH_mono	1 YggH_mono + 1 amet + 1 b0749_tRNA_6_Se <==> 1 b0749_tRNA_6_Se_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in lysQ by YggH_mono	1 b0749_tRNA_6_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0749_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_46_MODIF_2_Se	modification of position 46 nt (m7G) in lysQ by YggH_mono	1 b0749_tRNA_6_Se_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b0749_tRNA_7_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in lysQ by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b0749_tRNA_7 <==> 1 b0749_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_47_MODIF_1_Se	modification of position 47 nt (acp3U) in lysQ by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b0749_tRNA_7_Se <==> 1 b0749_tRNA_7_Se_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in lysQ by AcpT_tRNA_pos_47_acp3U	1 b0749_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b0749_tRNA_8 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_47_MODIF_2_Se	modification of position 47 nt (acp3U) in lysQ by AcpT_tRNA_pos_47_acp3U	1 b0749_tRNA_7_Se_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b0749_tRNA_8_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in lysQ by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0749_tRNA_8 <==> 1 b0749_tRNA_8_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_54_MODIF_1_Se	modification of position 54 nt (m5U) in lysQ by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0749_tRNA_8_Se <==> 1 b0749_tRNA_8_Se_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in lysQ by TrmA_mono	1 b0749_tRNA_8_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0749_tRNA_9 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_54_MODIF_2_Se	modification of position 54 nt (m5U) in lysQ by TrmA_mono	1 b0749_tRNA_8_Se_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0749_tRNA_9_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_55_MODIF_1	modification of position 55 nt (Y) in lysQ by TruB_mono	1 TruB_mono + 1 b0749_tRNA_9 <==> 1 b0749_tRNA_9_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_55_MODIF_1_Se	modification of position 55 nt (Y) in lysQ by TruB_mono	1 TruB_mono + 1 b0749_tRNA_9_Se <==> 1 b0749_tRNA_9_Se_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_55_MODIF_2	modification of position 55 nt (Y) in lysQ by TruB_mono	1 b0749_tRNA_9_TruB_mono_cplx --> 1 TruB_mono_inact + 1 lysQ_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_55_MODIF_2_Se	modification of position 55 nt (Y) in lysQ by TruB_mono	1 b0749_tRNA_9_Se_TruB_mono_cplx --> 1 TruB_mono_inact + 1 lysQ_tRNA_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0749_tRNA_Mg_BIND	Binding of two Mg2 to b0749_tRNA	1 b0749_RNA + 2 mg2 <==> 1 b0749_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
b0850_fold_spon	b0850_m folding: spontanous	1 b0850_m --> 1 YbjC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.46E+02	3.46E+02	0	5.46E+02	546.3867	0	8.45E+01	84.535
b0850_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0850_mRNA --> 1 b0850_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.24E+01	5.24E+01	0	9.26E+01	92.57733	0	2.07E-01	0.207
b0850_mRNA_degr1	Degradation of b0850_mRNA I	1 Orn_dim + 72 atp + 1 b0850_mRNA_2 + 1 degradosome + 72 h2o <==> 72 adp + 1 b0850_mRNA_2_degr + 72 h + 72 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.24E+01	5.24E+01	0	9.26E+01	92.57733	0	2.07E-01	0.207
b0850_mRNA_degr2	Degradation of b0850_mRNA II	1 b0850_mRNA_2_degr + 287 h2o --> 1 Orn_dim_inact + 63 amp + 1 atp + 69 cmp + 1 degradosome_inact + 76 gmp + 287 h + 79 ump	irreversible	mRNA degradation	0.00E+00	2.20E-01	0	5.24E+01	5.24E+01	0	9.26E+01	92.57733	0	2.07E-01	0.207
b0850_maturation1	Polypeptide b0850 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0850_aa <==> 1 b0850_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.46E+02	3.46E+02	0	5.46E+02	546.3867	0	8.45E+01	84.535
b0850_maturation2	b0850 formation	1 b0850_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0850_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.46E+02	3.46E+02	0	5.46E+02	546.3867	0	8.45E+01	84.535
b0851_fold_spon	b0851_m folding: spontanous	1 b0851_m --> 1 NfsA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.65E+02	8.65E+02	0	1.43E+03	1426.703	0	1.34E+02	133.518
b0851_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0851_mRNA --> 1 b0851_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.24E+01	5.24E+01	0	9.26E+01	92.57733	0	2.07E-01	0.207
b0851_mRNA_degr1	Degradation of b0851_mRNA I	1 Orn_dim + 176 atp + 1 b0851_mRNA_2 + 1 degradosome + 176 h2o <==> 176 adp + 1 b0851_mRNA_2_degr + 176 h + 176 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.24E+01	5.24E+01	0	9.26E+01	92.57733	0	2.07E-01	0.207
b0851_mRNA_degr2	Degradation of b0851_mRNA II	1 b0851_mRNA_2_degr + 705 h2o --> 1 Orn_dim_inact + 165 amp + 178 cmp + 1 degradosome_inact + 194 gmp + 705 h + 169 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	5.24E+01	5.24E+01	0	9.26E+01	92.57733	0	2.07E-01	0.207
b0851_maturation1	Polypeptide b0851 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0851_aa <==> 1 b0851_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	8.65E+02	8.65E+02	0	1.43E+03	1426.703	0	1.34E+02	133.518
b0851_maturation2	b0851 formation	1 b0851_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0851_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	8.65E+02	8.65E+02	0	1.43E+03	1426.703	0	1.34E+02	133.518
b0852_fold_spon	b0852_m folding: spontanous	1 b0852_m --> 1 RimK_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.64E+03	1.64E+03	0	2.83E+03	2833.396	0	8.27E+01	82.739
b0852_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0852_mRNA --> 1 b0852_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.07E-01	0.207
b0852_mRNA_degr1	Degradation of b0852_mRNA I	1 Orn_dim + 225 atp + 1 b0852_mRNA_2 + 1 degradosome + 225 h2o <==> 225 adp + 1 b0852_mRNA_2_degr + 225 h + 225 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.07E-01	0.207
b0852_mRNA_degr2	Degradation of b0852_mRNA II	1 b0852_mRNA_2_degr + 902 h2o --> 1 Orn_dim_inact + 192 amp + 220 cmp + 1 degradosome_inact + 287 gmp + 1 gtp + 902 h + 203 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.07E-01	0.207
b0852_maturation1	Polypeptide b0852 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0852_aa <==> 1 b0852_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.64E+03	1.64E+03	0	2.83E+03	2833.396	0	8.27E+01	82.739
b0852_maturation2	b0852 formation	1 b0852_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0852_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.64E+03	1.64E+03	0	2.83E+03	2833.396	0	8.27E+01	82.739
b0852_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0852_v1_mRNA --> 1 b0852_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.24E+01	5.24E+01	0	9.26E+01	92.57733	0	2.07E-01	0.207
b0853_fold_spon	b0853_m folding: spontanous	1 b0853_m --> 1 YbjN_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.69E+02	9.69E+02	0	1.60E+03	1601.193	0	1.45E+02	144.963
b0853_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0853_mRNA --> 1 b0853_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.07E-01	0.207
b0853_mRNA_degr1	Degradation of b0853_mRNA I	1 Orn_dim + 119 atp + 1 b0853_mRNA_2 + 1 degradosome + 119 h2o <==> 119 adp + 1 b0853_mRNA_2_degr + 119 h + 119 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.07E-01	0.207
b0853_mRNA_degr2	Degradation of b0853_mRNA II	1 b0853_mRNA_2_degr + 476 h2o --> 1 Orn_dim_inact + 109 amp + 111 cmp + 1 degradosome_inact + 120 gmp + 476 h + 137 ump	irreversible	mRNA degradation	0.00E+00	2.99E-01	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.07E-01	0.207
b0853_maturation1	Polypeptide b0853 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0853_aa <==> 1 b0853_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	9.69E+02	9.69E+02	0	1.60E+03	1601.193	0	1.45E+02	144.963
b0853_maturation2	b0853 formation	1 b0853_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0853_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	9.69E+02	9.69E+02	0	1.60E+03	1601.193	0	1.45E+02	144.963
b0853_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0853_v1_mRNA --> 1 b0853_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.24E+01	5.24E+01	0	9.26E+01	92.57733	0	2.07E-01	0.207
b0858_fold_spon	b0858_m folding: spontanous	1 b0858_m --> 1 YbjO_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.71E+02	7.71E+02	0	1.29E+03	1293.374	0	8.90E+01	89.046
b0858_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0858_mRNA --> 1 b0858_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.59E+01	7.59E+01	0	1.34E+02	133.9183	0	1.04E-01	0.104
b0858_mRNA_degr1	Degradation of b0858_mRNA I	1 Orn_dim + 122 atp + 1 b0858_mRNA_2 + 1 degradosome + 122 h2o <==> 122 adp + 1 b0858_mRNA_2_degr + 122 h + 122 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.59E+01	7.59E+01	0	1.34E+02	133.9183	0	1.04E-01	0.104

b0858_mRNA_degr2	Degradation of b0858_mRNA II	1 b0858_mRNA_2_degr + 488 h2o --> 1 Orn_dim_inact + 93 amp + 1 atp + 117 cmp + 1 degradosome_inact + 138 gmp + 488 h + 140 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	7.59E+01	7.59E+01	0	1.34E+02	133.9183	0	1.04E-01	0.104
b0858_maturation1	Polypeptide b0858 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0858_aa <==> 1 b0858_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.71E+02	7.71E+02	0	1.29E+03	1293.374	0	8.90E+01	89.046
b0858_maturation2	b0858 formation	1 b0858_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0858_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.71E+02	7.71E+02	0	1.29E+03	1293.374	0	8.90E+01	89.046
b0859_fold_spon	b0859_m folding: spontanous	1 b0859_m_FeS --> 1 RumB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.74E+03	1.74E+03	0	3.02E+03	3017.262	0	7.33E+01	73.348
b0859_iron_sulfur_BIND1	Incorporation of [4Fe-4S]2+ in b0859	1 IscU_dim_[4Fe-4S] + 1 b0859_m <==> 1 b0859_m_IscU_cplx	reversible	Iron-sulfur cluster incorporation	-1.00E+09	1.00E+09	0	1.74E+03	1.74E+03	0	3.02E+03	3017.262	0	7.33E+01	73.348
b0859_iron_sulfur_BIND2	Incorporation of [4Fe-4S]2+ in b0859	1 b0859_m_IscU_cplx <==> 2 IscU_mono + 1 b0859_m_FeS	reversible	Iron-sulfur cluster incorporation	-1.00E+09	1.00E+09	0	1.74E+03	1.74E+03	0	3.02E+03	3017.262	0	7.33E+01	73.348
b0859_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0859_mRNA --> 1 b0859_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.59E+01	7.59E+01	0	1.34E+02	133.9183	0	1.04E-01	0.104
b0859_mRNA_degr1	Degradation of b0859_mRNA I	1 Orn_dim + 282 atp + 1 b0859_mRNA_2 + 1 degradosome + 282 h2o <==> 282 adp + 1 b0859_mRNA_2_degr + 282 h + 282 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.59E+01	7.59E+01	0	1.34E+02	133.9183	0	1.04E-01	0.104
b0859_mRNA_degr2	Degradation of b0859_mRNA II	1 b0859_mRNA_2_degr + 1127 h2o --> 1 Orn_dim_inact + 248 amp 297 cmp + 1 degradosome_inact + 319 gmp + 1127 h + 264 ump	irreversible	mRNA degradation	0.00E+00	1.04E-01	0	7.59E+01	7.59E+01	0	1.34E+02	133.9183	0	1.04E-01	0.104
b0859_maturation1	Polypeptide b0859 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0859_aa <==> 1 b0859_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.74E+03	1.74E+03	0	3.02E+03	3017.262	0	7.33E+01	73.348
b0859_maturation2	b0859 formation	1 b0859_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0859_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.74E+03	1.74E+03	0	3.02E+03	3017.262	0	7.33E+01	73.348
b0883_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in serW by TrmH_dim	1 TrmH_dim + 1 amet + 1 b0883_tRNA_Mg2 <==> 1 b0883_tRNA_Mg2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b0883_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in serW by TrmH_dim	1 b0883_tRNA_Mg2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b0883_tRNA_1 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b0883_tRNA_20A_MODIF_1	modification of position 20A nt (D) in serW by Dus_gen	1 Dus_gen + 1 b0883_tRNA_1 + 1 h + 1 nadph <==> 1 b0883_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b0883_tRNA_20A_MODIF_2	modification of position 20A nt (D) in serW by Dus_gen	1 b0883_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0883_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b0883_tRNA_40_MODIF_1	modification of position 40 nt (Y) in serW by TruA_dim	1 TruA_dim + 1 b0883_tRNA_2 <==> 1 b0883_tRNA_2_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b0883_tRNA_40_MODIF_2	modification of position 40 nt (Y) in serW by TruA_dim	1 b0883_tRNA_2_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b0883_tRNA_3	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b0883_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in serW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0883_tRNA_3 <==> 1 b0883_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b0883_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in serW by TrmA_mono	1 b0883_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0883_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b0883_tRNA_55_MODIF_1	modification of position 55 nt (Y) in serW by TruB_mono	1 TruB_mono + 1 b0883_tRNA_4 <==> 1 b0883_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b0883_tRNA_55_MODIF_2	modification of position 55 nt (Y) in serW by TruB_mono	1 b0883_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 serW_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b0883_tRNA_Mg_BIND	Binding of two Mg2 to b0883_tRNA	1 b0883_RNA + 2 mg2 <==> 1 b0883_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b0884_fold_spon	b0884_m folding: spontanous	1 b0884_m --> 1 InfA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	4.56E+03	4.48E+03	6.22E+01	6.34E+03	6276.458	6.22E+01	2.27E+03	2203.364
b0884_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0884_mRNA --> 1 b0884_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.81E+02	5.81E+02	0	1.03E+03	1025.084	0	6.81E+00	6.81
b0884_mRNA_degr1	Degradation of b0884_mRNA I	1 Orn_dim + 54 atp + 1 b0884_mRNA_2 + 1 degradosome + 54 h2o <==> 54 adp + 1 b0884_mRNA_2_degr + 54 h + 54 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.81E+02	5.81E+02	0	1.03E+03	1025.084	0	6.81E+00	6.81
b0884_mRNA_degr2	Degradation of b0884_mRNA II	1 b0884_mRNA_2_degr + 218 h2o --> 1 Orn_dim_inact + 64 amp + 1 atp + 55 cmp + 1 degradosome_inact + 51 gmp + 218 h + 48 ump	irreversible	mRNA degradation	0.00E+00	6.81E+00	0	5.81E+02	5.81E+02	0	1.03E+03	1025.084	0	6.81E+00	6.81
b0884_maturation1	Polypeptide b0884 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0884_aa <==> 1 b0884_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	4.56E+03	4.48E+03	6.22E+01	6.34E+03	6276.458	6.22E+01	2.27E+03	2203.364
b0884_maturation2	b0884 formation	1 b0884_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0884_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	4.56E+03	4.48E+03	6.22E+01	6.34E+03	6276.458	6.22E+01	2.27E+03	2203.364
b0884_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0884_v1_mRNA --> 1 b0884_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.81E+02	5.81E+02	0	1.03E+03	1025.084	0	6.81E+00	6.81
b0893_fold_KJE_1	b0893_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b0893_m <==> 1 b0893_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.68E+03	2.68E+03	0	4.59E+03	4594.406	0	2.10E+02	210.475
b0893_fold_KJE_2	b0893_m folding: KJE mediated	1 GrpE_dim + 1 b0893_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 SerS_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.68E+03	2.68E+03	0	4.59E+03	4594.406	0	2.10E+02	210.475
b0893_fold_KJE_3	b0893_m folding: KJE mediated	1 SerS_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 SerS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.68E+03	2.68E+03	0	4.59E+03	4594.406	0	2.10E+02	210.475
b0893_fold_spon	b0893_m folding: spontanous	1 b0893_m --> 1 SerS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.68E+03	2.68E+03	0	4.59E+03	4594.406	0	2.10E+02	210.475
b0893_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0893_mRNA --> 1 b0893_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.98E+01	9.98E+01	0	1.76E+02	176.1862	0	8.29E-01	0.829
b0893_mRNA_degr1	Degradation of b0893_mRNA I	1 Orn_dim + 323 atp + 1 b0893_mRNA_2 + 1 degradosome + 323 h2o <==> 323 adp + 1 b0893_mRNA_2_degr + 323 h + 323 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.98E+01	9.98E+01	0	1.76E+02	176.1862	0	8.29E-01	0.829
b0893_mRNA_degr2	Degradation of b0893_mRNA II	1 b0893_mRNA_2_degr + 1292 h2o --> 1 Orn_dim_inact + 322 amp 1 atp + 320 cmp + 1 degradosome_inact + 361 gmp + 1292 h + 289 ump	irreversible	mRNA degradation	0.00E+00	8.29E-01	0	9.98E+01	9.98E+01	0	1.76E+02	176.1862	0	8.29E-01	0.829
b0893_maturation1	Polypeptide b0893 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0893_aa <==> 1 b0893_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.68E+03	2.68E+03	0	4.59E+03	4594.406	0	2.10E+02	210.475
b0893_maturation2	b0893 formation	1 b0893_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0893_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.68E+03	2.68E+03	0	4.59E+03	4594.406	0	2.10E+02	210.475
b0910_fold_spon	b0910_m folding: spontanous	1 b0910_m --> 1 Cmk_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.34E+02	8.34E+02	0	1.09E+03	1087.802	0	1.38E+02	138.372
b0910_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0910_mRNA --> 1 b0910_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	7.34E+01	73.37709	0	3.44E-01	0.344
b0910_mRNA_degr1	Degradation of b0910_mRNA I	1 Orn_dim + 171 atp + 1 b0910_mRNA_2 + 1 degradosome + 171 h2o <==> 171 adp + 1 b0910_mRNA_2_degr + 171 h + 171 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.39E+01	5.39E+01	0	7.34E+01	73.37709	0	3.44E-01	0.344
b0910_mRNA_degr2	Degradation of b0910_mRNA II	1 b0910_mRNA_2_degr + 683 h2o --> 1 Orn_dim_inact + 156 amp + 1 atp + 169 cmp + 1 degradosome_inact + 198 gmp + 683 h + 160 ump	irreversible	mRNA degradation	0.00E+00	3.44E-01	0	5.39E+01	5.39E+01	0	7.34E+01	73.37709	0	3.44E-01	0.344
b0910_maturation1	Polypeptide b0910 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0910_aa <==> 1 b0910_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	8.34E+02	8.34E+02	0	1.09E+03	1087.802	0	1.38E+02	138.372
b0910_maturation2	b0910 formation	1 b0910_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0910_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	8.34E+02	8.34E+02	0	1.09E+03	1087.802	0	1.38E+02	138.372
b0911_fold_spon	b0911_m folding: spontanous	1 b0911_m --> 1 RpsA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b0911_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0911_mRNA --> 1 b0911_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
b0911_mRNA_degr1	Degradation of b0911_mRNA I	1 Orn_dim + 418 atp + 1 b0911_mRNA_2 + 1 degradosome + 418 h2o <==> 418 adp + 1 b0911_mRNA_2_degr + 418 h + 418 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	7.39E-01	0.739
b0911_mRNA_degr2	Degradation of b0911_mRNA II	1 b0911_mRNA_2_degr + 1673 h2o --> 1 Orn_dim_inact + 447 amp 1 atp + 398 cmp + 1 degradosome_inact + 459 gmp + 1673 h + 369 ump	irreversible	mRNA degradation	0.00E+00	7.39E-01	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	7.39E-01	0.739

b0911_maturation1	Polypeptide b0911 peptide deformylas complex	1 Def_mono + 1 b0911_aa <==> 1 b0911_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b0911_maturation2	b0911 formation	1 b0911_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b0911_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b0911_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0911_v1_mRNA --> 1 b0911_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
b0911_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0911_v2_mRNA --> 1 b0911_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	7.34E+01	73.37709	0	3.44E-01	0.344
b0912_fold_spon	b0912_m folding: spontanous	1 b0912_m --> 1 lhfB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.44E+02	5.44E+02	0	6.14E+02	613.8883	0	2.30E+02	230.365
b0912_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0912_mRNA --> 1 b0912_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
b0912_mRNA_degr1	Degradation of b0912_mRNA I	1 Orn_dim + 71 atp + 1 b0912_mRNA_2 + 1 degradosome + 71 h2o <==> 71 adp + 1 b0912_mRNA_2_degr + 71 h + 71 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
b0912_mRNA_degr2	Degradation of b0912_mRNA II	1 b0912_mRNA_2_degr + 284 h2o --> 1 Orn_dim_inact + 84 amp + 70 cmp + 1 degradosome_inact + 70 gmp + 284 h + 61 ump	irreversible	mRNA degradation	0.00E+00	4.73E-01	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
b0912_maturation1	Polypeptide b0912 peptide deformylas complex	1 Def_mono + 1 b0912_aa <==> 1 b0912_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.44E+02	5.44E+02	0	6.14E+02	613.8883	0	2.30E+02	230.365
b0912_maturation2	b0912 formation	1 b0912_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b0912_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.44E+02	5.44E+02	0	6.14E+02	613.8883	0	2.30E+02	230.365
b0912_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0912_v1_mRNA --> 1 b0912_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
b0930_fold_GroEL/ES_1	b0930_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b0930_m + 1 transGroES_hepta --> 7 adp + 1 b0930_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.47E+03	4466.492	0	1.47E+02	146.718
b0930_fold_GroEL/ES_2	b0930_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b0930_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 AsnS_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.47E+03	4466.492	0	1.47E+02	146.718
b0930_fold_GroEL/ES_3	b0930_m folding: GroEL/ES mediated; release of native protein	1 AsnS_GroEL.(7)ADP.transGroES --> 1 AsnS_mono + 1 GroEL.(7)ADP.transGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.47E+03	4466.492	0	1.47E+02	146.718
b0930_fold_KJE_1	b0930_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b0930_m <==> 1 b0930_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.59E+03	2.59E+03	0	4.47E+03	4466.492	0	1.47E+02	146.718
b0930_fold_KJE_2	b0930_m folding: KJE mediated	1 GrpE_dim + 1 b0930_m_DnaKJ_complex + 1 h2o --> 1 AsnS_DnaK_GrpE_complex + 1 DnaJ_dim_inact + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.47E+03	4466.492	0	1.47E+02	146.718
b0930_fold_KJE_3	b0930_m folding: KJE mediated	1 AsnS_DnaK_GrpE_complex + 1 atp --> 1 AsnS_mono + 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.47E+03	4466.492	0	1.47E+02	146.718
b0930_fold_spon	b0930_m folding: spontanous	1 b0930_m --> 1 AsnS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.47E+03	4466.492	0	1.47E+02	146.718
b0930_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0930_mRNA --> 1 b0930_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.10E+01	9.10E+01	0	1.61E+02	160.6256	0	6.34E-01	0.634
b0930_mRNA_degr1	Degradation of b0930_mRNA I	1 Orn_dim + 350 atp + 1 b0930_mRNA_2 + 1 degradosome + 350 h2o <==> 350 adp + 1 b0930_mRNA_2_degr + 350 h + 350 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.10E+01	9.10E+01	0	1.61E+02	160.6256	0	6.34E-01	0.634
b0930_mRNA_degr2	Degradation of b0930_mRNA II	1 b0930_mRNA_2_degr + 1400 h2o --> 1 Orn_dim_inact + 318 amp + 1 atp + 351 cmp + 1 degradosome_inact + 383 gmp + 1400 h + 348 ump	irreversible	mRNA degradation	0.00E+00	6.34E-01	0	9.10E+01	9.10E+01	0	1.61E+02	160.6256	0	6.34E-01	0.634
b0930_maturation1	Polypeptide b0930 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0930_aa <==> 1 b0930_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.59E+03	2.59E+03	0	4.47E+03	4466.492	0	1.47E+02	146.718
b0930_maturation2	b0930 formation	1 b0930_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0930_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.47E+03	4466.492	0	1.47E+02	146.718
b0969_fold_spon	b0969_m folding: spontanous	1 b0969_m --> 1 YccK_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.07E+03	3.07E+03	0	5.36E+03	5362.387	0	7.77E+01	77.724
b0969_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b0969_mRNA --> 1 b0969_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+02	4.99E+02	0	8.81E+02	880.9312	0	1.54E-01	0.154
b0969_mRNA_degr1	Degradation of b0969_mRNA I	1 Orn_dim + 82 atp + 1 b0969_mRNA_2 + 1 degradosome + 82 h2o <==> 82 adp + 1 b0969_mRNA_2_degr + 82 h + 82 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.99E+02	4.99E+02	0	8.81E+02	880.9312	0	1.54E-01	0.154
b0969_mRNA_degr2	Degradation of b0969_mRNA II	1 b0969_mRNA_2_degr + 329 h2o --> 1 Orn_dim_inact + 97 amp + 1 atp + 64 cmp + 1 degradosome_inact + 90 gmp + 329 h + 78 ump	irreversible	mRNA degradation	0.00E+00	1.54E-01	0	4.99E+02	4.99E+02	0	8.81E+02	880.9312	0	1.54E-01	0.154
b0969_maturation1	Polypeptide b0969 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b0969_aa <==> 1 b0969_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.07E+03	3.07E+03	0	5.36E+03	5362.387	0	7.77E+01	77.724
b0969_maturation2	b0969 formation	1 b0969_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b0969_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.07E+03	3.07E+03	0	5.36E+03	5362.387	0	7.77E+01	77.724
b0971_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in serT by TrmH_dim	1 TrmH_dim + 1 amet + 1 b0971_tRNA_Mg2 <==> 1 b0971_tRNA_Mg2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in serT by TrmH_dim	1 b0971_tRNA_Mg2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b0971_tRNA_1 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_20A_MODIF_1	modification of position 20A nt (D) in serT by Dus_gen	1 Dus_gen + 1 b0971_tRNA_2 + 1 h + 1 nadph <==> 1 b0971_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_20A_MODIF_2	modification of position 20A nt (D) in serT by Dus_gen	1 b0971_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0971_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_20_MODIF_1	modification of position 20 nt (D) in serT by Dus_gen	1 Dus_gen + 1 b0971_tRNA_1 + 1 h + 1 nadph <==> 1 b0971_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_20_MODIF_2	modification of position 20 nt (D) in serT by Dus_gen	1 b0971_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b0971_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_32_MODIF_1	modification of position 32 nt (Cm) in serT by MeT_tRNA_pos_32_Cm	1 MeT_tRNA_pos_32_Cm + 1 amet + 1 b0971_tRNA_3 <==> 1 b0971_tRNA_3_MeT_tRNA_pos_32_Cm_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_32_MODIF_2	modification of position 32 nt (Cm) in serT by MeT_tRNA_pos_32_Cm	1 b0971_tRNA_3_MeT_tRNA_pos_32_Cm_cplx --> 1 MeT_tRNA_pos_32_Cm_inact + 1 ahcys + 1 b0971_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_34_MODIF_1	modification of position 34 nt (cmo5U) in serT by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 HyL_tRNA_pos_34_ho5U + 1 YecO_mono + 1 YecP_mono + 1 amet + 1 b0971_tRNA_4 + 2 chor <==> 1 b0971_tRNA_4_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_34_MODIF_2	modification of position 34 nt (cmo5U) in serT by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 b0971_tRNA_4_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx --> 1 C10H8O5 + 1 C9H9O4 + 1 HyL_tRNA_pos_34_ho5U_inact + 1 YecO_mono_inact + 1 YecP_mono_inact + 1 ahcys + 1 b0971_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_37_MODIF_1	modification of position 37 nt (ms2i6A) in serT by MiaA_dim-MiaB_mono	1 IscS_dim_S-SH + 1 MiaA_dim + 1 MiaB_mono + 2 amet + 1 b0971_tRNA_5 + 1 dmpp + 1 fldrd <==> 1 b0971_tRNA_5_MiaA_dim-MiaB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_37_MODIF_2	modification of position 37 nt (ms2i6A) in serT by MiaA_dim-MiaB_mono	1 b0971_tRNA_5_MiaA_dim-MiaB_mono_cplx --> 1 IscS_dim_S-H + 1 MiaA_dim_inact + 1 MiaB_mono_inact + 1 ahcys + 1 b0971_tRNA_6 + 1 dad-5 + 1 fldox + 2 h + 1 met-L + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in serT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b0971_tRNA_6 <==> 1 b0971_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in serT by TrmA_mono	1 b0971_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b0971_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_55_MODIF_1	modification of position 55 nt (Y) in serT by TruB_mono	1 TruB_mono + 1 b0971_tRNA_7 <==> 1 b0971_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_55_MODIF_2	modification of position 55 nt (Y) in serT by TruB_mono	1 b0971_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b0971_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in serT by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b0971_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b0971_tRNA_8_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b0971_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in serT by ThiI_mono	1 b0971_tRNA_8_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 serT_tRNA + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75

b0971_tRNA_Mg_BIND	Binding of two Mg2 to b0971_tRNA	1 b0971_RNA + 2 mg2 <==> 1 b0971_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
b1032_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in serX by TrmH_dim	1 TrmH_dim + 1 amet + 1 b1032_tRNA_Mg2 <==> 1 b1032_tRNA_Mg2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
b1032_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in serX by TrmH_dim	1 b1032_tRNA_Mg2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b1032_tRNA_1 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
b1032_tRNA_20A_MODIF_1	modification of position 20A nt (D) in serX by Dus_gen	1 Dus_gen + 1 b1032_tRNA_1 + 1 h + 1 nadph <==> 1 b1032_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
b1032_tRNA_20A_MODIF_2	modification of position 20A nt (D) in serX by Dus_gen	1 b1032_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1032_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
b1032_tRNA_40_MODIF_1	modification of position 40 nt (Y) in serX by TruA_dim	1 TruA_dim + 1 b1032_tRNA_2 <==> 1 b1032_tRNA_2_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
b1032_tRNA_40_MODIF_2	modification of position 40 nt (Y) in serX by TruA_dim	1 b1032_tRNA_2_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b1032_tRNA_3	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
b1032_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in serX by TrmA_mono	1 TrmA_mono + 1 amet + 1 b1032_tRNA_3 <==> 1 b1032_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
b1032_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in serX by TrmA_mono	1 b1032_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b1032_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
b1032_tRNA_55_MODIF_1	modification of position 55 nt (Y) in serX by TruB_mono	1 TruB_mono + 1 b1032_tRNA_4 <==> 1 b1032_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
b1032_tRNA_55_MODIF_2	modification of position 55 nt (Y) in serX by TruB_mono	1 b1032_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 serX_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
b1032_tRNA_Mg_BIND	Binding of two Mg2 to b1032_tRNA	1 b1032_RNA + 2 mg2 <==> 1 b1032_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
b1066_fold_GroEL/ES_1	b1066_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b1066_m + 1 transGroES_hepta --> 7 adp + 1 b1066_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.66E+03	2.66E+03	0	4.58E+03	4578.325	0	1.52E+02	151.921
b1066_fold_GroEL/ES_2	b1066_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b1066_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 RimJ_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.66E+03	2.66E+03	0	4.58E+03	4578.325	0	1.52E+02	151.921
b1066_fold_GroEL/ES_3	b1066_m folding: GroEL/ES mediated; release of native protein	1 RimJ_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 RimJ_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.66E+03	2.66E+03	0	4.58E+03	4578.325	0	1.52E+02	151.921
b1066_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1066_mRNA --> 1 b1066_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.28E+02	2.28E+02	0	4.03E+02	402.7114	0	3.11E-01	0.311
b1066_mRNA_degr1	Degradation of b1066_mRNA I	1 Orn_dim + 146 atp + 1 b1066_mRNA_2 + 1 degradosome + 146 h2o <==> 146 adp + 1 b1066_mRNA_2_degr + 146 h + 146 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.28E+02	2.28E+02	0	4.03E+02	402.7114	0	3.11E-01	0.311
b1066_mRNA_degr2	Degradation of b1066_mRNA II	1 b1066_mRNA_2_degr + 584 h2o --> 1 Orn_dim_inact + 144 amp + 1 atp + 140 cmp + 1 degradosome_inact + 149 gmp + 584 h + 151 ump	irreversible	mRNA degradation	0.00E+00	3.11E-01	0	2.28E+02	2.28E+02	0	4.03E+02	402.7114	0	3.11E-01	0.311
b1066_maturation1	Polypeptide b1066 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1066_aa <==> 1 b1066_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.66E+03	2.66E+03	0	4.58E+03	4578.325	0	1.52E+02	151.921
b1066_maturation2	b1066 formation	1 b1066_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1066_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.66E+03	2.66E+03	0	4.58E+03	4578.325	0	1.52E+02	151.921
b1084_fold_spon	b1084_m folding: spontanous	1 b1084_m --> 1 Rne_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.40E+03	1.40E+03	0	1.52E+03	1516.486	0	1.15E+02	115.258
b1084_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1084_mRNA --> 1 b1084_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.60E+01	3.60E+01	0	6.36E+01	63.56211	0	1.89E-01	0.189
b1084_mRNA_degr1	Degradation of b1084_mRNA I	1 Orn_dim + 796 atp + 1 b1084_mRNA_2 + 1 degradosome + 796 h2o <==> 796 adp + 1 b1084_mRNA_2_degr + 796 h + 796 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.60E+01	3.60E+01	0	6.36E+01	63.56211	0	1.89E-01	0.189
b1084_mRNA_degr2	Degradation of b1084_mRNA II	1 b1084_mRNA_2_degr + 3185 h2o --> 1 Orn_dim_inact + 797 amp + 1 atp + 887 cmp + 1 degradosome_inact + 886 gmp + 3185 h + 615 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	3.60E+01	3.60E+01	0	6.36E+01	63.56211	0	1.89E-01	0.189
b1084_maturation1	Polypeptide b1084 peptide deformylase complex	1 Def_mono + 1 b1084_aa <==> 1 b1084_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.40E+03	1.40E+03	0	1.52E+03	1516.486	0	1.15E+02	115.258
b1084_maturation2	b1084 formation	1 b1084_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b1084_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.40E+03	1.40E+03	0	1.52E+03	1516.486	0	1.15E+02	115.258
b1086_fold_GroEL/ES_1	b1086_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b1086_m + 1 transGroES_hepta --> 7 adp + 1 b1086_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.79E+03	2.79E+03	0	4.87E+03	4865.967	0	8.27E+01	82.746
b1086_fold_GroEL/ES_2	b1086_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b1086_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 RluC_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.79E+03	2.79E+03	0	4.87E+03	4865.967	0	8.27E+01	82.746
b1086_fold_GroEL/ES_3	b1086_m folding: GroEL/ES mediated; release of native protein	1 RluC_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 RluC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.79E+03	2.79E+03	0	4.87E+03	4865.967	0	8.27E+01	82.746
b1086_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1086_mRNA --> 1 b1086_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.51E+02	1.51E+02	0	2.66E+02	265.9415	0	2.07E-01	0.207
b1086_mRNA_degr1	Degradation of b1086_mRNA I	1 Orn_dim + 240 atp + 1 b1086_mRNA_2 + 1 degradosome + 240 h2o <==> 240 adp + 1 b1086_mRNA_2_degr + 240 h + 240 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.51E+02	1.51E+02	0	2.66E+02	265.9415	0	2.07E-01	0.207
b1086_mRNA_degr2	Degradation of b1086_mRNA II	1 b1086_mRNA_2_degr + 959 h2o --> 1 Orn_dim_inact + 241 amp + 1 atp + 212 cmp + 1 degradosome_inact + 282 gmp + 959 h + 224 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	1.51E+02	1.51E+02	0	2.66E+02	265.9415	0	2.07E-01	0.207
b1086_maturation1	Polypeptide b1086 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1086_aa <==> 1 b1086_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.79E+03	2.79E+03	0	4.87E+03	4865.967	0	8.27E+01	82.746
b1086_maturation2	b1086 formation	1 b1086_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1086_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.79E+03	2.79E+03	0	4.87E+03	4865.967	0	8.27E+01	82.746
b1088_fold_spon	b1088_m folding: spontanous	1 b1088_m --> 1 YceD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.30E+03	1.30E+03	0	1.16E+03	1162.8	0	3.39E+02	338.55
b1088_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1088_mRNA --> 1 b1088_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
b1088_mRNA_degr1	Degradation of b1088_mRNA I	1 Orn_dim + 130 atp + 1 b1088_mRNA_2 + 1 degradosome + 130 h2o <==> 130 adp + 1 b1088_mRNA_2_degr + 130 h + 130 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
b1088_mRNA_degr2	Degradation of b1088_mRNA II	1 b1088_mRNA_2_degr + 521 h2o --> 1 Orn_dim_inact + 133 amp + 1 atp + 121 cmp + 1 degradosome_inact + 138 gmp + 521 h + 129 ump	irreversible	mRNA degradation	0.00E+00	4.55E-01	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
b1088_maturation1	Polypeptide b1088 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1088_aa <==> 1 b1088_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.30E+03	1.30E+03	0	1.16E+03	1162.8	0	3.39E+02	338.55
b1088_maturation2	b1088 formation	1 b1088_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1088_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.30E+03	1.30E+03	0	1.16E+03	1162.8	0	3.39E+02	338.55
b1088_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1088_v1_mRNA --> 1 b1088_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
b1089_fold_spon	b1089_m folding: spontanous	1 b1089_m --> 1 RpmF_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b1089_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1089_mRNA --> 1 b1089_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
b1089_mRNA_degr1	Degradation of b1089_mRNA I	1 Orn_dim + 43 atp + 1 b1089_mRNA_2 + 1 degradosome + 43 h2o <==> 43 adp + 1 b1089_mRNA_2_degr + 43 h + 43 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	6.62E-01	0.662
b1089_mRNA_degr2	Degradation of b1089_mRNA II	1 b1089_mRNA_2_degr + 173 h2o --> 1 Orn_dim_inact + 48 amp + 56 cmp + 1 degradosome_inact + 38 gmp + 173 h + 32 ump	irreversible	mRNA degradation	0.00E+00	8.82E-01	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	6.62E-01	0.662
b1089_maturation1	Polypeptide b1089 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1089_aa <==> 1 b1089_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b1089_maturation2	b1089 formation	1 b1089_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1089_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72

b1089_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1089_v1_mRNA --> 1 b1089_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
b1089_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1089_v2_mRNA --> 1 b1089_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
b1090_fold_spon	b1090_m folding: spontanous	1 b1090_m --> 1 PlsX_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.53E+02	7.53E+02	0	1.25E+03	1253.737	0	1.04E+02	103.74
b1090_mRNA_degr1	Degradation of b1090_mRNA I	1 Orn_dim + 267 atp + 1 b1090_mRNA_2 + 1 degradosome + 267 h2o <==> 267 adp + 1 b1090_mRNA_2_degr + 267 h + 267 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
b1090_mRNA_degr2	Degradation of b1090_mRNA II	1 b1090_mRNA_2_degr + 1070 h2o --> 1 Orn_dim_inact + 250 amp 249 cmp + 1 degradosome_inact + 309 gmp + 1070 h + 262 ump + 1 utp	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
b1090_maturation1	Polypeptide b1090 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1090_aa <==> 1 b1090_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.53E+02	7.53E+02	0	1.25E+03	1253.737	0	1.04E+02	103.74
b1090_maturation2	b1090 formation	1 b1090_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1090_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.53E+02	7.53E+02	0	1.25E+03	1253.737	0	1.04E+02	103.74
b1090_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1090_v1_mRNA --> 1 b1090_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
b1091_fold_spon	b1091_m folding: spontanous	1 b1091_m --> 1 FabH_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.05E+02	7.05E+02	0	1.16E+03	1155.183	0	1.20E+02	120.186
b1091_mRNA_degr1	Degradation of b1091_mRNA I	1 Orn_dim + 238 atp + 1 b1091_mRNA_2 + 1 degradosome + 238 h2o <==> 238 adp + 1 b1091_mRNA_2_degr + 238 h + 238 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
b1091_mRNA_degr2	Degradation of b1091_mRNA II	1 b1091_mRNA_2_degr + 953 h2o --> 1 Orn_dim_inact + 205 amp + 1 atp + 240 cmp + 1 degradosome_inact + 282 gmp + 953 h + 226 ump	irreversible	mRNA degradation	0.00E+00	4.49E-01	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
b1091_maturation1	Polypeptide b1091 peptide deformylas complex	1 Def_mono + 1 b1091_aa <==> 1 b1091_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.05E+02	7.05E+02	0	1.16E+03	1155.183	0	1.20E+02	120.186
b1091_maturation2	b1091 formation	1 b1091_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b1091_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.05E+02	7.05E+02	0	1.16E+03	1155.183	0	1.20E+02	120.186
b1091_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1091_v2_mRNA --> 1 b1091_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
b1092_fold_spon	b1092_m folding: spontanous	1 b1092_m --> 1 FabD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	1.23E+03	1229.523	0	1.95E+02	194.526
b1092_mRNA_degr1	Degradation of b1092_mRNA I	1 Orn_dim + 232 atp + 1 b1092_mRNA_2 + 1 degradosome + 232 h2o <==> 232 adp + 1 b1092_mRNA_2_degr + 232 h + 232 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
b1092_mRNA_degr2	Degradation of b1092_mRNA II	1 b1092_mRNA_2_degr + 929 h2o --> 1 Orn_dim_inact + 211 amp + 1 atp + 228 cmp + 1 degradosome_inact + 285 gmp + 929 h + 205 ump	irreversible	mRNA degradation	0.00E+00	7.43E-01	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
b1092_maturation1	Polypeptide b1092 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1092_aa <==> 1 b1092_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	1.23E+03	1229.523	0	1.95E+02	194.526
b1092_maturation2	b1092 formation	1 b1092_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1092_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	1.23E+03	1229.523	0	1.95E+02	194.526
b1092_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1092_v3_mRNA --> 1 b1092_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
b1093_fold_GroEL/ES_1	b1093_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b1093_m + 1 transGroES_hepta --> 7 adp + 1 b1093_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.66E+02	6.66E+02	0	1.02E+03	1016.496	0	2.11E+02	211.498
b1093_fold_GroEL/ES_2	b1093_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b1093_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 FabG_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.66E+02	6.66E+02	0	1.02E+03	1016.496	0	2.11E+02	211.498
b1093_fold_GroEL/ES_3	b1093_m folding: GroEL/ES mediated; release of native protein	1 FabG_GroEL.(7)ADP.transGroES --> 1 FabG_mono + 1 GroEL.(7)ADP.transGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.66E+02	6.66E+02	0	1.02E+03	1016.496	0	2.11E+02	211.498
b1093_fold_KJE_1	b1093_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b1093_m <==> 1 b1093_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	6.66E+02	6.66E+02	0	1.02E+03	1016.496	0	2.11E+02	211.498
b1093_fold_KJE_2	b1093_m folding: KJE mediated	1 GrpE_dim + 1 b1093_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 FabG_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.66E+02	6.66E+02	0	1.02E+03	1016.496	0	2.11E+02	211.498
b1093_fold_KJE_3	b1093_m folding: KJE mediated	1 FabG_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 FabG_mono + 1 GrpE_dim_inact	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.66E+02	6.66E+02	0	1.02E+03	1016.496	0	2.11E+02	211.498
b1093_mRNA_degr1	Degradation of b1093_mRNA I	1 Orn_dim + 183 atp + 1 b1093_mRNA_2 + 1 degradosome + 183 h2o <==> 183 adp + 1 b1093_mRNA_2_degr + 183 h + 183 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
b1093_mRNA_degr2	Degradation of b1093_mRNA II	1 b1093_mRNA_2_degr + 734 h2o --> 1 Orn_dim_inact + 181 amp + 1 atp + 165 cmp + 1 degradosome_inact + 214 gmp + 734 h + 174 ump	irreversible	mRNA degradation	0.00E+00	3.78E-01	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
b1093_maturation1	Polypeptide b1093 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1093_aa <==> 1 b1093_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.66E+02	6.66E+02	0	1.02E+03	1016.496	0	2.11E+02	211.498
b1093_maturation2	b1093 formation	1 b1093_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1093_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.66E+02	6.66E+02	0	1.02E+03	1016.496	0	2.11E+02	211.498
b1093_v4_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1093_v4_mRNA --> 1 b1093_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
b1114_fold_KJE_1	b1114_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b1114_m_Mg <==> 1 b1114_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	1.95E+03	1.95E+03	0	2.12E+03	2119.82	0	7.92E+01	79.194
b1114_fold_KJE_2	b1114_m folding: KJE mediated	1 GrpE_dim + 1 b1114_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 Mfd_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.95E+03	1.95E+03	0	2.12E+03	2119.82	0	7.92E+01	79.194
b1114_fold_KJE_3	b1114_m folding: KJE mediated	1 Mfd_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 Mfd_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.95E+03	1.95E+03	0	2.12E+03	2119.82	0	7.92E+01	79.194
b1114_fold_spon	b1114_m folding: spontanous	1 b1114_m_Mg --> 1 Mfd_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.95E+03	1.95E+03	0	2.12E+03	2119.82	0	7.92E+01	79.194
b1114_ion_BIND	Binding of ions to b1114	1 b1114_m + 1 mg2 <==> 1 b1114_m_Mg	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	1.95E+03	1.95E+03	0	2.12E+03	2119.82	0	7.92E+01	79.194
b1114_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1114_mRNA --> 1 b1114_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
b1114_mRNA_degr1	Degradation of b1114_mRNA I	1 Orn_dim + 861 atp + 1 b1114_mRNA_2 + 1 degradosome + 861 h2o <==> 861 adp + 1 b1114_mRNA_2_degr + 861 h + 861 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
b1114_mRNA_degr2	Degradation of b1114_mRNA II	1 b1114_mRNA_2_degr + 3446 h2o --> 1 Orn_dim_inact + 806 amp 1 atp + 905 cmp + 1 degradosome_inact + 983 gmp + 3446 h + 752 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
b1114_maturation1	Polypeptide b1114 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1114_aa <==> 1 b1114_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.95E+03	1.95E+03	0	2.12E+03	2119.82	0	7.92E+01	79.194
b1114_maturation2	b1114 formation	1 b1114_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1114_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.95E+03	1.95E+03	0	2.12E+03	2119.82	0	7.92E+01	79.194
b1114_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1114_v1_mRNA --> 1 b1114_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
b1114_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1114_v2_mRNA --> 1 b1114_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
b1133_DNA_act_bind	b1133_DNA binding of activator	1 b1133_DNA_neu --> 1 b1133_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.99E+02	199.2212	0	2.07E-01	0.207
b1133_fold_spon	b1133_m folding: spontanous	1 b1133_m --> 1 TrmU_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.47E+03	2.47E+03	0	4.28E+03	4284.865	0	1.06E+02	105.567
b1133_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1133_mRNA --> 1 b1133_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.99E+02	199.2212	0	2.07E-01	0.207
b1133_mRNA_degr1	Degradation of b1133_mRNA I	1 Orn_dim + 276 atp + 1 b1133_mRNA_2 + 1 degradosome + 276 h2o <==> 276 adp + 1 b1133_mRNA_2_degr + 276 h + 276 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.99E+02	199.2212	0	2.07E-01	0.207

b1133_mRNA_degr2	Degradation of b1133_mRNA II	1 b1133_mRNA_2_degr + 1106 h2o --> 1 Orn_dim_inact + 261 amp + 1 atp + 283 cmp + 1 degradosome_inact + 312 gmp + 1106 h + 250 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	1.13E+02	1.13E+02	0	1.99E+02	199.2212	0	2.07E-01	0.207
b1133_maturation1	Polypeptide b1133 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1133_aa <==> 1 b1133_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.47E+03	2.47E+03	0	4.28E+03	4284.865	0	1.06E+02	105.567
b1133_maturation2	b1133 formation	1 b1133_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1133_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.47E+03	2.47E+03	0	4.28E+03	4284.865	0	1.06E+02	105.567
b1134_fold_spon	b1134_m folding: spontanous	1 b1134_m --> 1 YmfB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.11E+03	1.11E+03	0	1.89E+03	1892.949	0	9.48E+01	94.752
b1134_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1134_mRNA --> 1 b1134_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	2.00E+02	199.9276	0	1.28E-01	0.128
b1134_mRNA_degr1	Degradation of b1134_mRNA I	1 Orn_dim + 115 atp + 1 b1134_mRNA_2 + 1 degradosome + 115 h2o <==> 115 adp + 1 b1134_mRNA_2_degr + 115 h + 115 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	2.00E+02	199.9276	0	1.28E-01	0.128
b1134_mRNA_degr2	Degradation of b1134_mRNA II	1 b1134_mRNA_2_degr + 461 h2o --> 1 Orn_dim_inact + 113 amp + 109 cmp + 1 degradosome_inact + 123 gmp + 461 h + 117 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	1.13E+02	1.13E+02	0	2.00E+02	199.9276	0	1.28E-01	0.128
b1134_maturation1	Polypeptide b1134 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1134_aa <==> 1 b1134_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.11E+03	1.11E+03	0	1.89E+03	1892.949	0	9.48E+01	94.752
b1134_maturation2	b1134 formation	1 b1134_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1134_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.11E+03	1.11E+03	0	1.89E+03	1892.949	0	9.48E+01	94.752
b1135_fold_spon	b1135_m folding: spontanous	1 b1135_m --> 1 YmfC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.44E+03	1.44E+03	0	2.48E+03	2481.692	0	8.41E+01	84.096
b1135_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1135_mRNA --> 1 b1135_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	2.00E+02	199.9276	0	1.28E-01	0.128
b1135_mRNA_degr1	Degradation of b1135_mRNA I	1 Orn_dim + 163 atp + 1 b1135_mRNA_2 + 1 degradosome + 163 h2o <==> 163 adp + 1 b1135_mRNA_2_degr + 163 h + 163 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	2.00E+02	199.9276	0	1.28E-01	0.128
b1135_mRNA_degr2	Degradation of b1135_mRNA II	1 b1135_mRNA_2_degr + 653 h2o --> 1 Orn_dim_inact + 172 amp + 1 atp + 172 cmp + 1 degradosome_inact + 163 gmp + 653 h + 146 ump	irreversible	mRNA degradation	0.00E+00	1.28E-01	0	1.13E+02	1.13E+02	0	2.00E+02	199.9276	0	1.28E-01	0.128
b1135_maturation1	Polypeptide b1135 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1135_aa <==> 1 b1135_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.44E+03	1.44E+03	0	2.48E+03	2481.692	0	8.41E+01	84.096
b1135_maturation2	b1135 formation	1 b1135_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1135_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.44E+03	1.44E+03	0	2.48E+03	2481.692	0	8.41E+01	84.096
b1211_DNA_act_bind	b1211_DNA binding of activator	1 b1211_DNA_neu --> 1 b1211_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.16E+02	1.16E+02	0	2.04E+02	204.2739	0	3.08E-01	0.308
b1211_fold_spon	b1211_m folding: spontanous	1 b1211_m --> 1 PrfA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.52E+03	2.52E+03	0	4.38E+03	4382.152	0	9.89E+01	98.868
b1211_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1211_mRNA --> 1 b1211_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.16E+02	1.16E+02	0	2.04E+02	204.2739	0	3.08E-01	0.308
b1211_mRNA_degr1	Degradation of b1211_mRNA I	1 Orn_dim + 270 atp + 1 b1211_mRNA_2 + 1 degradosome + 270 h2o <==> 270 adp + 1 b1211_mRNA_2_degr + 270 h + 270 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.16E+02	1.16E+02	0	2.04E+02	204.2739	0	3.08E-01	0.308
b1211_mRNA_degr2	Degradation of b1211_mRNA II	1 b1211_mRNA_2_degr + 1082 h2o --> 1 Orn_dim_inact + 275 amp + 1 atp + 276 cmp + 1 degradosome_inact + 298 gmp + 1082 h + 233 ump	irreversible	mRNA degradation	0.00E+00	3.08E-01	0	1.16E+02	1.16E+02	0	2.04E+02	204.2739	0	3.08E-01	0.308
b1211_maturation1	Polypeptide b1211 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1211_aa <==> 1 b1211_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.52E+03	2.52E+03	0	4.38E+03	4382.152	0	9.89E+01	98.868
b1211_maturation2	b1211 formation	1 b1211_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1211_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.52E+03	2.52E+03	0	4.38E+03	4382.152	0	9.89E+01	98.868
b1212_DNA_act_bind	b1212_DNA binding of activator	1 b1212_DNA_neu --> 1 b1212_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	2.57E+02	257.4411	0	2.07E-01	0.207
b1212_fold_spon	b1212_m folding: spontanous	1 b1212_m --> 1 PrmC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.42E+03	2.42E+03	0	4.21E+03	4210.577	0	9.48E+01	94.832
b1212_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1212_mRNA --> 1 b1212_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	2.57E+02	257.4411	0	2.07E-01	0.207
b1212_mRNA_degr1	Degradation of b1212_mRNA I	1 Orn_dim + 208 atp + 1 b1212_mRNA_2 + 1 degradosome + 208 h2o <==> 208 adp + 1 b1212_mRNA_2_degr + 208 h + 208 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	2.57E+02	257.4411	0	2.07E-01	0.207
b1212_mRNA_degr2	Degradation of b1212_mRNA II	1 b1212_mRNA_2_degr + 833 h2o --> 1 Orn_dim_inact + 180 amp + 1 atp + 219 cmp + 1 degradosome_inact + 241 gmp + 833 h + 193 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	1.46E+02	1.46E+02	0	2.57E+02	257.4411	0	2.07E-01	0.207
b1212_maturation1	Polypeptide b1212 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1212_aa <==> 1 b1212_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.42E+03	2.42E+03	0	4.21E+03	4210.577	0	9.48E+01	94.832
b1212_maturation2	b1212 formation	1 b1212_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1212_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.42E+03	2.42E+03	0	4.21E+03	4210.577	0	9.48E+01	94.832
b1229_fold_spon	b1229_m folding: spontanous	1 b1229_m --> 1 Tpr_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.59E+02	2.59E+02	0	4.21E+02	421.3748	0	4.82E+01	48.207
b1229_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1229_mRNA --> 1 b1229_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1229_mRNA_degr1	Degradation of b1229_mRNA I	1 Orn_dim + 25 atp + 1 b1229_mRNA_2 + 1 degradosome + 25 h2o <==> 25 adp + 1 b1229_mRNA_2_degr + 25 h + 25 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1229_mRNA_degr2	Degradation of b1229_mRNA II	1 b1229_mRNA_2_degr + 101 h2o --> 1 Orn_dim_inact + 26 amp + 27 cmp + 1 degradosome_inact + 39 gmp + 101 h + 10 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1229_maturation1	Polypeptide b1229 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1229_aa <==> 1 b1229_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.59E+02	2.59E+02	0	4.21E+02	421.3748	0	4.82E+01	48.207
b1229_maturation2	b1229 formation	1 b1229_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1229_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.59E+02	2.59E+02	0	4.21E+02	421.3748	0	4.82E+01	48.207
b1230_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in tyrV by TrmH_dim	1 TrmH_dim + 1 amet + 1 b1230_tRNA_Mg2 <==> 1 b1230_tRNA_Mg2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in tyrV by TrmH_dim	1 b1230_tRNA_Mg2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b1230_tRNA_1 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_tRNA_34_MODIF_1	modification of position 34 nt (Q) in tyrV by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 EoR_tRNA_pos34_Q + 1 QueA_mono + 1 Tgt_hexa + 1 adocbl + 1 amet + 1 b1230_tRNA_1 + 1 h + 1 nadh + 1 pre_Q1 <==> 1 b1230_tRNA_1_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_tRNA_34_MODIF_2	modification of position 34 nt (Q) in tyrV by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 b1230_tRNA_1_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx > 1 EoR_tRNA_pos34_Q_inact + 1 QueA_mono_inact + 1 Tgt_hexa_inact + 1 ade + 1 adocbl + 1 b1230_tRNA_2 + 1 gua + 2 h 1 h2o + 1 met-L + 1 nad	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_tRNA_37_MODIF_1	modification of position 37 nt (ms2i6A) in tyrV by MiaA_dim-MiaB_mono	1 IscS_dim_S-SH + 1 MiaA_dim + 1 MiaB_mono + 2 amet + 1 b1230_tRNA_2 + 1 dmpp + 1 fldrd <==> 1 b1230_tRNA_2_MiaA_dim MiaB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_tRNA_37_MODIF_2	modification of position 37 nt (ms2i6A) in tyrV by MiaA_dim-MiaB_mono	1 b1230_tRNA_2_MiaA_dim-MiaB_mono_cplx --> 1 IscS_dim_S-H + 1 MiaA_dim_inact + 1 MiaB_mono_inact + 1 ahcys + 1 b1230_tRNA_3 + 1 dad-5 + 1 fldox + 2 h + 1 met-L + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_tRNA_39_MODIF_1	modification of position 39 nt (Y) in tyrV by TruA_dim	1 TruA_dim + 1 b1230_tRNA_3 <==> 1 b1230_tRNA_3_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_tRNA_39_MODIF_2	modification of position 39 nt (Y) in tyrV by TruA_dim	1 b1230_tRNA_3_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b1230_tRNA_4	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in tyrV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b1230_tRNA_4 <==> 1 b1230_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in tyrV by TrmA_mono	1 b1230_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b1230_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_tRNA_55_MODIF_1	modification of position 55 nt (Y) in tyrV by TruB_mono	1 TruB_mono + 1 b1230_tRNA_5 <==> 1 b1230_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207

b1230_tRNA_55_MODIF_2	modification of position 55 nt (Y) in tyrV by TruB_mono	1 b1230_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b1230_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in tyrV by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b1230_tRNA_6 + 1 mg2 + 1 trdrd <==> 1 b1230_tRNA_6_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in tyrV by ThiI_mono	1 b1230_tRNA_6_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 trdox + 1 tyrV_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_tRNA_Mg_BIND	Binding of two Mg2 to b1230_tRNA	1 b1230_RNA + 2 mg2 <==> 1 b1230_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_trimming	Cutting of stable b1230_RNA	1 b1230_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b1230_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1230_trimming_cplx	Cutting complex formation of stable b1230_RNA (,)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 b1230_RNA_pre <==> 1 b1230_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in tyrT by TrmH_dim	1 TrmH_dim + 1 amet + 1 b1231_tRNA_Mg2 <==> 1 b1231_tRNA_Mg2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in tyrT by TrmH_dim	1 b1231_tRNA_Mg2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b1231_tRNA_1 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_34_MODIF_1	modification of position 34 nt (Q) in tyrT by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 EoR_tRNA_pos34_Q + 1 QueA_mono + 1 Tgt_hexa + 1 adocbl + 1 amet + 1 b1231_tRNA_1 + 1 h + 1 nadh + 1 pre_Q1 <==> 1 b1231_tRNA_1_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_34_MODIF_2	modification of position 34 nt (Q) in tyrT by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 b1231_tRNA_1_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx > 1 EoR_tRNA_pos34_Q_inact + 1 QueA_mono_inact + 1 Tgt_hexa_inact + 1 ade + 1 adocbl + 1 b1231_tRNA_2 + 1 gua + 2 h + 1 h2o + 1 met-L + 1 nad	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_37_MODIF_1	modification of position 37 nt (ms2i6A) in tyrT by MiaA_dim-MiaB_mono	1 IscS_dim_S-SH + 1 MiaA_dim + 1 MiaB_mono + 2 amet + 1 b1231_tRNA_2 + 1 dmpp + 1 fldrd <==> 1 b1231_tRNA_2_MiaA_dim MiaB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_37_MODIF_2	modification of position 37 nt (ms2i6A) in tyrT by MiaA_dim-MiaB_mono	1 b1231_tRNA_2_MiaA_dim-MiaB_mono_cplx --> 1 IscS_dim_S-H + 1 MiaA_dim_inact + 1 MiaB_mono_inact + 1 ahcys + 1 b1231_tRNA_3 + 1 dad-5 + 1 fldox + 2 h + 1 met-L + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_39_MODIF_1	modification of position 39 nt (Y) in tyrT by TruA_dim	1 TruA_dim + 1 b1231_tRNA_3 <==> 1 b1231_tRNA_3_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_39_MODIF_2	modification of position 39 nt (Y) in tyrT by TruA_dim	1 b1231_tRNA_3_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b1231_tRNA_4	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in tyrT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b1231_tRNA_4 <==> 1 b1231_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in tyrT by TrmA_mono	1 b1231_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b1231_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_55_MODIF_1	modification of position 55 nt (Y) in tyrT by TruB_mono	1 TruB_mono + 1 b1231_tRNA_5 <==> 1 b1231_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_55_MODIF_2	modification of position 55 nt (Y) in tyrT by TruB_mono	1 b1231_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b1231_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in tyrT by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b1231_tRNA_6 + 1 mg2 + 1 trdrd <==> 1 b1231_tRNA_6_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in tyrT by ThiI_mono	1 b1231_tRNA_6_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 trdox + 1 tyrT_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_tRNA_Mg_BIND	Binding of two Mg2 to b1231_tRNA	1 b1231_RNA + 2 mg2 <==> 1 b1231_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_trimming	Cutting of stable b1231_RNA	1 b1231_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b1231_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1231_trimming_cplx	Cutting complex formation of stable b1231_RNA (,)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 b1231_RNA_pre <==> 1 b1231_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
b1269_fold_GroEL/ES_1	b1269_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b1269_m + 1 transGroES_hepta --> 7 adp + 1 b1269_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.74E+03	2.74E+03	0	4.77E+03	4768.031	0	9.68E+01	96.815
b1269_fold_GroEL/ES_2	b1269_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b1269_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 RluB_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.74E+03	2.74E+03	0	4.77E+03	4768.031	0	9.68E+01	96.815
b1269_fold_GroEL/ES_3	b1269_m folding: GroEL/ES mediated; release of native protein	1 RluB_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 RluB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.74E+03	2.74E+03	0	4.77E+03	4768.031	0	9.68E+01	96.815
b1269_fold_KJE_1	b1269_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b1269_m <==> 1 b1269_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.74E+03	2.74E+03	0	4.77E+03	4768.031	0	9.68E+01	96.815
b1269_fold_KJE_2	b1269_m folding: KJE mediated	1 GrpE_dim + 1 b1269_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 RluB_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.74E+03	2.74E+03	0	4.77E+03	4768.031	0	9.68E+01	96.815
b1269_fold_KJE_3	b1269_m folding: KJE mediated	1 RluB_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 RluB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.74E+03	2.74E+03	0	4.77E+03	4768.031	0	9.68E+01	96.815
b1269_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1269_mRNA --> 1 b1269_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.56E+02	1.56E+02	0	2.75E+02	275.0224	0	2.45E-01	0.245
b1269_mRNA_degr1	Degradation of b1269_mRNA I	1 Orn_dim + 219 atp + 1 b1269_mRNA_2 + 1 degradosome + 219 h2o <==> 219 adp + 1 b1269_mRNA_2_degr + 219 h + 219 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.56E+02	1.56E+02	0	2.75E+02	275.0224	0	2.45E-01	0.245
b1269_mRNA_degr2	Degradation of b1269_mRNA II	1 b1269_mRNA_2_degr + 875 h2o --> 1 Orn_dim_inact + 200 amp + 1 atp + 205 cmp + 1 degradosome_inact + 266 gmp + 875 h + 204 ump	irreversible	mRNA degradation	0.00E+00	2.45E-01	0	1.56E+02	1.56E+02	0	2.75E+02	275.0224	0	2.45E-01	0.245
b1269_maturation1	Polypeptide b1269 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1269_aa <==> 1 b1269_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.74E+03	2.74E+03	0	4.77E+03	4768.031	0	9.68E+01	96.815
b1269_maturation2	b1269 formation	1 b1269_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1269_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.74E+03	2.74E+03	0	4.77E+03	4768.031	0	9.68E+01	96.815
b1286_fold_spon	b1286_m folding: spontanous	1 b1286_m_Mg --> 1 Rnb_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.38E+03	2.38E+03	0	3.79E+03	3791.216	0	1.25E+02	125.43
b1286_ion_BIND	Binding of ions to b1286	1 b1286_m + 1 mg2 <==> 1 b1286_m_Mg	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	2.38E+03	2.38E+03	0	3.79E+03	3791.216	0	1.25E+02	125.43
b1286_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1286_mRNA --> 1 b1286_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	4.90E-01	0.49
b1286_mRNA_degr1	Degradation of b1286_mRNA I	1 Orn_dim + 483 atp + 1 b1286_mRNA_2 + 1 degradosome + 483 h2o <==> 483 adp + 1 b1286_mRNA_2_degr + 483 h + 483 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	4.90E-01	0.49
b1286_mRNA_degr2	Degradation of b1286_mRNA II	1 b1286_mRNA_2_degr + 1934 h2o --> 1 Orn_dim_inact + 470 amp + 1 atp + 521 cmp + 1 degradosome_inact + 509 gmp + 1934 h + 434 ump	irreversible	mRNA degradation	0.00E+00	4.90E-01	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	4.90E-01	0.49
b1286_maturation1	Polypeptide b1286 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1286_aa <==> 1 b1286_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.38E+03	2.38E+03	0	3.79E+03	3791.216	0	1.25E+02	125.43
b1286_maturation2	b1286 formation	1 b1286_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1286_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.38E+03	2.38E+03	0	3.79E+03	3791.216	0	1.25E+02	125.43
b1286_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1286_v1_mRNA --> 1 b1286_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	4.90E-01	0.49
b1344_fold_spon	b1344_m folding: spontanous	1 b1344_m --> 1 YdaO_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.84E+03	2.84E+03	0	4.95E+03	4947.459	0	9.52E+01	95.202
b1344_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1344_mRNA --> 1 b1344_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.70E+02	269.7588	0	1.89E-01	0.189
b1344_mRNA_degr1	Degradation of b1344_mRNA I	1 Orn_dim + 234 atp + 1 b1344_mRNA_2 + 1 degradosome + 234 h2o <==> 234 adp + 1 b1344_mRNA_2_degr + 234 h + 234 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.53E+02	1.53E+02	0	2.70E+02	269.7588	0	1.89E-01	0.189

b1344_mRNA_degr2	Degradation of b1344_mRNA II	1 b1344_mRNA_2_degr + 935 h2o --> 1 Orn_dim_inact + 257 amp + 1 atp + 209 cmp + 1 degradosome_inact + 246 gmp + 935 h + 223 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	1.53E+02	1.53E+02	0	2.70E+02	269.7588	0	1.89E-01	0.189
b1344_maturation1	Polypeptide b1344 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1344_aa <==> 1 b1344_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.84E+03	2.84E+03	0	4.95E+03	4947.459	0	9.52E+01	95.202
b1344_maturation2	b1344 formation	1 b1344_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1344_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.84E+03	2.84E+03	0	4.95E+03	4947.459	0	9.52E+01	95.202
b1427_fold_GroEL/ES_1	b1427_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b1427_m + 1 transGroES_hepta --> 7 adp + 1 b1427_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.02E+03	3.02E+03	0	5.05E+03	5054.124	0	8.98E+01	89.75
b1427_fold_GroEL/ES_2	b1427_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b1427_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 RimL_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.02E+03	3.02E+03	0	5.05E+03	5054.124	0	8.98E+01	89.75
b1427_fold_GroEL/ES_3	b1427_m folding: GroEL/ES mediated; release of native protein	1 RimL_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 RimL_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.02E+03	3.02E+03	0	5.05E+03	5054.124	0	8.98E+01	89.75
b1427_fold_KJE_1	b1427_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b1427_m <==> 1 b1427_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	3.02E+03	3.02E+03	0	5.05E+03	5054.124	0	8.98E+01	89.75
b1427_fold_KJE_2	b1427_m folding: KJE mediated	1 GrpE_dim + 1 b1427_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 RimL_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.02E+03	3.02E+03	0	5.05E+03	5054.124	0	8.98E+01	89.75
b1427_fold_KJE_3	b1427_m folding: KJE mediated	1 RimL_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 RimL_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.02E+03	3.02E+03	0	5.05E+03	5054.124	0	8.98E+01	89.75
b1427_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1427_mRNA --> 1 b1427_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.93E+02	2.93E+02	0	4.97E+02	496.5524	0	1.15E-01	0.115
b1427_mRNA_degr1	Degradation of b1427_mRNA I	1 Orn_dim + 135 atp + 1 b1427_mRNA_2 + 1 degradosome + 135 h2o <==> 135 adp + 1 b1427_mRNA_2_degr + 135 h + 135 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.93E+02	2.93E+02	0	4.97E+02	496.5524	0	1.15E-01	0.115
b1427_mRNA_degr2	Degradation of b1427_mRNA II	1 b1427_mRNA_2_degr + 539 h2o --> 1 Orn_dim_inact + 162 amp + 1 atp + 109 cmp + 1 degradosome_inact + 125 gmp + 539 h + 143 ump	irreversible	mRNA degradation	0.00E+00	1.15E-01	0	2.93E+02	2.93E+02	0	4.97E+02	496.5524	0	1.15E-01	0.115
b1427_maturation1	Polypeptide b1427 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1427_aa <==> 1 b1427_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.02E+03	3.02E+03	0	5.05E+03	5054.124	0	8.98E+01	89.75
b1427_maturation2	b1427 formation	1 b1427_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1427_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.02E+03	3.02E+03	0	5.05E+03	5054.124	0	8.98E+01	89.75
b1480_fold_spon	b1480_m folding: spontanous	1 b1480_m --> 1 Sra_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b1480_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1480_mRNA --> 1 b1480_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	8.29E+01	82.88	0	1.89E-01	0.189
b1480_mRNA_degr1	Degradation of b1480_mRNA I	1 Orn_dim + 34 atp + 1 b1480_mRNA_2 + 1 degradosome + 34 h2o <==> 34 adp + 1 b1480_mRNA_2_degr + 34 h + 34 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	3.10E+00	3.1
b1480_mRNA_degr2	Degradation of b1480_mRNA II	1 b1480_mRNA_2_degr + 137 h2o --> 1 Orn_dim_inact + 52 amp + 34 cmp + 1 degradosome_inact + 27 gmp + 137 h + 25 ump	irreversible	mRNA degradation	0.00E+00	3.10E+00	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	3.10E+00	3.1
b1480_maturation1	Polypeptide b1480 peptide deformylase complex	1 Def_mono + 1 b1480_aa <==> 1 b1480_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b1480_maturation2	b1480 formation	1 b1480_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b1480_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b1480_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1480_v1_mRNA --> 1 b1480_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	3.10E+00	3.1
b1481_fold_spon	b1481_m folding: spontanous	1 b1481_m --> 1 Bdm_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.03E+02	5.03E+02	0	4.21E+02	420.72	0	9.00E+01	89.956
b1481_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1481_mRNA --> 1 b1481_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	8.29E+01	82.88	0	1.89E-01	0.189
b1481_mRNA_degr1	Degradation of b1481_mRNA I	1 Orn_dim + 54 atp + 1 b1481_mRNA_2 + 1 degradosome + 54 h2o <==> 54 adp + 1 b1481_mRNA_2_degr + 54 h + 54 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.03E+02	1.03E+02	0	8.29E+01	82.88	0	1.89E-01	0.189
b1481_mRNA_degr2	Degradation of b1481_mRNA II	1 b1481_mRNA_2_degr + 215 h2o --> 1 Orn_dim_inact + 61 amp + 1 atp + 50 cmp + 1 degradosome_inact + 48 gmp + 215 h + 56 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	1.03E+02	1.03E+02	0	8.29E+01	82.88	0	1.89E-01	0.189
b1481_maturation1	Polypeptide b1481 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1481_aa <==> 1 b1481_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.03E+02	5.03E+02	0	4.21E+02	420.72	0	9.00E+01	89.956
b1481_maturation2	b1481 formation	1 b1481_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1481_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.03E+02	5.03E+02	0	4.21E+02	420.72	0	9.00E+01	89.956
b1636_fold_spon	b1636_m folding: spontanous	1 b1636_m --> 1 PdxY_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.06E+03	1.06E+03	0	1.81E+03	1809.834	0	9.19E+01	91.904
b1636_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1636_mRNA --> 1 b1636_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.09E+01	6.09E+01	0	1.08E+02	107.5946	0	2.24E-01	0.224
b1636_mRNA_degr1	Degradation of b1636_mRNA I	1 Orn_dim + 216 atp + 1 b1636_mRNA_2 + 1 degradosome + 216 h2o <==> 216 adp + 1 b1636_mRNA_2_degr + 216 h + 216 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.09E+01	6.09E+01	0	1.08E+02	107.5946	0	2.24E-01	0.224
b1636_mRNA_degr2	Degradation of b1636_mRNA II	1 b1636_mRNA_2_degr + 863 h2o --> 1 Orn_dim_inact + 204 amp + 208 cmp + 1 degradosome_inact + 250 gmp + 863 h + 202 ump	irreversible	mRNA degradation	0.00E+00	2.24E-01	0	6.09E+01	6.09E+01	0	1.08E+02	107.5946	0	2.24E-01	0.224
b1636_maturation1	Polypeptide b1636 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1636_aa <==> 1 b1636_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.06E+03	1.06E+03	0	1.81E+03	1809.834	0	9.19E+01	91.904
b1636_maturation2	b1636 formation	1 b1636_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1636_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.06E+03	1.06E+03	0	1.81E+03	1809.834	0	9.19E+01	91.904
b1636_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1636_v1_mRNA --> 1 b1636_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.46E+01	4.46E+01	0	7.87E+01	78.74245	0	1.04E-01	0.104
b1637_fold_spon	b1637_m folding: spontanous	1 b1637_m --> 1 TyrS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.55E+03	1.55E+03	0	2.67E+03	2672.032	0	9.51E+01	95.136
b1637_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1637_mRNA --> 1 b1637_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.09E+01	6.09E+01	0	1.08E+02	107.5946	0	2.24E-01	0.224
b1637_mRNA_degr1	Degradation of b1637_mRNA I	1 Orn_dim + 318 atp + 1 b1637_mRNA_2 + 1 degradosome + 318 h2o <==> 318 adp + 1 b1637_mRNA_2_degr + 318 h + 318 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.09E+01	6.09E+01	0	1.08E+02	107.5946	0	2.24E-01	0.224
b1637_mRNA_degr2	Degradation of b1637_mRNA II	1 b1637_mRNA_2_degr + 1274 h2o --> 1 Orn_dim_inact + 321 amp + 1 atp + 306 cmp + 1 degradosome_inact + 351 gmp + 1274 h + 296 ump	irreversible	mRNA degradation	0.00E+00	4.49E-01	0	6.09E+01	6.09E+01	0	1.08E+02	107.5946	0	2.24E-01	0.224
b1637_maturation1	Polypeptide b1637 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1637_aa <==> 1 b1637_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.55E+03	1.55E+03	0	2.67E+03	2672.032	0	9.51E+01	95.136
b1637_maturation2	b1637 formation	1 b1637_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1637_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.55E+03	1.55E+03	0	2.67E+03	2672.032	0	9.51E+01	95.136
b1637_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1637_v1_mRNA --> 1 b1637_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.46E+01	4.46E+01	0	7.87E+01	78.74245	0	1.04E-01	0.104
b1638_fold_spon	b1638_m folding: spontanous	1 b1638_m --> 1 PdxH_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.07E+02	6.07E+02	0	1.02E+03	1016.789	0	7.31E+01	73.128
b1638_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1638_mRNA --> 1 b1638_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.46E+01	4.46E+01	0	7.87E+01	78.74245	0	1.04E-01	0.104
b1638_mRNA_degr1	Degradation of b1638_mRNA I	1 Orn_dim + 164 atp + 1 b1638_mRNA_2 + 1 degradosome + 164 h2o <==> 164 adp + 1 b1638_mRNA_2_degr + 164 h + 164 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.46E+01	4.46E+01	0	7.87E+01	78.74245	0	1.04E-01	0.104
b1638_mRNA_degr2	Degradation of b1638_mRNA II	1 b1638_mRNA_2_degr + 656 h2o --> 1 Orn_dim_inact + 154 amp + 1 atp + 167 cmp + 1 degradosome_inact + 174 gmp + 656 h + 161 ump	irreversible	mRNA degradation	0.00E+00	1.04E-01	0	4.46E+01	4.46E+01	0	7.87E+01	78.74245	0	1.04E-01	0.104
b1638_maturation1	Polypeptide b1638 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1638_aa <==> 1 b1638_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.07E+02	6.07E+02	0	1.02E+03	1016.789	0	7.31E+01	73.128
b1638_maturation2	b1638 formation	1 b1638_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1638_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.07E+02	6.07E+02	0	1.02E+03	1016.789	0	7.31E+01	73.128

b1652_fold_spon	b1652_m folding: spontanous	1 b1652_m_Mg --> 1 Rnt_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.46E+02	3.46E+02	0	5.43E+02	542.8088	0	9.05E+01	90.492
b1652_ion_BIND	Binding of ions to b1652	1 b1652_m + 2 mg2 <==> 1 b1652_m_Mg	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	3.46E+02	3.46E+02	0	5.43E+02	542.8088	0	9.05E+01	90.492
b1652_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1652_mRNA --> 1 b1652_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	3.79E+01	37.86407	0	1.71E-01	0.171
b1652_mRNA_degr1	Degradation of b1652_mRNA I	1 Orn_dim + 162 atp + 1 b1652_mRNA_2 + 1 degradosome + 162 h2o <==> 162 adp + 1 b1652_mRNA_2_degr + 162 h + 162 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.14E+01	2.14E+01	0	3.79E+01	37.86407	0	1.71E-01	0.171
b1652_mRNA_degr2	Degradation of b1652_mRNA II	1 b1652_mRNA_2_degr + 647 h2o --> 1 Orn_dim_inact + 150 amp + 1 atp + 186 cmp + 1 degradosome_inact + 165 gmp + 647 h + 146 ump	irreversible	mRNA degradation	0.00E+00	1.71E-01	0	2.14E+01	2.14E+01	0	3.79E+01	37.86407	0	1.71E-01	0.171
b1652_maturation1	Polypeptide b1652 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1652_aa <==> 1 b1652_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.46E+02	3.46E+02	0	5.43E+02	542.8088	0	9.05E+01	90.492
b1652_maturation2	b1652 formation	1 b1652_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1652_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.46E+02	3.46E+02	0	5.43E+02	542.8088	0	9.05E+01	90.492
b1653_fold_spon	b1653_m folding: spontanous	1 b1653_m --> 1 Lhr_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.41E+03	1.41E+03	0	1.53E+03	1525.901	0	1.08E+02	108.09
b1653_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1653_mRNA --> 1 b1653_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	3.79E+01	37.86407	0	1.71E-01	0.171
b1653_mRNA_degr1	Degradation of b1653_mRNA I	1 Orn_dim + 1154 atp + 1 b1653_mRNA_2 + 1 degradosome + 1154 h2o <==> 1154 adp + 1 b1653_mRNA_2_degr + 1154 h + 1154 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.14E+01	2.14E+01	0	3.79E+01	37.86407	0	1.71E-01	0.171
b1653_mRNA_degr2	Degradation of b1653_mRNA II	1 b1653_mRNA_2_degr + 4616 h2o --> 1 Orn_dim_inact + 969 amp 1283 cmp + 1 degradosome_inact + 1344 gmp + 4616 h + 1021 ump	irreversible	mRNA degradation	0.00E+00	1.92E-01	0	2.14E+01	2.14E+01	0	3.79E+01	37.86407	0	1.71E-01	0.171
b1653_maturation1	Polypeptide b1653 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1653_aa <==> 1 b1653_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.41E+03	1.41E+03	0	1.53E+03	1525.901	0	1.08E+02	108.09
b1653_maturation2	b1653 formation	1 b1653_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1653_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.41E+03	1.41E+03	0	1.53E+03	1525.901	0	1.08E+02	108.09
b1665_tRNA_16_MODIF_1	modification of position 16 nt (D) in valV by Dus_gen	1 Dus_gen + 1 b1665_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b1665_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_16_MODIF_2	modification of position 16 nt (D) in valV by Dus_gen	1 b1665_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1665_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_17_MODIF_1	modification of position 17 nt (D) in valV by Dus_gen	1 Dus_gen + 1 b1665_tRNA_1 + 1 h + 1 nadph <==> 1 b1665_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_17_MODIF_2	modification of position 17 nt (D) in valV by Dus_gen	1 b1665_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1665_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_20A_MODIF_1	modification of position 20A nt (D) in valV by Dus_gen	1 Dus_gen + 1 b1665_tRNA_3 + 1 h + 1 nadph <==> 1 b1665_tRNA_3_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_20A_MODIF_2	modification of position 20A nt (D) in valV by Dus_gen	1 b1665_tRNA_3_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1665_tRNA_4 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_20_MODIF_1	modification of position 20 nt (D) in valV by Dus_gen	1 Dus_gen + 1 b1665_tRNA_2 + 1 h + 1 nadph <==> 1 b1665_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_20_MODIF_2	modification of position 20 nt (D) in valV by Dus_gen	1 b1665_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1665_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in valV by YggH_mono	1 YggH_mono + 1 amet + 1 b1665_tRNA_4 <==> 1 b1665_tRNA_4_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in valV by YggH_mono	1 b1665_tRNA_4_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b1665_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in valV by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b1665_tRNA_5 <==> 1 b1665_tRNA_5_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in valV by AcpT_tRNA_pos_47_acp3U	1 b1665_tRNA_5_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b1665_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in valV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b1665_tRNA_6 <==> 1 b1665_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in valV by TrmA_mono	1 b1665_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b1665_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_55_MODIF_1	modification of position 55 nt (Y) in valV by TruB_mono	1 TruB_mono + 1 b1665_tRNA_7 <==> 1 b1665_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_55_MODIF_2	modification of position 55 nt (Y) in valV by TruB_mono	1 b1665_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b1665_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in valV by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b1665_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b1665_tRNA_8_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in valV by ThiI_mono	1 b1665_tRNA_8_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 trdox + 1 valV_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1665_tRNA_Mg_BIND	Binding of two Mg2 to b1665_tRNA	1 b1665_RNA + 2 mg2 <==> 1 b1665_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_16_MODIF_1	modification of position 16 nt (D) in valW by Dus_gen	1 Dus_gen + 1 b1666_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b1666_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_16_MODIF_2	modification of position 16 nt (D) in valW by Dus_gen	1 b1666_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1666_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_17_MODIF_1	modification of position 17 nt (D) in valW by Dus_gen	1 Dus_gen + 1 b1666_tRNA_1 + 1 h + 1 nadph <==> 1 b1666_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_17_MODIF_2	modification of position 17 nt (D) in valW by Dus_gen	1 b1666_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1666_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_20A_MODIF_1	modification of position 20A nt (D) in valW by Dus_gen	1 Dus_gen + 1 b1666_tRNA_3 + 1 h + 1 nadph <==> 1 b1666_tRNA_3_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_20A_MODIF_2	modification of position 20A nt (D) in valW by Dus_gen	1 b1666_tRNA_3_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1666_tRNA_4 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_20_MODIF_1	modification of position 20 nt (D) in valW by Dus_gen	1 Dus_gen + 1 b1666_tRNA_2 + 1 h + 1 nadph <==> 1 b1666_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_20_MODIF_2	modification of position 20 nt (D) in valW by Dus_gen	1 b1666_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1666_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in valW by YggH_mono	1 YggH_mono + 1 amet + 1 b1666_tRNA_4 <==> 1 b1666_tRNA_4_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in valW by YggH_mono	1 b1666_tRNA_4_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b1666_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in valW by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b1666_tRNA_5 <==> 1 b1666_tRNA_5_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in valW by AcpT_tRNA_pos_47_acp3U	1 b1666_tRNA_5_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b1666_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in valW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b1666_tRNA_6 <==> 1 b1666_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in valW by TrmA_mono	1 b1666_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b1666_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_55_MODIF_1	modification of position 55 nt (Y) in valW by TruB_mono	1 TruB_mono + 1 b1666_tRNA_7 <==> 1 b1666_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_55_MODIF_2	modification of position 55 nt (Y) in valW by TruB_mono	1 b1666_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b1666_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in valW by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b1666_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b1666_tRNA_8_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in valW by ThiI_mono	1 b1666_tRNA_8_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 trdox + 1 valW_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
b1666_tRNA_Mg_BIND	Binding of two Mg2 to b1666_tRNA	1 b1666_RNA + 2 mg2 <==> 1 b1666_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6

b1712_fold_spon	b1712_m folding: spontanous	1 b1712_m --> 1 lhfA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.83E+02	2.83E+02	0	4.05E+02	405.2462	0	1.23E+02	122.994
b1712_mRNA_degr1	Degradation of b1712_mRNA I	1 Orn_dim + 75 atp + 1 b1712_mRNA_2 + 1 degradosome + 75 h2o <==> 75 adp + 1 b1712_mRNA_2_degr + 75 h + 75 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
b1712_mRNA_degr2	Degradation of b1712_mRNA II	1 b1712_mRNA_2_degr + 299 h2o --> 1 Orn_dim_inact + 86 amp + 1 atp + 67 cmp + 1 degradosome_inact + 83 gmp + 299 h + 63 ump	irreversible	mRNA degradation	0.00E+00	2.45E-01	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
b1712_maturation1	Polypeptide b1712 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1712_aa <==> 1 b1712_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.83E+02	2.83E+02	0	4.05E+02	405.2462	0	1.23E+02	122.994
b1712_maturation2	b1712 formation	1 b1712_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1712_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.83E+02	2.83E+02	0	4.05E+02	405.2462	0	1.23E+02	122.994
b1712_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1712_v1_mRNA --> 1 b1712_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
b1713_fold_KJE_1	b1713_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b1713_m <==> 1 b1713_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	7.28E+02	7.28E+02	0	1.19E+03	1193.566	0	1.07E+02	107.1248
b1713_fold_KJE_2	b1713_m folding: KJE mediated	1 GrpE_dim + 1 b1713_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 PheT_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.28E+02	7.28E+02	0	1.19E+03	1193.566	0	1.07E+02	107.1248
b1713_fold_KJE_3	b1713_m folding: KJE mediated	1 PheT_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 PheT_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.28E+02	7.28E+02	0	1.19E+03	1193.566	0	1.07E+02	107.1248
b1713_fold_spon	b1713_m folding: spontanous	1 b1713_m --> 1 PheT_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.28E+02	7.28E+02	0	1.19E+03	1193.566	0	1.07E+02	107.1248
b1713_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1713_mRNA --> 1 b1713_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
b1713_mRNA_degr1	Degradation of b1713_mRNA I	1 Orn_dim + 597 atp + 1 b1713_mRNA_2 + 1 degradosome + 597 h2o <==> 597 adp + 1 b1713_mRNA_2_degr + 597 h + 597 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
b1713_mRNA_degr2	Degradation of b1713_mRNA II	1 b1713_mRNA_2_degr + 2387 h2o --> 1 Orn_dim_inact + 553 amp + 588 cmp + 1 degradosome_inact + 710 gmp + 2387 h + 537 ump	irreversible	mRNA degradation	0.00E+00	2.84E-01	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
b1713_maturation1	Polypeptide b1713 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1713_aa <==> 1 b1713_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.28E+02	7.28E+02	0	1.19E+03	1193.566	0	1.07E+02	107.1248
b1713_maturation2	b1713 formation	1 b1713_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1713_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.28E+02	7.28E+02	0	1.19E+03	1193.566	0	1.07E+02	107.1248
b1714_fold_spon	b1714_m folding: spontanous	1 b1714_m --> 1 PheS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.28E+02	7.28E+02	0	1.19E+03	1193.566	0	1.07E+02	107.1248
b1714_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1714_mRNA --> 1 b1714_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
b1714_mRNA_degr1	Degradation of b1714_mRNA I	1 Orn_dim + 246 atp + 1 b1714_mRNA_2 + 1 degradosome + 246 h2o <==> 246 adp + 1 b1714_mRNA_2_degr + 246 h + 246 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
b1714_mRNA_degr2	Degradation of b1714_mRNA II	1 b1714_mRNA_2_degr + 983 h2o --> 1 Orn_dim_inact + 223 amp + 265 cmp + 1 degradosome_inact + 265 gmp + 983 h + 231 ump	irreversible	mRNA degradation	0.00E+00	3.72E-01	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
b1714_maturation1	Polypeptide b1714 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1714_aa <==> 1 b1714_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.28E+02	7.28E+02	0	1.19E+03	1193.566	0	1.07E+02	107.1248
b1714_maturation2	b1714 formation	1 b1714_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1714_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.28E+02	7.28E+02	0	1.19E+03	1193.566	0	1.07E+02	107.1248
b1715_fold_spon	b1715_m folding: spontanous	1 b1715_m --> 1 PheM_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.19E+02	2.19E+02	0	2.24E+02	224.2242	0	1.13E+02	113.3448
b1715_mRNA_degr1	Degradation of b1715_mRNA I	1 Orn_dim + 11 atp + 1 b1715_mRNA_2 + 1 degradosome + 11 h2o <==> 11 adp + 1 b1715_mRNA_2_degr + 11 h + 11 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.11E+02	110.9782	0	9.88E-02	0.0988
b1715_mRNA_degr2	Degradation of b1715_mRNA II	1 b1715_mRNA_2_degr + 44 h2o --> 1 Orn_dim_inact + 7 amp + 1 atp + 10 cmp + 1 degradosome_inact + 6 gmp + 44 h + 21 ump	irreversible	mRNA degradation	0.00E+00	9.88E-02	0	1.06E+02	1.06E+02	0	1.11E+02	110.9782	0	9.88E-02	0.0988
b1715_maturation1	Polypeptide b1715 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1715_aa <==> 1 b1715_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.19E+02	2.19E+02	0	2.24E+02	224.2242	0	1.13E+02	113.3448
b1715_maturation2	b1715 formation	1 b1715_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1715_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.19E+02	2.19E+02	0	2.24E+02	224.2242	0	1.13E+02	113.3448
b1715_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1715_v1_mRNA --> 1 b1715_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.02E+02	1.02E+02	0	8.29E+01	82.88	0	9.88E-02	0.0988
b1715_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1715_v2_mRNA --> 1 b1715_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
b1716_fold_spon	b1716_m folding: spontanous	1 b1716_m --> 1 RplT_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b1716_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1716_mRNA --> 1 b1716_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	6.79E+01	67.90817	0	1.65E-01	0.165
b1716_mRNA_degr1	Degradation of b1716_mRNA I	1 Orn_dim + 89 atp + 1 b1716_mRNA_2 + 1 degradosome + 89 h2o <==> 89 adp + 1 b1716_mRNA_2_degr + 89 h + 89 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	1.65E-01	0.165
b1716_mRNA_degr2	Degradation of b1716_mRNA II	1 b1716_mRNA_2_degr + 356 h2o --> 1 Orn_dim_inact + 97 amp + 86 cmp + 1 degradosome_inact + 86 gmp + 356 h + 88 ump	irreversible	mRNA degradation	0.00E+00	1.65E-01	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	1.65E-01	0.165
b1716_maturation1	Polypeptide b1716 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1716_aa <==> 1 b1716_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b1716_maturation2	b1716 formation	1 b1716_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1716_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b1716_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1716_v1_mRNA --> 1 b1716_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.02E+02	1.02E+02	0	8.29E+01	82.88	0	9.88E-02	0.0988
b1716_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1716_v2_mRNA --> 1 b1716_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	1.65E-01	0.165
b1717_fold_spon	b1717_m folding: spontanous	1 b1717_m --> 1 RpmI_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b1717_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1717_mRNA --> 1 b1717_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	6.79E+01	67.90817	0	1.65E-01	0.165
b1717_mRNA_degr1	Degradation of b1717_mRNA I	1 Orn_dim + 49 atp + 1 b1717_mRNA_2 + 1 degradosome + 49 h2o <==> 49 adp + 1 b1717_mRNA_2_degr + 49 h + 49 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.35E+01	4.35E+01	0	6.79E+01	67.90817	0	1.65E-01	0.165
b1717_mRNA_degr2	Degradation of b1717_mRNA II	1 b1717_mRNA_2_degr + 197 h2o --> 1 Orn_dim_inact + 61 amp + 53 cmp + 1 degradosome_inact + 46 gmp + 197 h + 38 ump	irreversible	mRNA degradation	0.00E+00	2.62E-01	0	4.35E+01	4.35E+01	0	6.79E+01	67.90817	0	1.65E-01	0.165
b1717_maturation1	Polypeptide b1717 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1717_aa <==> 1 b1717_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b1717_maturation2	b1717 formation	1 b1717_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1717_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b1718_fold_GroEL/ES_1	b1718_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b1718_m + 1 transGroES_hepta --> 7 adp + 1 b1718_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.02E+03	3.02E+03	0	5.11E+03	5108.769	0	2.96E+02	296.22
b1718_fold_GroEL/ES_2	b1718_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b1718_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 lnfC_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.02E+03	3.02E+03	0	5.11E+03	5108.769	0	2.96E+02	296.22
b1718_fold_GroEL/ES_3	b1718_m folding: GroEL/ES mediated; release of native protein	1 lnfC_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 lnfC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.02E+03	3.02E+03	0	5.11E+03	5108.769	0	2.96E+02	296.22
b1718_fold_KJE_1	b1718_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b1718_m <==> 1 b1718_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	3.02E+03	3.02E+03	0	5.11E+03	5108.769	0	2.96E+02	296.22
b1718_fold_KJE_2	b1718_m folding: KJE mediated	1 GrpE_dim + 1 b1718_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 lnfC_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.02E+03	3.02E+03	0	5.11E+03	5108.769	0	2.96E+02	296.22
b1718_fold_KJE_3	b1718_m folding: KJE mediated	1 lnfC_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + GrpE_dim_inact + 1 lnfC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.02E+03	3.02E+03	0	5.11E+03	5108.769	0	2.96E+02	296.22
b1718_fold_spon	b1718_m folding: spontanous	1 b1718_m --> 1 lnfC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.02E+03	3.02E+03	0	5.11E+03	5108.769	0	2.96E+02	296.22

b1718_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1718_mRNA --> 1 b1718_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	6.79E+01	67.90817	0	1.65E-01	0.165
b1718_mRNA_degr1	Degradation of b1718_mRNA I	1 Orn_dim + 135 atp + 1 b1718_mRNA_2 + 1 degradosome + 135 h2o <==> 135 adp + 1 b1718_mRNA_2_degr + 135 h + 135 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.73E+02	2.73E+02	0	4.82E+02	481.8769	0	6.22E-01	0.622
b1718_mRNA_degr2	Degradation of b1718_mRNA II	1 b1718_mRNA_2_degr + 542 h2o --> 1 Orn_dim_inact + 169 amp + 117 cmp + 1 degradosome_inact + 147 gmp + 542 h + 110 ump	irreversible	mRNA degradation	0.00E+00	6.22E-01	0	2.73E+02	2.73E+02	0	4.82E+02	481.8769	0	6.22E-01	0.622
b1718_maturation1	Polypeptide b1718 peptide deformylas complex	1 Def_mono + 1 b1718_aa <==> 1 b1718_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	3.02E+03	2.94E+03	6.22E+01	5.11E+03	5046.609	6.22E+01	2.96E+02	234.06
b1718_maturation2	b1718 formation	1 b1718_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b1718_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	3.02E+03	2.94E+03	6.22E+01	5.11E+03	5046.609	6.22E+01	2.96E+02	234.06
b1718_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1718_v1_mRNA --> 1 b1718_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.73E+02	2.73E+02	0	4.82E+02	481.8769	0	6.22E-01	0.622
b1718_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1718_v2_mRNA --> 1 b1718_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.73E+02	2.73E+02	0	4.82E+02	481.8769	0	6.22E-01	0.622
b1719_fold_GroEL/ES_1	b1719_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b1719_m_Zn + 1 transGroES_hepta --> 7 adp + 1 b1719_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.92E+03	1.92E+03	0	2.82E+03	2824.512	0	3.18E+02	318.015
b1719_fold_GroEL/ES_2	b1719_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b1719_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 ThrS_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.92E+03	1.92E+03	0	2.82E+03	2824.512	0	3.18E+02	318.015
b1719_fold_GroEL/ES_3	b1719_m folding: GroEL/ES mediated; release of native protein	1 ThrS_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 ThrS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.92E+03	1.92E+03	0	2.82E+03	2824.512	0	3.18E+02	318.015
b1719_fold_KJE_1	b1719_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b1719_m_Zn <==> 1 b1719_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	1.92E+03	1.92E+03	0	2.82E+03	2824.512	0	3.18E+02	318.015
b1719_fold_KJE_2	b1719_m folding: KJE mediated	1 GrpE_dim + 1 b1719_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 ThrS_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.92E+03	1.92E+03	0	2.82E+03	2824.512	0	3.18E+02	318.015
b1719_fold_KJE_3	b1719_m folding: KJE mediated	1 ThrS_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 ThrS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.92E+03	1.92E+03	0	2.82E+03	2824.512	0	3.18E+02	318.015
b1719_ion_BIND	Binding of ions to b1719	1 b1719_m + 1 zn2 <==> 1 b1719_m_Zn	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	1.92E+03	1.92E+03	0	2.82E+03	2824.512	0	3.18E+02	318.015
b1719_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1719_mRNA --> 1 b1719_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	6.79E+01	67.90817	0	1.65E-01	0.165
b1719_mRNA_degr1	Degradation of b1719_mRNA I	1 Orn_dim + 482 atp + 1 b1719_mRNA_2 + 1 degradosome + 482 h2o <==> 482 adp + 1 b1719_mRNA_2_degr + 482 h + 482 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.35E+01	4.35E+01	0	6.79E+01	67.90817	0	1.65E-01	0.165
b1719_mRNA_degr2	Degradation of b1719_mRNA II	1 b1719_mRNA_2_degr + 1928 h2o --> 1 Orn_dim_inact + 518 amp + 1 atp + 452 cmp + 1 degradosome_inact + 504 gmp + 1928 h + 454 ump	irreversible	mRNA degradation	0.00E+00	5.67E-01	0	4.35E+01	4.35E+01	0	6.79E+01	67.90817	0	1.65E-01	0.165
b1719_maturation1	Polypeptide b1719 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1719_aa <==> 1 b1719_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.92E+03	1.92E+03	0	2.82E+03	2824.512	0	3.18E+02	318.015
b1719_maturation2	b1719 formation	1 b1719_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1719_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.92E+03	1.92E+03	0	2.82E+03	2824.512	0	3.18E+02	318.015
b1804_DNA_act_bind	b1804_DNA binding of activator	1 b1804_DNA_neu --> 1 b1804_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.95E+02	195.0851	0	9.45E-02	0.0945
b1804_fold_spon	b1804_m folding: spontanous	1 b1804_m_Mg --> 1 Rnd_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.50E+03	2.50E+03	0	4.11E+03	4113.529	0	7.31E+01	73.139
b1804_ion_BIND	Binding of ions to b1804	1 b1804_m + 5 mg2 <==> 1 b1804_m_Mg	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	2.50E+03	2.50E+03	0	4.11E+03	4113.529	0	7.31E+01	73.139
b1804_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1804_mRNA --> 1 b1804_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.95E+02	195.0851	0	9.45E-02	0.0945
b1804_mRNA_degr1	Degradation of b1804_mRNA I	1 Orn_dim + 282 atp + 1 b1804_mRNA_2 + 1 degradosome + 282 h2o <==> 282 adp + 1 b1804_mRNA_2_degr + 282 h + 282 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.95E+02	195.0851	0	9.45E-02	0.0945
b1804_mRNA_degr2	Degradation of b1804_mRNA II	1 b1804_mRNA_2_degr + 1127 h2o --> 1 Orn_dim_inact + 258 amp 289 cmp + 1 degradosome_inact + 321 gmp + 1127 h + 259 ump + 1 utp	irreversible	mRNA degradation	0.00E+00	9.45E-02	0	1.11E+02	1.11E+02	0	1.95E+02	195.0851	0	9.45E-02	0.0945
b1804_maturation1	Polypeptide b1804 peptide deformylas complex	1 Def_mono + 1 b1804_aa <==> 1 b1804_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.50E+03	2.50E+03	0	4.11E+03	4113.529	0	7.31E+01	73.139
b1804_maturation2	b1804 formation	1 b1804_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b1804_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.50E+03	2.50E+03	0	4.11E+03	4113.529	0	7.31E+01	73.139
b1822_fold_spon	b1822_m folding: spontanous	1 b1822_m_Zn --> 1 RrmA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.52E+03	2.52E+03	0	4.38E+03	4381.213	0	8.95E+01	89.547
b1822_ion_BIND	Binding of ions to b1822	1 b1822_m + 1 zn2 <==> 1 b1822_m_Zn	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	2.52E+03	2.52E+03	0	4.38E+03	4381.213	0	8.95E+01	89.547
b1822_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1822_mRNA --> 1 b1822_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.86E+02	286.1908	0	7.98E-02	0.0798
b1822_mRNA_degr1	Degradation of b1822_mRNA I	1 Orn_dim + 202 atp + 1 b1822_mRNA_2 + 1 degradosome + 202 h2o <==> 202 adp + 1 b1822_mRNA_2_degr + 202 h + 202 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.62E+02	1.62E+02	0	2.86E+02	286.1908	0	7.98E-02	0.0798
b1822_mRNA_degr2	Degradation of b1822_mRNA II	1 b1822_mRNA_2_degr + 809 h2o --> 1 Orn_dim_inact + 193 amp + 1 atp + 197 cmp + 1 degradosome_inact + 219 gmp + 809 h + 200 ump	irreversible	mRNA degradation	0.00E+00	7.98E-02	0	1.62E+02	1.62E+02	0	2.86E+02	286.1908	0	7.98E-02	0.0798
b1822_maturation1	Polypeptide b1822 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1822_aa <==> 1 b1822_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.52E+03	2.52E+03	0	4.38E+03	4381.213	0	8.95E+01	89.547
b1822_maturation2	b1822 formation	1 b1822_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1822_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.52E+03	2.52E+03	0	4.38E+03	4381.213	0	8.95E+01	89.547
b1866_fold_spon	b1866_m folding: spontanous	1 b1866_m --> 1 AspS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.48E+03	2.48E+03	0	4.23E+03	4228.23	0	7.87E+01	78.676
b1866_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1866_mRNA --> 1 b1866_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.08E+01	7.08E+01	0	1.25E+02	125.0102	0	1.04E-01	0.104
b1866_mRNA_degr1	Degradation of b1866_mRNA I	1 Orn_dim + 443 atp + 1 b1866_mRNA_2 + 1 degradosome + 443 h2o <==> 443 adp + 1 b1866_mRNA_2_degr + 443 h + 443 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.08E+01	7.08E+01	0	1.25E+02	125.0102	0	1.04E-01	0.104
b1866_mRNA_degr2	Degradation of b1866_mRNA II	1 b1866_mRNA_2_degr + 1772 h2o --> 1 Orn_dim_inact + 416 amp + 1 atp + 451 cmp + 1 degradosome_inact + 502 gmp + 1772 h + 403 ump	irreversible	mRNA degradation	0.00E+00	1.04E-01	0	7.08E+01	7.08E+01	0	1.25E+02	125.0102	0	1.04E-01	0.104
b1866_maturation1	Polypeptide b1866 peptide deformylas complex	1 Def_mono + 1 b1866_aa <==> 1 b1866_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.48E+03	2.48E+03	0	4.23E+03	4228.23	0	7.87E+01	78.676
b1866_maturation2	b1866 formation	1 b1866_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b1866_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.48E+03	2.48E+03	0	4.23E+03	4228.23	0	7.87E+01	78.676
b1869_fold_spon	b1869_m folding: spontanous	1 b1869_m --> 1 YecN_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.14E+02	5.14E+02	0	8.42E+02	842.1994	0	8.58E+01	85.806
b1869_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1869_mRNA --> 1 b1869_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158
b1869_mRNA_degr1	Degradation of b1869_mRNA I	1 Orn_dim + 99 atp + 1 b1869_mRNA_2 + 1 degradosome + 99 h2o <==> 99 adp + 1 b1869_mRNA_2_degr + 99 h + 99 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158
b1869_mRNA_degr2	Degradation of b1869_mRNA II	1 b1869_mRNA_2_degr + 395 h2o --> 1 Orn_dim_inact + 66 amp + 1 atp + 86 cmp + 1 degradosome_inact + 115 gmp + 395 h + 128 ump	irreversible	mRNA degradation	0.00E+00	1.77E-01	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158
b1869_maturation1	Polypeptide b1869 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1869_aa <==> 1 b1869_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.14E+02	5.14E+02	0	8.42E+02	842.1994	0	8.58E+01	85.806
b1869_maturation2	b1869 formation	1 b1869_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1869_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.14E+02	5.14E+02	0	8.42E+02	842.1994	0	8.58E+01	85.806
b1870_fold_spon	b1870_m folding: spontanous	1 b1870_m --> 1 YecO_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.48E+02	9.48E+02	0	1.60E+03	1604.879	0	9.21E+01	92.092
b1870_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1870_mRNA --> 1 b1870_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158

b1870_mRNA_degr1	Degradation of b1870_mRNA I	1 Orn_dim + 186 atp + 1 b1870_mRNA_2 + 1 degradosome + 186 h2o <==> 186 adp + 1 b1870_mRNA_2_degr + 186 h + 186 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158
b1870_mRNA_degr2	Degradation of b1870_mRNA II	1 b1870_mRNA_2_degr + 743 h2o --> 1 Orn_dim_inact + 177 amp + 188 cmp + 1 degradosome_inact + 189 gmp + 743 h + 190 ump	irreversible	mRNA degradation	0.00E+00	2.84E-01	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158
b1870_maturation1	Polypeptide b1870 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1870_aa <==> 1 b1870_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	9.48E+02	9.48E+02	0	1.60E+03	1604.879	0	9.21E+01	92.092
b1870_maturation2	b1870 formation	1 b1870_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1870_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	9.48E+02	9.48E+02	0	1.60E+03	1604.879	0	9.21E+01	92.092
b1871_fold_spon	b1871_m folding: spontanous	1 b1871_m --> 1 YecP_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.26E+03	1.26E+03	0	2.15E+03	2149.36	0	9.63E+01	96.292
b1871_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1871_mRNA --> 1 b1871_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158
b1871_mRNA_degr1	Degradation of b1871_mRNA I	1 Orn_dim + 242 atp + 1 b1871_mRNA_2 + 1 degradosome + 242 h2o <==> 242 adp + 1 b1871_mRNA_2_degr + 242 h + 242 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158
b1871_mRNA_degr2	Degradation of b1871_mRNA II	1 b1871_mRNA_2_degr + 967 h2o --> 1 Orn_dim_inact + 225 amp + 235 cmp + 1 degradosome_inact + 270 gmp + 967 h + 238 ump	irreversible	mRNA degradation	0.00E+00	1.58E-01	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158
b1871_maturation1	Polypeptide b1871 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1871_aa <==> 1 b1871_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.26E+03	1.26E+03	0	2.15E+03	2149.36	0	9.63E+01	96.292
b1871_maturation2	b1871 formation	1 b1871_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1871_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.26E+03	1.26E+03	0	2.15E+03	2149.36	0	9.63E+01	96.292
b1876_fold_spon	b1876_m folding: spontanous	1 b1876_m --> 1 ArgS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.51E+03	2.51E+03	0	4.11E+03	4107.15	0	1.02E+02	101.508
b1876_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1876_mRNA --> 1 b1876_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.32E+01	7.32E+01	0	1.29E+02	129.311	0	3.26E-01	0.326
b1876_mRNA_degr1	Degradation of b1876_mRNA I	1 Orn_dim + 433 atp + 1 b1876_mRNA_2 + 1 degradosome + 433 h2o <==> 433 adp + 1 b1876_mRNA_2_degr + 433 h + 433 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.32E+01	7.32E+01	0	1.29E+02	129.311	0	3.26E-01	0.326
b1876_mRNA_degr2	Degradation of b1876_mRNA II	1 b1876_mRNA_2_degr + 1733 h2o --> 1 Orn_dim_inact + 445 amp 436 cmp + 1 degradosome_inact + 487 gmp + 1 gtp + 1733 h + 365 ump	irreversible	mRNA degradation	0.00E+00	3.26E-01	0	7.32E+01	7.32E+01	0	1.29E+02	129.311	0	3.26E-01	0.326
b1876_maturation1	Polypeptide b1876 peptide deformylase complex	1 Def_mono + 1 b1876_aa <==> 1 b1876_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.51E+03	2.51E+03	0	4.11E+03	4107.15	0	1.02E+02	101.508
b1876_maturation2	b1876 formation	1 b1876_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b1876_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.51E+03	2.51E+03	0	4.11E+03	4107.15	0	1.02E+02	101.508
b1909_tRNA_16_MODIF_1	modification of position 16 nt (D) in leuZ by Dus_gen	1 Dus_gen + 1 b1909_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b1909_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_16_MODIF_2	modification of position 16 nt (D) in leuZ by Dus_gen	1 b1909_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1909_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in leuZ by TrmH_dim	1 TrmH_dim + 1 amet + 1 b1909_tRNA_1 <==> 1 b1909_tRNA_1_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in leuZ by TrmH_dim	1 b1909_tRNA_1_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b1909_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_20_MODIF_1	modification of position 20 nt (D) in leuZ by Dus_gen	1 Dus_gen + 1 b1909_tRNA_2 + 1 h + 1 nadph <==> 1 b1909_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_20_MODIF_2	modification of position 20 nt (D) in leuZ by Dus_gen	1 b1909_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1909_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_32_MODIF_1	modification of position 32 nt (Y) in leuZ by RluA_mono	1 RluA_mono + 1 b1909_tRNA_3 <==> 1 b1909_tRNA_3_RluA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_32_MODIF_2	modification of position 32 nt (Y) in leuZ by RluA_mono	1 b1909_tRNA_3_RluA_mono_cplx --> 1 RluA_mono_inact + 1 b1909_tRNA_4	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_37_MODIF_1	modification of position 37 nt (ms2i6A) in leuZ by MiaA_dim-MiaB_mono	1 IscS_dim_S-SH + 1 MiaA_dim + 1 MiaB_mono + 2 amet + 1 b1909_tRNA_4 + 1 dmpp + 1 fldrd <==> 1 b1909_tRNA_4_MiaA_dim_MiaB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_37_MODIF_2	modification of position 37 nt (ms2i6A) in leuZ by MiaA_dim-MiaB_mono	1 b1909_tRNA_4_MiaA_dim-MiaB_mono_cplx --> 1 IscS_dim_S-H + 1 MiaA_dim_inact + 1 MiaB_mono_inact + 1 ahcys + 1 b1909_tRNA_5 + 1 dad-5 + 1 fldox + 2 h + 1 met-L + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_39_MODIF_1	modification of position 39 nt (Y) in leuZ by TruA_dim	1 TruA_dim + 1 b1909_tRNA_5 <==> 1 b1909_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_39_MODIF_2	modification of position 39 nt (Y) in leuZ by TruA_dim	1 b1909_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b1909_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in leuZ by TrmA_mono	1 TrmA_mono + 1 amet + 1 b1909_tRNA_6 <==> 1 b1909_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in leuZ by TrmA_mono	1 b1909_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b1909_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_55_MODIF_1	modification of position 55 nt (Y) in leuZ by TruB_mono	1 TruB_mono + 1 b1909_tRNA_7 <==> 1 b1909_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_55_MODIF_2	modification of position 55 nt (Y) in leuZ by TruB_mono	1 b1909_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b1909_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in leuZ by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b1909_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b1909_tRNA_8_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in leuZ by ThiI_mono	1 b1909_tRNA_8_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 leuZ_tRNA + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1909_tRNA_Mg_BIND	Binding of two Mg2 to b1909_tRNA	1 b1909_RNA + 2 mg2 <==> 1 b1909_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_20_MODIF_1	modification of position 20 nt (D) in cysT by Dus_gen	1 Dus_gen + 1 b1910_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b1910_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_20_MODIF_2	modification of position 20 nt (D) in cysT by Dus_gen	1 b1910_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1910_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_21_MODIF_1	modification of position 21 nt (D) in cysT by Dus_gen	1 Dus_gen + 1 b1910_tRNA_1 + 1 h + 1 nadph <==> 1 b1910_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_21_MODIF_2	modification of position 21 nt (D) in cysT by Dus_gen	1 b1910_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1910_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_32_MODIF_1	modification of position 32 nt (Y) in cysT by RluA_mono	1 RluA_mono + 1 b1910_tRNA_2 <==> 1 b1910_tRNA_2_RluA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_32_MODIF_2	modification of position 32 nt (Y) in cysT by RluA_mono	1 b1910_tRNA_2_RluA_mono_cplx --> 1 RluA_mono_inact + 1 b1910_tRNA_3	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_37_MODIF_1	modification of position 37 nt (ms2i6A) in cysT by MiaA_dim-MiaB_mono	1 IscS_dim_S-SH + 1 MiaA_dim + 1 MiaB_mono + 2 amet + 1 b1910_tRNA_3 + 1 dmpp + 1 fldrd <==> 1 b1910_tRNA_3_MiaA_dim_MiaB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_37_MODIF_2	modification of position 37 nt (ms2i6A) in cysT by MiaA_dim-MiaB_mono	1 b1910_tRNA_3_MiaA_dim-MiaB_mono_cplx --> 1 IscS_dim_S-H + 1 MiaA_dim_inact + 1 MiaB_mono_inact + 1 ahcys + 1 b1910_tRNA_4 + 1 dad-5 + 1 fldox + 2 h + 1 met-L + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_39_MODIF_1	modification of position 39 nt (Y) in cysT by TruA_dim	1 TruA_dim + 1 b1910_tRNA_4 <==> 1 b1910_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_39_MODIF_2	modification of position 39 nt (Y) in cysT by TruA_dim	1 b1910_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b1910_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in cysT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b1910_tRNA_5 <==> 1 b1910_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in cysT by TrmA_mono	1 b1910_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b1910_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_55_MODIF_1	modification of position 55 nt (Y) in cysT by TruB_mono	1 TruB_mono + 1 b1910_tRNA_6 <==> 1 b1910_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_55_MODIF_2	modification of position 55 nt (Y) in cysT by TruB_mono	1 b1910_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b1910_tRNA_7	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in cysT by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b1910_tRNA_7 + 1 mg2 + 1 trdrd <==> 1 b1910_tRNA_7_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22

b1910_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in cysT by Thil_mono	1 b1910_tRNA_7_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 cysT_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1910_tRNA_Mg_BIND	Binding of two Mg2 to b1910_tRNA	1 b1910_RNA + 2 mg2 <==> 1 b1910_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1911_tRNA_16_MODIF_1	modification of position 16 nt (D) in glyW by Dus_gen	1 Dus_gen + 1 b1911_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b1911_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1911_tRNA_16_MODIF_2	modification of position 16 nt (D) in glyW by Dus_gen	1 b1911_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1911_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1911_tRNA_17_MODIF_1	modification of position 17 nt (D) in glyW by Dus_gen	1 Dus_gen + 1 b1911_tRNA_1 + 1 h + 1 nadph <==> 1 b1911_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1911_tRNA_17_MODIF_2	modification of position 17 nt (D) in glyW by Dus_gen	1 b1911_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1911_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1911_tRNA_20_MODIF_1	modification of position 20 nt (D) in glyW by Dus_gen	1 Dus_gen + 1 b1911_tRNA_2 + 1 h + 1 nadph <==> 1 b1911_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1911_tRNA_20_MODIF_2	modification of position 20 nt (D) in glyW by Dus_gen	1 b1911_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1911_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1911_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in glyW by YggH_mono	1 YggH_mono + 1 amet + 1 b1911_tRNA_3 <==> 1 b1911_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1911_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in glyW by YggH_mono	1 b1911_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b1911_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1911_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in glyW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b1911_tRNA_4 <==> 1 b1911_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1911_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in glyW by TrmA_mono	1 b1911_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b1911_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1911_tRNA_55_MODIF_1	modification of position 55 nt (Y) in glyW by TruB_mono	1 TruB_mono + 1 b1911_tRNA_5 <==> 1 b1911_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1911_tRNA_55_MODIF_2	modification of position 55 nt (Y) in glyW by TruB_mono	1 b1911_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 glyW_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1911_tRNA_Mg_BIND	Binding of two Mg2 to b1911_tRNA	1 b1911_RNA + 2 mg2 <==> 1 b1911_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
b1920_fold_spon	b1920_m folding: spontanous	1 b1920_m --> 1 FliY_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.07E+03	1.07E+03	0	1.80E+03	1796.95	0	1.18E+02	118.065
b1920_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1920_mRNA --> 1 b1920_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
b1920_mRNA_degr1	Degradation of b1920_mRNA I	1 Orn_dim + 200 atp + 1 b1920_mRNA_2 + 1 degradosome + 200 h2o <==> 200 adp + 1 b1920_mRNA_2_degr + 200 h + 200 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
b1920_mRNA_degr2	Degradation of b1920_mRNA II	1 b1920_mRNA_2_degr + 800 h2o --> 1 Orn_dim_inact + 220 amp + 162 cmp + 1 degradosome_inact + 237 gmp + 800 h + 182 ump	irreversible	mRNA degradation	0.00E+00	1.96E-01	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
b1920_maturation1	Polypeptide b1920 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1920_aa <==> 1 b1920_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.07E+03	1.07E+03	0	1.80E+03	1796.95	0	1.18E+02	118.065
b1920_maturation2	b1920 formation	1 b1920_def_map_cplx + 30 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 6 ala-L + 1 arg-L + 1 b1920_m + 1 for + 1 gln-L + 3 gly + 1 his-L + 4 leu-L + 2 lys-L + 4 met-L + 1 phe-L + 2 ser-L + 4 va L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.07E+03	1.07E+03	0	1.80E+03	1796.95	0	1.18E+02	118.065
b1920_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1920_v1_mRNA --> 1 b1920_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
b1921_fold_spon	b1921_m folding: spontanous	1 b1921_m --> 1 FliZ_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.47E+02	7.47E+02	0	1.23E+03	1232.867	0	1.14E+02	113.61
b1921_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1921_mRNA --> 1 b1921_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
b1921_mRNA_degr1	Degradation of b1921_mRNA I	1 Orn_dim + 138 atp + 1 b1921_mRNA_2 + 1 degradosome + 138 h2o <==> 138 adp + 1 b1921_mRNA_2_degr + 138 h + 138 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
b1921_mRNA_degr2	Degradation of b1921_mRNA II	1 b1921_mRNA_2_degr + 551 h2o --> 1 Orn_dim_inact + 153 amp + 138 cmp + 1 degradosome_inact + 119 gmp + 551 h + 142 ump	irreversible	mRNA degradation	0.00E+00	1.77E-01	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
b1921_maturation1	Polypeptide b1921 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1921_aa <==> 1 b1921_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.47E+02	7.47E+02	0	1.23E+03	1232.867	0	1.14E+02	113.61
b1921_maturation2	b1921 formation	1 b1921_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1921_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.47E+02	7.47E+02	0	1.23E+03	1232.867	0	1.14E+02	113.61
b1921_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1921_v1_mRNA --> 1 b1921_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
b1922_fold_spon	b1922_m folding: spontanous	1 b1922_m --> 1 FliA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.82E+02	9.82E+02	0	1.66E+03	1662.033	0	9.51E+01	95.074
b1922_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1922_mRNA --> 1 b1922_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
b1922_mRNA_degr1	Degradation of b1922_mRNA I	1 Orn_dim + 180 atp + 1 b1922_mRNA_2 + 1 degradosome + 180 h2o <==> 180 adp + 1 b1922_mRNA_2_degr + 180 h + 180 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
b1922_mRNA_degr2	Degradation of b1922_mRNA II	1 b1922_mRNA_2_degr + 719 h2o --> 1 Orn_dim_inact + 185 amp + 179 cmp + 1 degradosome_inact + 210 gmp + 1 gtp + 719 h + 145 ump	irreversible	mRNA degradation	0.00E+00	1.61E-01	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
b1922_maturation1	Polypeptide b1922 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b1922_aa <==> 1 b1922_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	9.82E+02	9.82E+02	0	1.66E+03	1662.033	0	9.51E+01	95.074
b1922_maturation2	b1922 formation	1 b1922_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b1922_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	9.82E+02	9.82E+02	0	1.66E+03	1662.033	0	9.51E+01	95.074
b1922_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b1922_v1_mRNA --> 1 b1922_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
b1975_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in serU by TrmH_dim	1 TrmH_dim + 1 amet + 1 b1975_tRNA_Mg2 <==> 1 b1975_tRNA_Mg2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1975_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in serU by TrmH_dim	1 b1975_tRNA_Mg2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b1975_tRNA_1 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1975_tRNA_20A_MODIF_1	modification of position 20A nt (D) in serU by Dus_gen	1 Dus_gen + 1 b1975_tRNA_1 + 1 h + 1 nadph <==> 1 b1975_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1975_tRNA_20A_MODIF_2	modification of position 20A nt (D) in serU by Dus_gen	1 b1975_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1975_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1975_tRNA_37_MODIF_1	modification of position 37 nt (ms2i6A) in serU by MiaA_dim-MiaB_mono	1 IscS_dim_S-SH + 1 MiaA_dim + 1 MiaB_mono + 2 amet + 1 b1975_tRNA_2 + 1 dmpp + 1 fldrd <==> 1 b1975_tRNA_2_MiaA_dim MiaB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1975_tRNA_37_MODIF_2	modification of position 37 nt (ms2i6A) in serU by MiaA_dim-MiaB_mono	1 b1975_tRNA_2_MiaA_dim-MiaB_mono_cplx --> 1 IscS_dim_S-H + 1 MiaA_dim_inact + 1 MiaB_mono_inact + 1 ahcys + 1 b1975_tRNA_3 + 1 dad-5 + 1 fldox + 2 h + 1 met-L + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1975_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in serU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b1975_tRNA_3 <==> 1 b1975_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1975_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in serU by TrmA_mono	1 b1975_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b1975_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1975_tRNA_55_MODIF_1	modification of position 55 nt (Y) in serU by TruB_mono	1 TruB_mono + 1 b1975_tRNA_4 <==> 1 b1975_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1975_tRNA_55_MODIF_2	modification of position 55 nt (Y) in serU by TruB_mono	1 b1975_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 serU_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1975_tRNA_Mg_BIND	Binding of two Mg2 to b1975_tRNA	1 b1975_RNA + 2 mg2 <==> 1 b1975_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_16_MODIF_1	modification of position 16 nt (D) in asnT by Dus_gen	1 Dus_gen + 1 b1977_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b1977_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_16_MODIF_2	modification of position 16 nt (D) in asnT by Dus_gen	1 b1977_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1977_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_20_MODIF_1	modification of position 20 nt (D) in asnT by Dus_gen	1 Dus_gen + 1 b1977_tRNA_1 + 1 h + 1 nadph <==> 1 b1977_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36

b1977_tRNA_20_MODIF_2	modification of position 20 nt (D) in asnT by Dus_gen	1 b1977_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1977_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_34_MODIF_1	modification of position 34 nt (Q) in asnT by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 EoR_tRNA_pos34_Q + 1 QueA_mono + 1 Tgt_hexa + 1 adocbl + 1 amet + 1 b1977_tRNA_2 + 1 h + 1 nadh + 1 pre_Q1 <==> 1 b1977_tRNA_2_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_34_MODIF_2	modification of position 34 nt (Q) in asnT by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 b1977_tRNA_2_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx > 1 EoR_tRNA_pos34_Q_inact + 1 QueA_mono_inact + 1 Tgt_hexa_inact + 1 ade + 1 adocbl + 1 b1977_tRNA_3 + 1 gua + 2 h 1 h2o + 1 met-L + 1 nad	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in asnT by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b1977_tRNA_3 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b1977_tRNA_3_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in asnT by Up_tRNA_pos_37_t6A	1 b1977_tRNA_3_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b1977_tRNA_4 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_39_MODIF_1	modification of position 39 nt (Y) in asnT by TruA_dim	1 TruA_dim + 1 b1977_tRNA_4 <==> 1 b1977_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_39_MODIF_2	modification of position 39 nt (Y) in asnT by TruA_dim	1 b1977_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b1977_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in asnT by YggH_mono	1 YggH_mono + 1 amet + 1 b1977_tRNA_5 <==> 1 b1977_tRNA_5_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in asnT by YggH_mono	1 b1977_tRNA_5_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b1977_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in asnT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b1977_tRNA_6 <==> 1 b1977_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in asnT by TrmA_mono	1 b1977_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b1977_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_55_MODIF_1	modification of position 55 nt (Y) in asnT by TruB_mono	1 TruB_mono + 1 b1977_tRNA_7 <==> 1 b1977_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_55_MODIF_2	modification of position 55 nt (Y) in asnT by TruB_mono	1 b1977_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b1977_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in asnT by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b1977_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b1977_tRNA_8_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in asnT by ThiI_mono	1 b1977_tRNA_8_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 asnT_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1977_tRNA_Mg_BIND	Binding of two Mg2 to b1977_tRNA	1 b1977_RNA + 2 mg2 <==> 1 b1977_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
b1984_tRNA_16_MODIF_1	modification of position 16 nt (D) in asnW by Dus_gen	1 Dus_gen + 1 b1984_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b1984_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_16_MODIF_2	modification of position 16 nt (D) in asnW by Dus_gen	1 b1984_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1984_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_20_MODIF_1	modification of position 20 nt (D) in asnW by Dus_gen	1 Dus_gen + 1 b1984_tRNA_1 + 1 h + 1 nadph <==> 1 b1984_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_20_MODIF_2	modification of position 20 nt (D) in asnW by Dus_gen	1 b1984_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1984_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_34_MODIF_1	modification of position 34 nt (Q) in asnW by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 EoR_tRNA_pos34_Q + 1 QueA_mono + 1 Tgt_hexa + 1 adocbl + 1 amet + 1 b1984_tRNA_2 + 1 h + 1 nadh + 1 pre_Q1 <==> 1 b1984_tRNA_2_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_34_MODIF_2	modification of position 34 nt (Q) in asnW by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 b1984_tRNA_2_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx > 1 EoR_tRNA_pos34_Q_inact + 1 QueA_mono_inact + 1 Tgt_hexa_inact + 1 ade + 1 adocbl + 1 b1984_tRNA_3 + 1 gua + 2 h 1 h2o + 1 met-L + 1 nad	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in asnW by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b1984_tRNA_3 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b1984_tRNA_3_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in asnW by Up_tRNA_pos_37_t6A	1 b1984_tRNA_3_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b1984_tRNA_4 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_39_MODIF_1	modification of position 39 nt (Y) in asnW by TruA_dim	1 TruA_dim + 1 b1984_tRNA_4 <==> 1 b1984_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_39_MODIF_2	modification of position 39 nt (Y) in asnW by TruA_dim	1 b1984_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b1984_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in asnW by YggH_mono	1 YggH_mono + 1 amet + 1 b1984_tRNA_5 <==> 1 b1984_tRNA_5_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in asnW by YggH_mono	1 b1984_tRNA_5_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b1984_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in asnW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b1984_tRNA_6 <==> 1 b1984_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in asnW by TrmA_mono	1 b1984_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b1984_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_55_MODIF_1	modification of position 55 nt (Y) in asnW by TruB_mono	1 TruB_mono + 1 b1984_tRNA_7 <==> 1 b1984_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_55_MODIF_2	modification of position 55 nt (Y) in asnW by TruB_mono	1 b1984_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b1984_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in asnW by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b1984_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b1984_tRNA_8_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in asnW by ThiI_mono	1 b1984_tRNA_8_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 asnW_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1984_tRNA_Mg_BIND	Binding of two Mg2 to b1984_tRNA	1 b1984_RNA + 2 mg2 <==> 1 b1984_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
b1986_tRNA_16_MODIF_1	modification of position 16 nt (D) in asnU by Dus_gen	1 Dus_gen + 1 b1986_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b1986_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_16_MODIF_2	modification of position 16 nt (D) in asnU by Dus_gen	1 b1986_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1986_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_20_MODIF_1	modification of position 20 nt (D) in asnU by Dus_gen	1 Dus_gen + 1 b1986_tRNA_1 + 1 h + 1 nadph <==> 1 b1986_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_20_MODIF_2	modification of position 20 nt (D) in asnU by Dus_gen	1 b1986_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1986_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_34_MODIF_1	modification of position 34 nt (Q) in asnU by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 EoR_tRNA_pos34_Q + 1 QueA_mono + 1 Tgt_hexa + 1 adocbl + 1 amet + 1 b1986_tRNA_2 + 1 h + 1 nadh + 1 pre_Q1 <==> 1 b1986_tRNA_2_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_34_MODIF_2	modification of position 34 nt (Q) in asnU by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 b1986_tRNA_2_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx > 1 EoR_tRNA_pos34_Q_inact + 1 QueA_mono_inact + 1 Tgt_hexa_inact + 1 ade + 1 adocbl + 1 b1986_tRNA_3 + 1 gua + 2 h 1 h2o + 1 met-L + 1 nad	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in asnU by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b1986_tRNA_3 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b1986_tRNA_3_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in asnU by Up_tRNA_pos_37_t6A	1 b1986_tRNA_3_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b1986_tRNA_4 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_39_MODIF_1	modification of position 39 nt (Y) in asnU by TruA_dim	1 TruA_dim + 1 b1986_tRNA_4 <==> 1 b1986_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_39_MODIF_2	modification of position 39 nt (Y) in asnU by TruA_dim	1 b1986_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b1986_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in asnU by YggH_mono	1 YggH_mono + 1 amet + 1 b1986_tRNA_5 <==> 1 b1986_tRNA_5_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in asnU by YggH_mono	1 b1986_tRNA_5_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b1986_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41

b1986_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in asnU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b1986_tRNA_6 <==> 1 b1986_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in asnU by TrmA_mono	1 b1986_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b1986_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_55_MODIF_1	modification of position 55 nt (Y) in asnU by TruB_mono	1 TruB_mono + 1 b1986_tRNA_7 <==> 1 b1986_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_55_MODIF_2	modification of position 55 nt (Y) in asnU by TruB_mono	1 b1986_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b1986_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in asnU by Thil_mono	1 IscS_dim_S-SH + 1 Thil_mono + 1 atp + 1 b1986_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b1986_tRNA_8_Thil_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in asnU by Thil_mono	1 b1986_tRNA_8_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 asnU_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1986_tRNA_Mg_BIND	Binding of two Mg2 to b1986_tRNA	1 b1986_RNA + 2 mg2 <==> 1 b1986_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_16_MODIF_1	modification of position 16 nt (D) in asnV by Dus_gen	1 Dus_gen + 1 b1989_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b1989_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_16_MODIF_2	modification of position 16 nt (D) in asnV by Dus_gen	1 b1989_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1989_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_20_MODIF_1	modification of position 20 nt (D) in asnV by Dus_gen	1 Dus_gen + 1 b1989_tRNA_1 + 1 h + 1 nadph <==> 1 b1989_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_20_MODIF_2	modification of position 20 nt (D) in asnV by Dus_gen	1 b1989_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b1989_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_34_MODIF_1	modification of position 34 nt (Q) in asnV by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 EoR_tRNA_pos34_Q + 1 QueA_mono + 1 Tgt_hexa + 1 adocbl + 1 amet + 1 b1989_tRNA_2 + 1 h + 1 nadh + 1 pre_Q1 <==> 1 b1989_tRNA_2_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_34_MODIF_2	modification of position 34 nt (Q) in asnV by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 b1989_tRNA_2_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx > 1 EoR_tRNA_pos34_Q_inact + 1 QueA_mono_inact + 1 Tgt_hexa_inact + 1 ade + 1 adocbl + 1 b1989_tRNA_3 + 1 gua + 2 h 1 h2o + 1 met-L + 1 nad	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in asnV by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b1989_tRNA_3 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b1989_tRNA_3_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in asnV by Up_tRNA_pos_37_t6A	1 b1989_tRNA_3_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b1989_tRNA_4 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_39_MODIF_1	modification of position 39 nt (Y) in asnV by TruA_dim	1 TruA_dim + 1 b1989_tRNA_4 <==> 1 b1989_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_39_MODIF_2	modification of position 39 nt (Y) in asnV by TruA_dim	1 b1989_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b1989_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in asnV by YggH_mono	1 YggH_mono + 1 amet + 1 b1989_tRNA_5 <==> 1 b1989_tRNA_5_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in asnV by YggH_mono	1 b1989_tRNA_5_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b1989_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in asnV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b1989_tRNA_6 <==> 1 b1989_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in asnV by TrmA_mono	1 b1989_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b1989_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_55_MODIF_1	modification of position 55 nt (Y) in asnV by TruB_mono	1 TruB_mono + 1 b1989_tRNA_7 <==> 1 b1989_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_55_MODIF_2	modification of position 55 nt (Y) in asnV by TruB_mono	1 b1989_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b1989_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in asnV by Thil_mono	1 IscS_dim_S-SH + 1 Thil_mono + 1 atp + 1 b1989_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b1989_tRNA_8_Thil_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in asnV by Thil_mono	1 b1989_tRNA_8_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 asnV_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b1989_tRNA_Mg_BIND	Binding of two Mg2 to b1989_tRNA	1 b1989_RNA + 2 mg2 <==> 1 b1989_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
b2114_fold_KJE_1	b2114_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b2114_m_Zn <==> 1 b2114_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.42E+03	2.42E+03	0	4.15E+03	4151.924	0	1.11E+02	111.267
b2114_fold_KJE_2	b2114_m folding: KJE mediated	1 GrpE_dim + 1 b2114_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 MetG_DnaK_GrpE_complex + 1 adp + 1 h + 1 p	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.42E+03	2.42E+03	0	4.15E+03	4151.924	0	1.11E+02	111.267
b2114_fold_KJE_3	b2114_m folding: KJE mediated	1 MetG_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 MetG_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.42E+03	2.42E+03	0	4.15E+03	4151.924	0	1.11E+02	111.267
b2114_fold_spon	b2114_m folding: spontanous	1 b2114_m_Zn --> 1 MetG_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.42E+03	2.42E+03	0	4.15E+03	4151.924	0	1.11E+02	111.267
b2114_ion_BIND	Binding of ions to b2114	1 b2114_m + 1 zn2 <==> 1 b2114_m_Zn	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	2.42E+03	2.42E+03	0	4.15E+03	4151.924	0	1.11E+02	111.267
b2114_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2114_mRNA --> 1 b2114_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.98E+01	5.98E+01	0	1.06E+02	105.5798	0	5.13E-01	0.513
b2114_mRNA_degr1	Degradation of b2114_mRNA I	1 Orn_dim + 508 atp + 1 b2114_mRNA_2 + 1 degradosome + 508 h2o <==> 508 adp + 1 b2114_mRNA_2_degr + 508 h + 508 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.98E+01	5.98E+01	0	1.06E+02	105.5798	0	5.13E-01	0.513
b2114_mRNA_degr2	Degradation of b2114_mRNA II	1 b2114_mRNA_2_degr + 2033 h2o --> 1 Orn_dim_inact + 492 amp + 1 atp + 534 cmp + 1 degradosome_inact + 545 gmp + 2033 h + 462 ump	irreversible	mRNA degradation	0.00E+00	5.13E-01	0	5.98E+01	5.98E+01	0	1.06E+02	105.5798	0	5.13E-01	0.513
b2114_maturation1	Polypeptide b2114 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2114_aa <==> 1 b2114_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.42E+03	2.42E+03	0	4.15E+03	4151.924	0	1.11E+02	111.267
b2114_maturation2	b2114 formation	1 b2114_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2114_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.42E+03	2.42E+03	0	4.15E+03	4151.924	0	1.11E+02	111.267
b2140_fold_GroEL/ES_1	b2140_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b2140_m + 1 transGroES_hepta --> 7 adp + 1 b2140_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.78E+03	2.78E+03	0	4.83E+03	4832.749	0	9.38E+01	93.834
b2140_fold_GroEL/ES_2	b2140_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b2140_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 DusC_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.78E+03	2.78E+03	0	4.83E+03	4832.749	0	9.38E+01	93.834
b2140_fold_GroEL/ES_3	b2140_m folding: GroEL/ES mediated; release of native protein	1 DusC_GroEL.(7)ADP.transGroES --> 1 DusC_mono + 1 GroEL.(7)ADP.transGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.78E+03	2.78E+03	0	4.83E+03	4832.749	0	9.38E+01	93.834
b2140_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2140_mRNA --> 1 b2140_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	1.83E-01	0.183
b2140_mRNA_degr1	Degradation of b2140_mRNA I	1 Orn_dim + 237 atp + 1 b2140_mRNA_2 + 1 degradosome + 237 h2o <==> 237 adp + 1 b2140_mRNA_2_degr + 237 h + 237 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	1.83E-01	0.183
b2140_mRNA_degr2	Degradation of b2140_mRNA II	1 b2140_mRNA_2_degr + 947 h2o --> 1 Orn_dim_inact + 220 amp + 1 atp + 214 cmp + 1 degradosome_inact + 300 gmp + 947 h + 213 ump	irreversible	mRNA degradation	0.00E+00	1.83E-01	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	1.83E-01	0.183
b2140_maturation1	Polypeptide b2140 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2140_aa <==> 1 b2140_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.78E+03	2.78E+03	0	4.83E+03	4832.749	0	9.38E+01	93.834
b2140_maturation2	b2140 formation	1 b2140_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2140_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.78E+03	2.78E+03	0	4.83E+03	4832.749	0	9.38E+01	93.834
b2183_fold_spon	b2183_m folding: spontanous	1 b2183_m --> 1 RsuA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.41E+03	2.41E+03	0	4.18E+03	4183.787	0	9.16E+01	91.598
b2183_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2183_mRNA --> 1 b2183_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.78E+02	1.78E+02	0	3.15E+02	314.9698	0	1.86E-01	0.186
b2183_mRNA_degr1	Degradation of b2183_mRNA I	1 Orn_dim + 174 atp + 1 b2183_mRNA_2 + 1 degradosome + 174 h2o <==> 174 adp + 1 b2183_mRNA_2_degr + 174 h + 174 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.78E+02	1.78E+02	0	3.15E+02	314.9698	0	1.86E-01	0.186

b2183_mRNA_degr2	Degradation of b2183_mRNA II	1 b2183_mRNA_2_degr + 695 h2o --> 1 Orn_dim_inact + 161 amp + 1 atp + 179 cmp + 1 degradosome_inact + 189 gmp + 695 h + 166 ump	irreversible	mRNA degradation	0.00E+00	1.86E-01	0	1.78E+02	1.78E+02	0	3.15E+02	314.9698	0	1.86E-01	0.186
b2183_maturation1	Polypeptide b2183 peptide deformylase complex	1 Def_mono + 1 b2183_aa <==> 1 b2183_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.41E+03	2.41E+03	0	4.18E+03	4183.787	0	9.16E+01	91.598
b2183_maturation2	b2183 formation	1 b2183_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b2183_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.41E+03	2.41E+03	0	4.18E+03	4183.787	0	9.16E+01	91.598
b2185_fold_spon	b2185_m folding: spontanous	1 b2185_m --> 1 RplY_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b2185_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2185_mRNA --> 1 b2185_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	3.50E-01	0.35
b2185_mRNA_degr1	Degradation of b2185_mRNA I	1 Orn_dim + 71 atp + 1 b2185_mRNA_2 + 1 degradosome + 71 h2o <==> 71 adp + 1 b2185_mRNA_2_degr + 71 h + 71 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	3.50E-01	0.35
b2185_mRNA_degr2	Degradation of b2185_mRNA II	1 b2185_mRNA_2_degr + 284 h2o --> 1 Orn_dim_inact + 84 amp + 1 atp + 72 cmp + 1 degradosome_inact + 72 gmp + 284 h + 56 ump	irreversible	mRNA degradation	0.00E+00	3.50E-01	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	3.50E-01	0.35
b2185_maturation1	Polypeptide b2185 peptide deformylase complex	1 Def_mono + 1 b2185_aa <==> 1 b2185_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b2185_maturation2	b2185 formation	1 b2185_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b2185_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b2189_tRNA_20_MODIF_1	modification of position 20 nt (D) in proL by Dus_gen	1 Dus_gen + 1 b2189_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2189_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_20_MODIF_2	modification of position 20 nt (D) in proL by Dus_gen	1 b2189_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2189_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_32_MODIF_1	modification of position 32 nt (Cm) in proL by MeT_tRNA_pos_32_Cm	1 MeT_tRNA_pos_32_Cm + 1 amet + 1 b2189_tRNA_1 <==> 1 b2189_tRNA_1_MeT_tRNA_pos_32_Cm_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_32_MODIF_2	modification of position 32 nt (Cm) in proL by MeT_tRNA_pos_32_Cm	1 b2189_tRNA_1_MeT_tRNA_pos_32_Cm_cplx --> 1 MeT_tRNA_pos_32_Cm_inact + 1 ahcys + 1 b2189_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_37_MODIF_1	modification of position 37 nt (m1G) in proL by TrmD_dim	1 TrmD_dim + 1 amet + 1 b2189_tRNA_2 <==> 1 b2189_tRNA_2_TrmD_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_37_MODIF_2	modification of position 37 nt (m1G) in proL by TrmD_dim	1 b2189_tRNA_2_TrmD_dim_cplx --> 1 TrmD_dim_inact + 1 ahcys + 1 b2189_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_39_MODIF_1	modification of position 39 nt (Y) in proL by TruA_dim	1 TruA_dim + 1 b2189_tRNA_3 <==> 1 b2189_tRNA_3_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_39_MODIF_2	modification of position 39 nt (Y) in proL by TruA_dim	1 b2189_tRNA_3_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b2189_tRNA_4	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in proL by YggH_mono	1 YggH_mono + 1 amet + 1 b2189_tRNA_4 <==> 1 b2189_tRNA_4_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in proL by YggH_mono	1 b2189_tRNA_4_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2189_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in proL by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2189_tRNA_5 <==> 1 b2189_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in proL by TrmA_mono	1 b2189_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2189_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_55_MODIF_1	modification of position 55 nt (Y) in proL by TruB_mono	1 TruB_mono + 1 b2189_tRNA_6 <==> 1 b2189_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_55_MODIF_2	modification of position 55 nt (Y) in proL by TruB_mono	1 b2189_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2189_tRNA_7	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in proL by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b2189_tRNA_7 + 1 mg2 + 1 trdrd <==> 1 b2189_tRNA_7_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in proL by ThiI_mono	1 b2189_tRNA_7_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 proL_tRNA + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2189_tRNA_Mg_BIND	Binding of two Mg2 to b2189_tRNA	1 b2189_RNA + 2 mg2 <==> 1 b2189_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
b2268_fold_spon	b2268_m folding: spontanous	1 b2268_m_Zn --> 1 ElaC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.42E+03	2.42E+03	0	4.20E+03	4201.933	0	9.13E+01	91.307
b2268_ion_BIND	Binding of ions to b2268	1 b2268_m + 1 zn2 <==> 1 b2268_m_Zn	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	2.42E+03	2.42E+03	0	4.20E+03	4201.933	0	9.13E+01	91.307
b2268_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2268_mRNA --> 1 b2268_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.42E+02	241.9725	0	1.71E-01	0.171
b2268_mRNA_degr1	Degradation of b2268_mRNA I	1 Orn_dim + 229 atp + 1 b2268_mRNA_2 + 1 degradosome + 229 h2o <==> 229 adp + 1 b2268_mRNA_2_degr + 229 h + 229 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.37E+02	1.37E+02	0	2.42E+02	241.9725	0	1.71E-01	0.171
b2268_mRNA_degr2	Degradation of b2268_mRNA II	1 b2268_mRNA_2_degr + 917 h2o --> 1 Orn_dim_inact + 226 amp + 1 atp + 233 cmp + 1 degradosome_inact + 233 gmp + 917 h + 225 ump	irreversible	mRNA degradation	0.00E+00	1.71E-01	0	1.37E+02	1.37E+02	0	2.42E+02	241.9725	0	1.71E-01	0.171
b2268_maturation1	Polypeptide b2268 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2268_aa <==> 1 b2268_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.42E+03	2.42E+03	0	4.20E+03	4201.933	0	9.13E+01	91.307
b2268_maturation2	b2268 formation	1 b2268_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2268_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.42E+03	2.42E+03	0	4.20E+03	4201.933	0	9.13E+01	91.307
b2317_fold_spon	b2317_m folding: spontanous	1 b2317_m --> 1 DedA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.98E+02	6.98E+02	0	1.17E+03	1165.915	0	8.80E+01	88.014
b2317_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2317_mRNA --> 1 b2317_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945
b2317_mRNA_degr1	Degradation of b2317_mRNA I	1 Orn_dim + 165 atp + 1 b2317_mRNA_2 + 1 degradosome + 165 h2o <==> 165 adp + 1 b2317_mRNA_2_degr + 165 h + 165 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945
b2317_mRNA_degr2	Degradation of b2317_mRNA II	1 b2317_mRNA_2_degr + 659 h2o --> 1 Orn_dim_inact + 135 amp + 154 cmp + 1 degradosome_inact + 169 gmp + 659 h + 202 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945
b2317_maturation1	Polypeptide b2317 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2317_aa <==> 1 b2317_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.98E+02	6.98E+02	0	1.17E+03	1165.915	0	8.80E+01	88.014
b2317_maturation2	b2317 formation	1 b2317_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2317_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.98E+02	6.98E+02	0	1.17E+03	1165.915	0	8.80E+01	88.014
b2317_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2317_v1_mRNA --> 1 b2317_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.50E+01	3.50E+01	0	6.18E+01	61.81973	0	9.45E-02	0.0945
b2318_fold_spon	b2318_m folding: spontanous	1 b2318_m --> 1 TruA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.62E+02	8.62E+02	0	1.45E+03	1447.194	0	9.98E+01	99.8175
b2318_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2318_mRNA --> 1 b2318_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945
b2318_mRNA_degr1	Degradation of b2318_mRNA I	1 Orn_dim + 203 atp + 1 b2318_mRNA_2 + 1 degradosome + 203 h2o <==> 203 adp + 1 b2318_mRNA_2_degr + 203 h + 203 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945
b2318_mRNA_degr2	Degradation of b2318_mRNA II	1 b2318_mRNA_2_degr + 811 h2o --> 1 Orn_dim_inact + 188 amp + 208 cmp + 1 degradosome_inact + 242 gmp + 811 h + 174 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945
b2318_maturation1	Polypeptide b2318 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2318_aa <==> 1 b2318_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	8.62E+02	8.62E+02	0	1.45E+03	1447.194	0	9.98E+01	99.8175
b2318_maturation2	b2318 formation	1 b2318_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2318_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	8.62E+02	8.62E+02	0	1.45E+03	1447.194	0	9.98E+01	99.8175
b2318_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2318_v1_mRNA --> 1 b2318_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.50E+01	3.50E+01	0	6.18E+01	61.81973	0	9.45E-02	0.0945
b2319_fold_spon	b2319_m folding: spontanous	1 b2319_m --> 1 Usg_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.03E+03	1.03E+03	0	1.77E+03	1771.553	0	6.49E+01	64.8755
b2319_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2319_mRNA --> 1 b2319_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945
b2319_mRNA_degr1	Degradation of b2319_mRNA I	1 Orn_dim + 253 atp + 1 b2319_mRNA_2 + 1 degradosome + 253 h2o <==> 253 adp + 1 b2319_mRNA_2_degr + 253 h + 253 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945

b2319_mRNA_degr2	Degradation of b2319_mRNA II	1 b2319_mRNA_2_degr + 1013 h2o --> 1 Orn_dim_inact + 230 amp + 1 atp + 249 cmp + 1 degradosome_inact + 308 gmp + 1013 h + 226 ump	irreversible	mRNA degradation	0.00E+00	9.45E-02	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945
b2319_maturation1	Polypeptide b2319 peptide deformylase complex	1 Def_mono + 1 b2319_aa <==> 1 b2319_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.03E+03	1.03E+03	0	1.77E+03	1771.553	0	6.49E+01	64.8755
b2319_maturation2	b2319 formation	1 b2319_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b2319_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.03E+03	1.03E+03	0	1.77E+03	1771.553	0	6.49E+01	64.8755
b2319_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2319_v1_mRNA --> 1 b2319_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.50E+01	3.50E+01	0	6.18E+01	61.81973	0	9.45E-02	0.0945
b2320_fold_spon	b2320_m folding: spontanous	1 b2320_m --> 1 PdxB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.46E+02	8.46E+02	0	1.44E+03	1435.934	0	7.80E+01	77.979
b2320_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2320_mRNA --> 1 b2320_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.50E+01	3.50E+01	0	6.18E+01	61.81973	0	9.45E-02	0.0945
b2320_mRNA_degr1	Degradation of b2320_mRNA I	1 Orn_dim + 284 atp + 1 b2320_mRNA_2 + 1 degradosome + 284 h2o <==> 284 adp + 1 b2320_mRNA_2_degr + 284 h + 284 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.50E+01	3.50E+01	0	6.18E+01	61.81973	0	9.45E-02	0.0945
b2320_mRNA_degr2	Degradation of b2320_mRNA II	1 b2320_mRNA_2_degr + 1136 h2o --> 1 Orn_dim_inact + 251 amp + 268 cmp + 1 degradosome_inact + 334 gmp + 1 gtp + 1136 h + 283 ump	irreversible	mRNA degradation	0.00E+00	1.35E-01	0	3.50E+01	3.50E+01	0	6.18E+01	61.81973	0	9.45E-02	0.0945
b2320_maturation1	Polypeptide b2320 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2320_aa <==> 1 b2320_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	8.46E+02	8.46E+02	0	1.44E+03	1435.934	0	7.80E+01	77.979
b2320_maturation2	b2320 formation	1 b2320_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2320_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	8.46E+02	8.46E+02	0	1.44E+03	1435.934	0	7.80E+01	77.979
b2324_fold_spon	b2324_m folding: spontanous	1 b2324_m --> 1 TrmC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.66E+03	2.66E+03	0	3.29E+03	3290.823	0	7.01E+01	70.083
b2324_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2324_mRNA --> 1 b2324_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.17E+02	117.4575	0	1.17E-01	0.117
b2324_mRNA_degr1	Degradation of b2324_mRNA I	1 Orn_dim + 501 atp + 1 b2324_mRNA_2 + 1 degradosome + 501 h2o <==> 501 adp + 1 b2324_mRNA_2_degr + 501 h + 501 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.65E+01	6.65E+01	0	1.17E+02	117.4575	0	1.17E-01	0.117
b2324_mRNA_degr2	Degradation of b2324_mRNA II	1 b2324_mRNA_2_degr + 2006 h2o --> 1 Orn_dim_inact + 460 amp + 480 cmp + 1 degradosome_inact + 580 gmp + 1 gtp + 2006 h + 486 ump	irreversible	mRNA degradation	0.00E+00	1.17E-01	0	6.65E+01	6.65E+01	0	1.17E+02	117.4575	0	1.17E-01	0.117
b2324_maturation1	Polypeptide b2324 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2324_aa <==> 1 b2324_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.66E+03	2.66E+03	0	3.29E+03	3290.823	0	7.01E+01	70.083
b2324_maturation2	b2324 formation	1 b2324_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2324_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.66E+03	2.66E+03	0	3.29E+03	3290.823	0	7.01E+01	70.083
b2325_fold_spon	b2325_m folding: spontanous	1 b2325_m --> 1 YfcL_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.21E+02	2.21E+02	0	3.24E+02	324.4924	0	8.64E+01	86.438
b2325_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2325_mRNA --> 1 b2325_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2325_mRNA_degr1	Degradation of b2325_mRNA I	1 Orn_dim + 69 atp + 1 b2325_mRNA_2 + 1 degradosome + 69 h2o <==> 69 adp + 1 b2325_mRNA_2_degr + 69 h + 69 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2325_mRNA_degr2	Degradation of b2325_mRNA II	1 b2325_mRNA_2_degr + 278 h2o --> 1 Orn_dim_inact + 65 amp + 62 cmp + 1 degradosome_inact + 85 gmp + 278 h + 67 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2325_maturation1	Polypeptide b2325 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2325_aa <==> 1 b2325_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.21E+02	2.21E+02	0	3.24E+02	324.4924	0	8.64E+01	86.438
b2325_maturation2	b2325 formation	1 b2325_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2325_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.21E+02	2.21E+02	0	3.24E+02	324.4924	0	8.64E+01	86.438
b2326_fold_spon	b2326_m folding: spontanous	1 b2326_m --> 1 YfcM_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.27E+02	3.27E+02	0	5.33E+02	533.3847	0	5.73E+01	57.276
b2326_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2326_mRNA --> 1 b2326_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2326_mRNA_degr1	Degradation of b2326_mRNA I	1 Orn_dim + 137 atp + 1 b2326_mRNA_2 + 1 degradosome + 137 h2o <==> 137 adp + 1 b2326_mRNA_2_degr + 137 h + 137 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2326_mRNA_degr2	Degradation of b2326_mRNA II	1 b2326_mRNA_2_degr + 547 h2o --> 1 Orn_dim_inact + 133 amp + 127 cmp + 1 degradosome_inact + 149 gmp + 547 h + 139 ump	irreversible	mRNA degradation	0.00E+00	1.04E-01	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2326_maturation1	Polypeptide b2326 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2326_aa <==> 1 b2326_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.27E+02	3.27E+02	0	5.33E+02	533.3847	0	5.73E+01	57.276
b2326_maturation2	b2326 formation	1 b2326_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2326_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.27E+02	3.27E+02	0	5.33E+02	533.3847	0	5.73E+01	57.276
b2327_fold_spon	b2327_m folding: spontanous	1 b2327_m --> 1 YfcA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.94E+02	4.94E+02	0	8.04E+02	803.8271	0	8.97E+01	89.664
b2327_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2327_mRNA --> 1 b2327_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2327_mRNA_degr1	Degradation of b2327_mRNA I	1 Orn_dim + 202 atp + 1 b2327_mRNA_2 + 1 degradosome + 202 h2o <==> 202 adp + 1 b2327_mRNA_2_degr + 202 h + 202 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2327_mRNA_degr2	Degradation of b2327_mRNA II	1 b2327_mRNA_2_degr + 808 h2o --> 1 Orn_dim_inact + 156 amp + 202 cmp + 1 degradosome_inact + 225 gmp + 808 h + 226 ump	irreversible	mRNA degradation	0.00E+00	8.76E-02	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2327_maturation1	Polypeptide b2327 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2327_aa <==> 1 b2327_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.94E+02	4.94E+02	0	8.04E+02	803.8271	0	8.97E+01	89.664
b2327_maturation2	b2327 formation	1 b2327_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2327_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.94E+02	4.94E+02	0	8.04E+02	803.8271	0	8.97E+01	89.664
b2328_fold_spon	b2328_m folding: spontanous	1 b2328_m --> 1 MepA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.03E+02	5.03E+02	0	8.34E+02	833.8956	0	7.21E+01	72.1216
b2328_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2328_mRNA --> 1 b2328_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2328_mRNA_degr1	Degradation of b2328_mRNA I	1 Orn_dim + 206 atp + 1 b2328_mRNA_2 + 1 degradosome + 206 h2o <==> 206 adp + 1 b2328_mRNA_2_degr + 206 h + 206 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2328_mRNA_degr2	Degradation of b2328_mRNA II	1 b2328_mRNA_2_degr + 824 h2o --> 1 Orn_dim_inact + 186 amp + 231 cmp + 1 degradosome_inact + 226 gmp + 824 h + 182 ump	irreversible	mRNA degradation	0.00E+00	1.74E-01	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2328_maturation1	Polypeptide b2328 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2328_aa <==> 1 b2328_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.03E+02	5.03E+02	0	8.34E+02	833.8956	0	7.21E+01	72.1216
b2328_maturation2	b2328 formation	1 b2328_def_map_cplx + 20 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 6 ala-L + 1 asn-L + 1 b2328_m + 1 for + 1 ile-L + leu-L + 1 lys-L + 1 met-L + 3 ser-L + 1 thr-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.03E+02	5.03E+02	0	8.34E+02	833.8956	0	7.21E+01	72.1216
b2329_fold_spon	b2329_m folding: spontanous	1 b2329_m --> 1 AroC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.71E+02	6.71E+02	0	1.10E+03	1104.778	0	1.05E+02	104.9496
b2329_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2329_mRNA --> 1 b2329_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2329_mRNA_degr1	Degradation of b2329_mRNA I	1 Orn_dim + 271 atp + 1 b2329_mRNA_2 + 1 degradosome + 271 h2o <==> 271 adp + 1 b2329_mRNA_2_degr + 271 h + 271 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2329_mRNA_degr2	Degradation of b2329_mRNA II	1 b2329_mRNA_2_degr + 1085 h2o --> 1 Orn_dim_inact + 247 amp + 305 cmp + 1 degradosome_inact + 311 gmp + 1085 h + 223 ump	irreversible	mRNA degradation	0.00E+00	2.57E-01	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2329_maturation1	Polypeptide b2329 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2329_aa <==> 1 b2329_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.71E+02	6.71E+02	0	1.10E+03	1104.778	0	1.05E+02	104.9496
b2329_maturation2	b2329 formation	1 b2329_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2329_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.71E+02	6.71E+02	0	1.10E+03	1104.778	0	1.05E+02	104.9496
b2330_fold_spon	b2330_m folding: spontanous	1 b2330_m --> 1 PrmB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.78E+02	5.78E+02	0	9.51E+02	950.5525	0	9.36E+01	93.5568

b2330_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2330_mRNA --> 1 b2330_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2330_mRNA_degr1	Degradation of b2330_mRNA I	1 Orn_dim + 233 atp + 1 b2330_mRNA_2 + 1 degradosome + 233 h2o <==> 233 adp + 1 b2330_mRNA_2_degr + 233 h + 233 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2330_mRNA_degr2	Degradation of b2330_mRNA II	1 b2330_mRNA_2_degr + 932 h2o --> 1 Orn_dim_inact + 218 amp + 239 cmp + 1 degradosome_inact + 250 gmp + 1 gtp + 932 h + 225 ump	irreversible	mRNA degradation	0.00E+00	1.77E-01	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
b2330_maturation1	Polypeptide b2330 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2330_aa <==> 1 b2330_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.78E+02	5.78E+02	0	9.51E+02	950.5525	0	9.36E+01	93.5568
b2330_maturation2	b2330 formation	1 b2330_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2330_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.78E+02	5.78E+02	0	9.51E+02	950.5525	0	9.36E+01	93.5568
b2348_tRNA_20A_MODIF_1	modification of position 20A nt (D) in argW by Dus_gen	1 Dus_gen + 1 b2348_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2348_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
b2348_tRNA_20A_MODIF_2	modification of position 20A nt (D) in argW by Dus_gen	1 b2348_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2348_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
b2348_tRNA_32_MODIF_1	modification of position 32 nt (s2C) in argW by YdaO_mono	1 IscS_dim_S-SH + 1 YdaO_mono + 1 atp + 1 b2348_tRNA_1 + 1 mg2 + 1 trdrd <==> 1 b2348_tRNA_1_YdaO_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
b2348_tRNA_32_MODIF_2	modification of position 32 nt (s2C) in argW by YdaO_mono	1 b2348_tRNA_1_YdaO_mono_cplx --> 1 IscS_dim_S-H + 1 YdaO_mono_inact + 1 amp + 1 b2348_tRNA_2 + 1 h + 1 mg2 + 1 pp + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
b2348_tRNA_34_MODIF_1	modification of position 34 nt (mnm5U) in argW by TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 TrmC_mono + 1 TrmE_dim + 1 amet + 1 b2348_tRNA_2 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o <==> 1 b2348_tRNA_2_TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
b2348_tRNA_34_MODIF_2	modification of position 34 nt (mnm5U) in argW by TrmE_dim-GidA_mono-TrmC_mono	1 b2348_tRNA_2_TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 ahcys + 1 b2348_tRNA_3 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 3 h + 1 pi + 1 thf	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
b2348_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in argW by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b2348_tRNA_3 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b2348_tRNA_3_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
b2348_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in argW by Up_tRNA_pos_37_t6A	1 b2348_tRNA_3_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b2348_tRNA_4 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
b2348_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in argW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2348_tRNA_4 <==> 1 b2348_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
b2348_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in argW by TrmA_mono	1 b2348_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2348_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
b2348_tRNA_55_MODIF_1	modification of position 55 nt (Y) in argW by TruB_mono	1 TruB_mono + 1 b2348_tRNA_5 <==> 1 b2348_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
b2348_tRNA_55_MODIF_2	modification of position 55 nt (Y) in argW by TruB_mono	1 b2348_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 argW_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
b2348_tRNA_Mg_BIND	Binding of two Mg2 to b2348_tRNA	1 b2348_RNA + 2 mg2 <==> 1 b2348_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
b2396_tRNA_17_MODIF_1	modification of position 17 nt (D) in alaX by Dus_gen	1 Dus_gen + 1 b2396_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2396_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2396_tRNA_17_MODIF_2	modification of position 17 nt (D) in alaX by Dus_gen	1 b2396_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2396_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2396_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in alaX by YggH_mono	1 YggH_mono + 1 amet + 1 b2396_tRNA_1 <==> 1 b2396_tRNA_1_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2396_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in alaX by YggH_mono	1 b2396_tRNA_1_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2396_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2396_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in alaX by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2396_tRNA_2 <==> 1 b2396_tRNA_2_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2396_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in alaX by TrmA_mono	1 b2396_tRNA_2_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2396_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2396_tRNA_55_MODIF_1	modification of position 55 nt (Y) in alaX by TruB_mono	1 TruB_mono + 1 b2396_tRNA_3 <==> 1 b2396_tRNA_3_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2396_tRNA_55_MODIF_2	modification of position 55 nt (Y) in alaX by TruB_mono	1 b2396_tRNA_3_TruB_mono_cplx --> 1 TruB_mono_inact + 1 alaX_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2396_tRNA_Mg_BIND	Binding of two Mg2 to b2396_tRNA	1 b2396_RNA + 2 mg2 <==> 1 b2396_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2397_tRNA_17_MODIF_1	modification of position 17 nt (D) in alaW by Dus_gen	1 Dus_gen + 1 b2397_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2397_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2397_tRNA_17_MODIF_2	modification of position 17 nt (D) in alaW by Dus_gen	1 b2397_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2397_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2397_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in alaW by YggH_mono	1 YggH_mono + 1 amet + 1 b2397_tRNA_1 <==> 1 b2397_tRNA_1_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2397_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in alaW by YggH_mono	1 b2397_tRNA_1_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2397_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2397_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in alaW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2397_tRNA_2 <==> 1 b2397_tRNA_2_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2397_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in alaW by TrmA_mono	1 b2397_tRNA_2_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2397_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2397_tRNA_55_MODIF_1	modification of position 55 nt (Y) in alaW by TruB_mono	1 TruB_mono + 1 b2397_tRNA_3 <==> 1 b2397_tRNA_3_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2397_tRNA_55_MODIF_2	modification of position 55 nt (Y) in alaW by TruB_mono	1 b2397_tRNA_3_TruB_mono_cplx --> 1 TruB_mono_inact + 1 alaW_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2397_tRNA_Mg_BIND	Binding of two Mg2 to b2397_tRNA	1 b2397_RNA + 2 mg2 <==> 1 b2397_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
b2400_fold_spon	b2400_m folding: spontanous	1 b2400_m_Zn --> 1 GltX_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.61E+03	2.61E+03	0	4.01E+03	4005.054	0	1.87E+02	186.759
b2400_ion_BIND	Binding of ions to b2400	1 b2400_m + 1 zn2 <==> 1 b2400_m_Zn	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	2.61E+03	2.61E+03	0	4.01E+03	4005.054	0	1.87E+02	186.759
b2400_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2400_mRNA --> 1 b2400_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
b2400_mRNA_degr1	Degradation of b2400_mRNA I	1 Orn_dim + 354 atp + 1 b2400_mRNA_2 + 1 degradosome + 354 h2o <==> 354 adp + 1 b2400_mRNA_2_degr + 354 h + 354 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
b2400_mRNA_degr2	Degradation of b2400_mRNA II	1 b2400_mRNA_2_degr + 1415 h2o --> 1 Orn_dim_inact + 348 amp + 1 atp + 354 cmp + 1 degradosome_inact + 390 gmp + 1415 h + 323 ump	irreversible	mRNA degradation	0.00E+00	5.77E-01	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
b2400_maturation1	Polypeptide b2400 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2400_aa <==> 1 b2400_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.61E+03	2.61E+03	0	4.01E+03	4005.054	0	1.87E+02	186.759
b2400_maturation2	b2400 formation	1 b2400_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2400_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.61E+03	2.61E+03	0	4.01E+03	4005.054	0	1.87E+02	186.759
b2400_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2400_v1_mRNA --> 1 b2400_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
b2400_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2400_v2_mRNA --> 1 b2400_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
b2401_tRNA_17_MODIF_1	modification of position 17 nt (D) in valU by Dus_gen	1 Dus_gen + 1 b2401_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2401_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2401_tRNA_17_MODIF_2	modification of position 17 nt (D) in valU by Dus_gen	1 b2401_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2401_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2401_tRNA_34_MODIF_1	modification of position 34 nt (cmo5U) in valU by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 HyL_tRNA_pos_34_ho5U + 1 YecO_mono + 1 YecP_mono + 1 amet + 1 b2401_tRNA_1 + 2 chor <==> 1 b2401_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2401_tRNA_34_MODIF_2	modification of position 34 nt (cmo5U) in valU by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 b2401_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx --> 1 C10H8O5 + 1 C9H9O4 + 1 HyL_tRNA_pos_34_ho5U_inact + 1 YecO_mono_inact + 1 YecP_mono_inact + 1 ahcys + 1 b2401_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81

b2401_tRNA_37_MODIF_1	modification of position 37 nt (m6A) in valU by MeT_tRNA_pos_37_m6A	1 MeT_tRNA_pos_37_m6A + 1 amet + 1 b2401_tRNA_2 <==> 1 b2401_tRNA_2_MeT_tRNA_pos_37_m6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2401_tRNA_37_MODIF_2	modification of position 37 nt (m6A) in valU by MeT_tRNA_pos_37_m6A	1 b2401_tRNA_2_MeT_tRNA_pos_37_m6A_cplx --> 1 MeT_tRNA_pos_37_m6A_inact + 1 ahcys + 1 b2401_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2401_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in valU by YggH_mono	1 YggH_mono + 1 amet + 1 b2401_tRNA_3 <==> 1 b2401_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2401_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in valU by YggH_mono	1 b2401_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2401_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2401_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in valU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2401_tRNA_4 <==> 1 b2401_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2401_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in valU by TrmA_mono	1 b2401_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2401_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2401_tRNA_55_MODIF_1	modification of position 55 nt (Y) in valU by TruB_mono	1 TruB_mono + 1 b2401_tRNA_5 <==> 1 b2401_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2401_tRNA_55_MODIF_2	modification of position 55 nt (Y) in valU by TruB_mono	1 b2401_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2401_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2401_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in valU by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b2401_tRNA_6 + 1 mg2 + 1 trdrd <==> 1 b2401_tRNA_6_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2401_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in valU by ThiI_mono	1 b2401_tRNA_6_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 trdox + 1 valU_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2401_tRNA_Mg_BIND	Binding of two Mg2 to b2401_tRNA	1 b2401_RNA + 2 mg2 <==> 1 b2401_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_17_MODIF_1	modification of position 17 nt (D) in valX by Dus_gen	1 Dus_gen + 1 b2402_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2402_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_17_MODIF_2	modification of position 17 nt (D) in valX by Dus_gen	1 b2402_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2402_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_34_MODIF_1	modification of position 34 nt (cmo5U) in valX by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 HyL_tRNA_pos_34_ho5U + 1 YecO_mono + 1 YecP_mono + 1 amet + 1 b2402_tRNA_1 + 2 chor <==> 1 b2402_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_34_MODIF_2	modification of position 34 nt (cmo5U) in valX by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 b2402_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx --> 1 C10H8O5 + 1 C9H9O4 + 1 HyL_tRNA_pos_34_ho5U_inact + 1 YecO_mono_inact + 1 YecP_mono_inact + 1 ahcys + 1 b2402_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_37_MODIF_1	modification of position 37 nt (m6A) in valX by MeT_tRNA_pos_37_m6A	1 MeT_tRNA_pos_37_m6A + 1 amet + 1 b2402_tRNA_2 <==> 1 b2402_tRNA_2_MeT_tRNA_pos_37_m6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_37_MODIF_2	modification of position 37 nt (m6A) in valX by MeT_tRNA_pos_37_m6A	1 b2402_tRNA_2_MeT_tRNA_pos_37_m6A_cplx --> 1 MeT_tRNA_pos_37_m6A_inact + 1 ahcys + 1 b2402_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in valX by YggH_mono	1 YggH_mono + 1 amet + 1 b2402_tRNA_3 <==> 1 b2402_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in valX by YggH_mono	1 b2402_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2402_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in valX by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2402_tRNA_4 <==> 1 b2402_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in valX by TrmA_mono	1 b2402_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2402_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_55_MODIF_1	modification of position 55 nt (Y) in valX by TruB_mono	1 TruB_mono + 1 b2402_tRNA_5 <==> 1 b2402_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_55_MODIF_2	modification of position 55 nt (Y) in valX by TruB_mono	1 b2402_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2402_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in valX by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b2402_tRNA_6 + 1 mg2 + 1 trdrd <==> 1 b2402_tRNA_6_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in valX by ThiI_mono	1 b2402_tRNA_6_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 trdox + 1 valX_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2402_tRNA_Mg_BIND	Binding of two Mg2 to b2402_tRNA	1 b2402_RNA + 2 mg2 <==> 1 b2402_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_17_MODIF_1	modification of position 17 nt (D) in valY by Dus_gen	1 Dus_gen + 1 b2403_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2403_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_17_MODIF_2	modification of position 17 nt (D) in valY by Dus_gen	1 b2403_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2403_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_34_MODIF_1	modification of position 34 nt (cmo5U) in valY by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 HyL_tRNA_pos_34_ho5U + 1 YecO_mono + 1 YecP_mono + 1 amet + 1 b2403_tRNA_1 + 2 chor <==> 1 b2403_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_34_MODIF_2	modification of position 34 nt (cmo5U) in valY by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 b2403_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx --> 1 C10H8O5 + 1 C9H9O4 + 1 HyL_tRNA_pos_34_ho5U_inact + 1 YecO_mono_inact + 1 YecP_mono_inact + 1 ahcys + 1 b2403_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_37_MODIF_1	modification of position 37 nt (m6A) in valY by MeT_tRNA_pos_37_m6A	1 MeT_tRNA_pos_37_m6A + 1 amet + 1 b2403_tRNA_2 <==> 1 b2403_tRNA_2_MeT_tRNA_pos_37_m6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_37_MODIF_2	modification of position 37 nt (m6A) in valY by MeT_tRNA_pos_37_m6A	1 b2403_tRNA_2_MeT_tRNA_pos_37_m6A_cplx --> 1 MeT_tRNA_pos_37_m6A_inact + 1 ahcys + 1 b2403_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in valY by YggH_mono	1 YggH_mono + 1 amet + 1 b2403_tRNA_3 <==> 1 b2403_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in valY by YggH_mono	1 b2403_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2403_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in valY by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2403_tRNA_4 <==> 1 b2403_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in valY by TrmA_mono	1 b2403_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2403_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_55_MODIF_1	modification of position 55 nt (Y) in valY by TruB_mono	1 TruB_mono + 1 b2403_tRNA_5 <==> 1 b2403_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_55_MODIF_2	modification of position 55 nt (Y) in valY by TruB_mono	1 b2403_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2403_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in valY by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b2403_tRNA_6 + 1 mg2 + 1 trdrd <==> 1 b2403_tRNA_6_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in valY by ThiI_mono	1 b2403_tRNA_6_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 trdox + 1 valY_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2403_tRNA_Mg_BIND	Binding of two Mg2 to b2403_tRNA	1 b2403_RNA + 2 mg2 <==> 1 b2403_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_16_MODIF_1	modification of position 16 nt (D) in lysV by Dus_gen	1 Dus_gen + 1 b2404_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2404_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_16_MODIF_2	modification of position 16 nt (D) in lysV by Dus_gen	1 b2404_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2404_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_17_MODIF_1	modification of position 17 nt (D) in lysV by Dus_gen	1 Dus_gen + 1 b2404_tRNA_1 + 1 h + 1 nadph <==> 1 b2404_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_17_MODIF_2	modification of position 17 nt (D) in lysV by Dus_gen	1 b2404_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2404_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_20_MODIF_1	modification of position 20 nt (D) in lysV by Dus_gen	1 Dus_gen + 1 b2404_tRNA_2 + 1 h + 1 nadph <==> 1 b2404_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_20_MODIF_2	modification of position 20 nt (D) in lysV by Dus_gen	1 b2404_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2404_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81

b2404_tRNA_34_MODIF_1	modification of position 34 nt (mnm5s2U) in lysV by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 IscS_dim_S-SH + 1 TrmC_mono + 1 TrmE_dim + 1 TrmU_mono + 1 YccK_mono + 1 YheLMN_cplx + 1 YhhP_mono + 1 amet + 1 atp + 1 b2404_tRNA_3 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o + 1 mg2 + 1 trdrd <==> 1 b2404_tRNA_3_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mon TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_34_MODIF_2	modification of position 34 nt (mnm5s2U) in lysV by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 b2404_tRNA_3_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 IscS_dim_S-H + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 TrmU_mono_inact + 1 YccK_mono_inact + 1 YheLMN_cplx_inact + 1 YhhP_mono_inact + 1 ahcys + 1 amp + 1 b2404_tRNA_4 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 4 h + 1 mg2 + 1 pi + 1 ppi + 1 thf + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_34_MODIF_3	replacement of sulfur with selenium: b2404_tRNA_4	1 YbbB_dim + 1 b2404_tRNA_4 + 1 h2o + 1 selnp <==> 1 b2404_tRNA_4_YbbB_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_34_MODIF_4	replacement of sulfur with selenium: b2404_tRNA_4	1 b2404_tRNA_4_YbbB_dim_cplx --> 1 YbbB_dim_inact + 1 b2404_tRNA_4_Se + 1 h + 1 h2s + 1 pi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in lysV by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b2404_tRNA_4 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b2404_tRNA_4_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_37_MODIF_1_Se	modification of position 37 nt (t6A) in lysV by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b2404_tRNA_4_Se + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b2404_tRNA_4_Se_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in lysV by Up_tRNA_pos_37_t6A	1 b2404_tRNA_4_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b2404_tRNA_5 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_37_MODIF_2_Se	modification of position 37 nt (t6A) in lysV by Up_tRNA_pos_37_t6A	1 b2404_tRNA_4_Se_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b2404_tRNA_5_Se + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_39_MODIF_1	modification of position 39 nt (Y) in lysV by TruA_dim	1 TruA_dim + 1 b2404_tRNA_5 <==> 1 b2404_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_39_MODIF_1_Se	modification of position 39 nt (Y) in lysV by TruA_dim	1 TruA_dim + 1 b2404_tRNA_5_Se <==> 1 b2404_tRNA_5_Se_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_39_MODIF_2	modification of position 39 nt (Y) in lysV by TruA_dim	1 b2404_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b2404_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_39_MODIF_2_Se	modification of position 39 nt (Y) in lysV by TruA_dim	1 b2404_tRNA_5_Se_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b2404_tRNA_6_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in lysV by YggH_mono	1 YggH_mono + 1 amet + 1 b2404_tRNA_6 <==> 1 b2404_tRNA_6_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_46_MODIF_1_Se	modification of position 46 nt (m7G) in lysV by YggH_mono	1 YggH_mono + 1 amet + 1 b2404_tRNA_6_Se <==> 1 b2404_tRNA_6_Se_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in lysV by YggH_mono	1 b2404_tRNA_6_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2404_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_46_MODIF_2_Se	modification of position 46 nt (m7G) in lysV by YggH_mono	1 b2404_tRNA_6_Se_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2404_tRNA_7_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in lysV by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b2404_tRNA_7 <==> 1 b2404_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_47_MODIF_1_Se	modification of position 47 nt (acp3U) in lysV by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b2404_tRNA_7_Se <==> 1 b2404_tRNA_7_Se_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in lysV by AcpT_tRNA_pos_47_acp3U	1 b2404_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b2404_tRNA_8 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_47_MODIF_2_Se	modification of position 47 nt (acp3U) in lysV by AcpT_tRNA_pos_47_acp3U	1 b2404_tRNA_7_Se_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b2404_tRNA_8_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in lysV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2404_tRNA_8 <==> 1 b2404_tRNA_8_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_54_MODIF_1_Se	modification of position 54 nt (m5U) in lysV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2404_tRNA_8_Se <==> 1 b2404_tRNA_8_Se_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in lysV by TrmA_mono	1 b2404_tRNA_8_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2404_tRNA_9 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_54_MODIF_2_Se	modification of position 54 nt (m5U) in lysV by TrmA_mono	1 b2404_tRNA_8_Se_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2404_tRNA_9_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_55_MODIF_1	modification of position 55 nt (Y) in lysV by TruB_mono	1 TruB_mono + 1 b2404_tRNA_9 <==> 1 b2404_tRNA_9_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_55_MODIF_1_Se	modification of position 55 nt (Y) in lysV by TruB_mono	1 TruB_mono + 1 b2404_tRNA_9_Se <==> 1 b2404_tRNA_9_Se_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_55_MODIF_2	modification of position 55 nt (Y) in lysV by TruB_mono	1 b2404_tRNA_9_TruB_mono_cplx --> 1 TruB_mono_inact + 1 lysV_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_55_MODIF_2_Se	modification of position 55 nt (Y) in lysV by TruB_mono	1 b2404_tRNA_9_Se_TruB_mono_cplx --> 1 TruB_mono_inact + 1 lysV_tRNA_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2404_tRNA_Mg_BIND	Binding of two Mg2 to b2404_tRNA	1 b2404_RNA + 2 mg2 <==> 1 b2404_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
b2514_fold_spon	b2514_m folding: spontanous	1 b2514_m_Mg --> 1 HisS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.56E+03	2.56E+03	0	4.43E+03	4433.916	0	1.25E+02	125.256
b2514_ion_BIND	Binding of ions to b2514	1 b2514_m + 2 mg2 <==> 1 b2514_m_Mg	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	2.56E+03	2.56E+03	0	4.43E+03	4433.916	0	1.25E+02	125.256
b2514_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2514_mRNA --> 1 b2514_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	5.99E-01	0.599
b2514_mRNA_degr1	Degradation of b2514_mRNA I	1 Orn_dim + 318 atp + 1 b2514_mRNA_2 + 1 degradosome + 318 h2o <==> 318 adp + 1 b2514_mRNA_2_degr + 318 h + 318 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	5.99E-01	0.599
b2514_mRNA_degr2	Degradation of b2514_mRNA II	1 b2514_mRNA_2_degr + 1274 h2o --> 1 Orn_dim_inact + 282 amp + 313 cmp + 1 degradosome_inact + 384 gmp + 1 gtp + 1274 h + 295 ump	irreversible	mRNA degradation	0.00E+00	5.99E-01	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	5.99E-01	0.599
b2514_maturation1	Polypeptide b2514 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2514_aa <==> 1 b2514_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.56E+03	2.56E+03	0	4.43E+03	4433.916	0	1.25E+02	125.256
b2514_maturation2	b2514 formation	1 b2514_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2514_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.56E+03	2.56E+03	0	4.43E+03	4433.916	0	1.25E+02	125.256
b2528_fold_spon	b2528_m folding: spontanous	1 b2528_m --> 1 IscA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.97E+02	3.97E+02	0	6.29E+02	629.4493	0	9.52E+01	95.208
b2528_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2528_mRNA --> 1 b2528_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
b2528_mRNA_degr1	Degradation of b2528_mRNA I	1 Orn_dim + 81 atp + 1 b2528_mRNA_2 + 1 degradosome + 81 h2o <==> 81 adp + 1 b2528_mRNA_2_degr + 81 h + 81 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
b2528_mRNA_degr2	Degradation of b2528_mRNA II	1 b2528_mRNA_2_degr + 323 h2o --> 1 Orn_dim_inact + 83 amp + 68 cmp + 1 degradosome_inact + 99 gmp + 323 h + 74 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
b2528_maturation1	Polypeptide b2528 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2528_aa <==> 1 b2528_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.97E+02	3.97E+02	0	6.29E+02	629.4493	0	9.52E+01	95.208
b2528_maturation2	b2528 formation	1 b2528_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2528_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.97E+02	3.97E+02	0	6.29E+02	629.4493	0	9.52E+01	95.208
b2529_fold_spon	b2529_m folding: spontanous	1 b2529_m --> 1 IscU_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.76E+02	4.76E+02	0	7.47E+02	746.9575	0	1.24E+02	123.676
b2529_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2529_mRNA --> 1 b2529_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
b2529_mRNA_degr1	Degradation of b2529_mRNA I	1 Orn_dim + 96 atp + 1 b2529_mRNA_2 + 1 degradosome + 96 h2o <==> 96 adp + 1 b2529_mRNA_2_degr + 96 h + 96 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
b2529_mRNA_degr2	Degradation of b2529_mRNA II	1 b2529_mRNA_2_degr + 386 h2o --> 1 Orn_dim_inact + 114 amp + 89 cmp + 1 degradosome_inact + 105 gmp + 386 h + 79 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168

b2529_maturation1	Polypeptide b2529 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2529_aa <==> 1 b2529_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.76E+02	4.76E+02	0	7.47E+02	746.9575	0	1.24E+02	123.676
b2529_maturation2	b2529 formation	1 b2529_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2529_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.76E+02	4.76E+02	0	7.47E+02	746.9575	0	1.24E+02	123.676
b2530_fold_GroEL/ES_1	b2530_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b2530_m + 1 transGroES_hepta --> 7 adp + 1 b2530_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.25E+03	1.25E+03	0	2.14E+03	2141.949	0	9.40E+01	94.024
b2530_fold_GroEL/ES_2	b2530_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b2530_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 IscS_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.25E+03	1.25E+03	0	2.14E+03	2141.949	0	9.40E+01	94.024
b2530_fold_GroEL/ES_3	b2530_m folding: GroEL/ES mediated; release of native protein	1 IscS_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 IscS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.25E+03	1.25E+03	0	2.14E+03	2141.949	0	9.40E+01	94.024
b2530_fold_KJE_1	b2530_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b2530_m <==> 1 b2530_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	1.25E+03	1.25E+03	0	2.14E+03	2141.949	0	9.40E+01	94.024
b2530_fold_KJE_2	b2530_m folding: KJE mediated	1 GrpE_dim + 1 b2530_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 IscS_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.25E+03	1.25E+03	0	2.14E+03	2141.949	0	9.40E+01	94.024
b2530_fold_KJE_3	b2530_m folding: KJE mediated	1 IscS_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 IscS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.25E+03	1.25E+03	0	2.14E+03	2141.949	0	9.40E+01	94.024
b2530_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2530_mRNA --> 1 b2530_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
b2530_mRNA_degr1	Degradation of b2530_mRNA I	1 Orn_dim + 303 atp + 1 b2530_mRNA_2 + 1 degradosome + 303 h2o <==> 303 adp + 1 b2530_mRNA_2_degr + 303 h + 303 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
b2530_mRNA_degr2	Degradation of b2530_mRNA II	1 b2530_mRNA_2_degr + 1214 h2o --> 1 Orn_dim_inact + 298 amp + 322 cmp + 1 degradosome_inact + 326 gmp + 1214 h + 269 ump	irreversible	mRNA degradation	0.00E+00	3.72E-01	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
b2530_maturation1	Polypeptide b2530 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2530_aa <==> 1 b2530_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.25E+03	1.25E+03	0	2.14E+03	2141.949	0	9.40E+01	94.024
b2530_maturation2	b2530 formation	1 b2530_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2530_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.25E+03	1.25E+03	0	2.14E+03	2141.949	0	9.40E+01	94.024
b2531_fold_spon	b2531_m folding: spontanous	1 b2531_m --> 1 IscR_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.43E+02	5.43E+02	0	8.91E+02	890.984	0	8.96E+01	89.622
b2531_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2531_mRNA --> 1 b2531_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
b2531_mRNA_degr1	Degradation of b2531_mRNA I	1 Orn_dim + 122 atp + 1 b2531_mRNA_2 + 1 degradosome + 122 h2o <==> 122 adp + 1 b2531_mRNA_2_degr + 122 h + 122 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
b2531_mRNA_degr2	Degradation of b2531_mRNA II	1 b2531_mRNA_2_degr + 488 h2o --> 1 Orn_dim_inact + 109 amp + 1 atp + 127 cmp + 1 degradosome_inact + 135 gmp + 488 h + 117 ump	irreversible	mRNA degradation	0.00E+00	1.68E-01	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
b2531_maturation1	Polypeptide b2531 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2531_aa <==> 1 b2531_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.43E+02	5.43E+02	0	8.91E+02	890.984	0	8.96E+01	89.622
b2531_maturation2	b2531 formation	1 b2531_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2531_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.43E+02	5.43E+02	0	8.91E+02	890.984	0	8.96E+01	89.622
b2559_fold_spon	b2559_m folding: spontanous	1 b2559_m_Zn --> 1 TadA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.21E+03	1.21E+03	0	2.07E+03	2067.331	0	9.04E+01	90.41
b2559_ion_BIND	Binding of ions to b2559	1 b2559_m + 1 zn2 <==> 1 b2559_m_Zn	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	1.21E+03	1.21E+03	0	2.07E+03	2067.331	0	9.04E+01	90.41
b2559_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2559_mRNA --> 1 b2559_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	1.31E-01	0.131
b2559_mRNA_degr1	Degradation of b2559_mRNA I	1 Orn_dim + 134 atp + 1 b2559_mRNA_2 + 1 degradosome + 134 h2o <==> 134 adp + 1 b2559_mRNA_2_degr + 134 h + 134 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	1.31E-01	0.131
b2559_mRNA_degr2	Degradation of b2559_mRNA II	1 b2559_mRNA_2_degr + 536 h2o --> 1 Orn_dim_inact + 121 amp + 126 cmp + 1 degradosome_inact + 165 gmp + 536 h + 125 ump	irreversible	mRNA degradation	0.00E+00	1.31E-01	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	1.31E-01	0.131
b2559_maturation1	Polypeptide b2559 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2559_aa <==> 1 b2559_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.21E+03	1.21E+03	0	2.07E+03	2067.331	0	9.04E+01	90.41
b2559_maturation2	b2559 formation	1 b2559_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2559_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.21E+03	1.21E+03	0	2.07E+03	2067.331	0	9.04E+01	90.41
b2560_fold_spon	b2560_m folding: spontanous	1 b2560_m --> 1 YfhB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.43E+03	1.43E+03	0	2.46E+03	2463.998	0	9.17E+01	91.692
b2560_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2560_mRNA --> 1 b2560_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	1.31E-01	0.131
b2560_mRNA_degr1	Degradation of b2560_mRNA I	1 Orn_dim + 159 atp + 1 b2560_mRNA_2 + 1 degradosome + 159 h2o <==> 159 adp + 1 b2560_mRNA_2_degr + 159 h + 159 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	1.31E-01	0.131
b2560_mRNA_degr2	Degradation of b2560_mRNA II	1 b2560_mRNA_2_degr + 635 h2o --> 1 Orn_dim_inact + 126 amp + 155 cmp + 1 degradosome_inact + 177 gmp + 635 h + 177 ump + 1 utp	irreversible	mRNA degradation	0.00E+00	2.00E-01	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	1.31E-01	0.131
b2560_maturation1	Polypeptide b2560 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2560_aa <==> 1 b2560_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.43E+03	1.43E+03	0	2.46E+03	2463.998	0	9.17E+01	91.692
b2560_maturation2	b2560 formation	1 b2560_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2560_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.43E+03	1.43E+03	0	2.46E+03	2463.998	0	9.17E+01	91.692
b2563_fold_spon	b2563_m folding: spontanous	1 b2563_m --> 1 AcpS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.32E+02	3.32E+02	0	5.30E+02	530.1084	0	7.35E+01	73.542
b2563_mRNA_degr1	Degradation of b2563_mRNA I	1 Orn_dim + 95 atp + 1 b2563_mRNA_2 + 1 degradosome + 95 h2o <==> 95 adp + 1 b2563_mRNA_2_degr + 95 h + 95 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
b2563_mRNA_degr2	Degradation of b2563_mRNA II	1 b2563_mRNA_2_degr + 379 h2o --> 1 Orn_dim_inact + 97 amp + 82 cmp + 1 degradosome_inact + 114 gmp + 379 h + 87 ump	irreversible	mRNA degradation	0.00E+00	1.25E-01	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
b2563_maturation1	Polypeptide b2563 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2563_aa <==> 1 b2563_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.32E+02	3.32E+02	0	5.30E+02	530.1084	0	7.35E+01	73.542
b2563_maturation2	b2563 formation	1 b2563_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2563_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.32E+02	3.32E+02	0	5.30E+02	530.1084	0	7.35E+01	73.542
b2563_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2563_v1_mRNA --> 1 b2563_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
b2564_fold_spon	b2564_m folding: spontanous	1 b2564_m --> 1 PdxJ_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.09E+02	6.09E+02	0	1.01E+03	1005.897	0	9.28E+01	92.764
b2564_mRNA_degr1	Degradation of b2564_mRNA I	1 Orn_dim + 183 atp + 1 b2564_mRNA_2 + 1 degradosome + 183 h2o <==> 183 adp + 1 b2564_mRNA_2_degr + 183 h + 183 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
b2564_mRNA_degr2	Degradation of b2564_mRNA II	1 b2564_mRNA_2_degr + 731 h2o --> 1 Orn_dim_inact + 172 amp + 1 atp + 192 cmp + 1 degradosome_inact + 221 gmp + 731 h + 146 ump	irreversible	mRNA degradation	0.00E+00	2.69E-01	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
b2564_maturation1	Polypeptide b2564 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2564_aa <==> 1 b2564_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.09E+02	6.09E+02	0	1.01E+03	1005.897	0	9.28E+01	92.764
b2564_maturation2	b2564 formation	1 b2564_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2564_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.09E+02	6.09E+02	0	1.01E+03	1005.897	0	9.28E+01	92.764
b2564_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2564_v1_mRNA --> 1 b2564_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
b2565_fold_spon	b2565_m folding: spontanous	1 b2565_m --> 1 RecO_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.83E+02	5.83E+02	0	9.79E+02	979.2968	0	6.62E+01	66.164
b2565_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2565_mRNA --> 1 b2565_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106

b2565_mRNA_degr1	Degradation of b2565_mRNA I	1 Orn_dim + 182 atp + 1 b2565_mRNA_2 + 1 degradosome + 182 h2o <==> 182 adp + 1 b2565_mRNA_2_degr + 182 h + 182 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
b2565_mRNA_degr2	Degradation of b2565_mRNA II	1 b2565_mRNA_2_degr + 728 h2o --> 1 Orn_dim_inact + 165 amp + 195 cmp + 1 degradosome_inact + 199 gmp + 728 h + 170 ump	irreversible	mRNA degradation	0.00E+00	1.06E-01	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
b2565_maturation1	Polypeptide b2565 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2565_aa <==> 1 b2565_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.83E+02	5.83E+02	0	9.79E+02	979.2968	0	6.62E+01	66.164
b2565_maturation2	b2565 formation	1 b2565_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2565_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.83E+02	5.83E+02	0	9.79E+02	979.2968	0	6.62E+01	66.164
b2566_fold_spon	b2566_m folding: spontanous	1 b2566_m --> 1 Era_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.47E+03	1.47E+03	0	2.53E+03	2531.352	0	7.61E+01	76.075
b2566_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2566_mRNA --> 1 b2566_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
b2566_mRNA_degr1	Degradation of b2566_mRNA I	1 Orn_dim + 225 atp + 1 b2566_mRNA_2 + 1 degradosome + 225 h2o <==> 225 adp + 1 b2566_mRNA_2_degr + 225 h + 225 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.19E+01	8.19E+01	0	1.45E+02	144.5631	0	1.35E-01	0.135
b2566_mRNA_degr2	Degradation of b2566_mRNA II	1 b2566_mRNA_2_degr + 901 h2o --> 1 Orn_dim_inact + 236 amp + 229 cmp + 1 degradosome_inact + 244 gmp + 901 h + 193 ump	irreversible	mRNA degradation	0.00E+00	1.86E-01	0	8.19E+01	8.19E+01	0	1.45E+02	144.5631	0	1.35E-01	0.135
b2566_maturation1	Polypeptide b2566 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2566_aa <==> 1 b2566_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.47E+03	1.47E+03	0	2.53E+03	2531.352	0	7.61E+01	76.075
b2566_maturation2	b2566 formation	1 b2566_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2566_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.47E+03	1.47E+03	0	2.53E+03	2531.352	0	7.61E+01	76.075
b2566_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2566_v1_mRNA --> 1 b2566_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.19E+01	8.19E+01	0	1.45E+02	144.5631	0	1.35E-01	0.135
b2567_fold_spon	b2567_m folding: spontanous	1 b2567_m_Mg --> 1 Rnc_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.13E+03	1.13E+03	0	1.94E+03	1943.67	0	6.61E+01	66.105
b2567_ion_BIND	Binding of ions to b2567	1 b2567_m + 1 mg2 <==> 1 b2567_m_Mg	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	1.13E+03	1.13E+03	0	1.94E+03	1943.67	0	6.61E+01	66.105
b2567_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2567_mRNA --> 1 b2567_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
b2567_mRNA_degr1	Degradation of b2567_mRNA I	1 Orn_dim + 170 atp + 1 b2567_mRNA_2 + 1 degradosome + 170 h2o <==> 170 adp + 1 b2567_mRNA_2_degr + 170 h + 170 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.19E+01	8.19E+01	0	1.45E+02	144.5631	0	1.35E-01	0.135
b2567_mRNA_degr2	Degradation of b2567_mRNA II	1 b2567_mRNA_2_degr + 680 h2o --> 1 Orn_dim_inact + 174 amp + 1 atp + 161 cmp + 1 degradosome_inact + 184 gmp + 680 h + 161 ump	irreversible	mRNA degradation	0.00E+00	1.35E-01	0	8.19E+01	8.19E+01	0	1.45E+02	144.5631	0	1.35E-01	0.135
b2567_maturation1	Polypeptide b2567 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2567_aa <==> 1 b2567_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.13E+03	1.13E+03	0	1.94E+03	1943.67	0	6.61E+01	66.105
b2567_maturation2	b2567 formation	1 b2567_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2567_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.13E+03	1.13E+03	0	1.94E+03	1943.67	0	6.61E+01	66.105
b2567_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2567_v1_mRNA --> 1 b2567_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.19E+01	8.19E+01	0	1.45E+02	144.5631	0	1.35E-01	0.135
b2570_fold_spon	b2570_m folding: spontanous	1 b2570_m --> 1 RseC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.21E+02	5.21E+02	0	8.52E+02	851.6164	0	9.24E+01	92.421
b2570_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2570_mRNA --> 1 b2570_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2570_mRNA_degr1	Degradation of b2570_mRNA I	1 Orn_dim + 119 atp + 1 b2570_mRNA_2 + 1 degradosome + 119 h2o <==> 119 adp + 1 b2570_mRNA_2_degr + 119 h + 119 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2570_mRNA_degr2	Degradation of b2570_mRNA II	1 b2570_mRNA_2_degr + 475 h2o --> 1 Orn_dim_inact + 90 amp + 122 cmp + 1 degradosome_inact + 140 gmp + 475 h + 124 ump	irreversible	mRNA degradation	0.00E+00	2.99E-01	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2570_maturation1	Polypeptide b2570 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2570_aa <==> 1 b2570_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.21E+02	5.21E+02	0	8.52E+02	851.6164	0	9.24E+01	92.421
b2570_maturation2	b2570 formation	1 b2570_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2570_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.21E+02	5.21E+02	0	8.52E+02	851.6164	0	9.24E+01	92.421
b2570_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2570_v2_mRNA --> 1 b2570_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2571_fold_spon	b2571_m folding: spontanous	1 b2571_m --> 1 RseB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.74E+02	9.74E+02	0	1.63E+03	1634.653	0	1.16E+02	116.262
b2571_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2571_mRNA --> 1 b2571_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2571_mRNA_degr1	Degradation of b2571_mRNA I	1 Orn_dim + 239 atp + 1 b2571_mRNA_2 + 1 degradosome + 239 h2o <==> 239 adp + 1 b2571_mRNA_2_degr + 239 h + 239 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2571_mRNA_degr2	Degradation of b2571_mRNA II	1 b2571_mRNA_2_degr + 955 h2o --> 1 Orn_dim_inact + 227 amp + 249 cmp + 1 degradosome_inact + 237 gmp + 955 h + 243 ump	irreversible	mRNA degradation	0.00E+00	3.48E-01	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2571_maturation1	Polypeptide b2571 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2571_aa <==> 1 b2571_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	9.74E+02	9.74E+02	0	1.63E+03	1634.653	0	1.16E+02	116.262
b2571_maturation2	b2571 formation	1 b2571_def_map_cplx + 24 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 4 ala-L + 1 asn-L + 1 b2571_m + 1 for + 1 gln-L + 1 gly + 4 leu-L + 1 lys-L + 2 met-L + 2 phe-L + 4 ser-L + 1 thr-L + 1 trp-L + 1 val-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	9.74E+02	9.74E+02	0	1.63E+03	1634.653	0	1.16E+02	116.262
b2571_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2571_v2_mRNA --> 1 b2571_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2572_fold_spon	b2572_m folding: spontanous	1 b2572_m --> 1 RseA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.16E+02	7.16E+02	0	1.16E+03	1156.249	0	1.44E+02	143.988
b2572_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2572_mRNA --> 1 b2572_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2572_mRNA_degr1	Degradation of b2572_mRNA I	1 Orn_dim + 162 atp + 1 b2572_mRNA_2 + 1 degradosome + 162 h2o <==> 162 adp + 1 b2572_mRNA_2_degr + 162 h + 162 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2572_mRNA_degr2	Degradation of b2572_mRNA II	1 b2572_mRNA_2_degr + 650 h2o --> 1 Orn_dim_inact + 183 amp + 173 cmp + 1 degradosome_inact + 167 gmp + 650 h + 128 ump	irreversible	mRNA degradation	0.00E+00	5.39E-01	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2572_maturation1	Polypeptide b2572 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2572_aa <==> 1 b2572_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.16E+02	7.16E+02	0	1.16E+03	1156.249	0	1.44E+02	143.988
b2572_maturation2	b2572 formation	1 b2572_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2572_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.16E+02	7.16E+02	0	1.16E+03	1156.249	0	1.44E+02	143.988
b2572_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2572_v2_mRNA --> 1 b2572_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2573_fold_spon	b2573_m folding: spontanous	1 b2573_m --> 1 RpoE_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.30E+02	6.30E+02	0	1.03E+03	1033.275	0	1.05E+02	105.369
b2573_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2573_mRNA --> 1 b2573_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2573_mRNA_degr1	Degradation of b2573_mRNA I	1 Orn_dim + 144 atp + 1 b2573_mRNA_2 + 1 degradosome + 144 h2o <==> 144 adp + 1 b2573_mRNA_2_degr + 144 h + 144 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2573_mRNA_degr2	Degradation of b2573_mRNA II	1 b2573_mRNA_2_degr + 575 h2o --> 1 Orn_dim_inact + 145 amp + 1 atp + 118 cmp + 1 degradosome_inact + 163 gmp + 575 h + 149 ump	irreversible	mRNA degradation	0.00E+00	3.08E-01	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2573_maturation1	Polypeptide b2573 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2573_aa <==> 1 b2573_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.30E+02	6.30E+02	0	1.03E+03	1033.275	0	1.05E+02	105.369
b2573_maturation2	b2573 formation	1 b2573_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2573_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.30E+02	6.30E+02	0	1.03E+03	1033.275	0	1.05E+02	105.369

b2573_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2573_v1_mRNA --> 1 b2573_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
b2589_RNA_10_modif_1	b2589_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 MeT_23S_2445 + 1 amet + 1 b2589_RNA_10 <==> 1 b2589_RNA_10_MeT_23S_2445	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_10_modif_2	b2589_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 b2589_RNA_10_MeT_23S_2445 --> 1 MeT_23S_2445_inact + 1 ahcys + 1 b2589_RNA_11 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_11_a_modif_1	b2589_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 DU_23S_2449 + 1 b2589_RNA_11 + 1 h + 1 nadh <==> 1 b2589_RNA_11_DU_23S_2449_a	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_11_a_modif_2	b2589_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 b2589_RNA_11_DU_23S_2449_a --> 1 DU_23S_2449_inact + 1 b2589_RNA_12 + 1 nad	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_11_b_modif_1	b2589_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 DU_23S_2449 + 1 b2589_RNA_11 + 1 h + 1 nadph <==> 1 b2589_RNA_11_DU_23S_2449_b	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_11_b_modif_2	b2589_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 b2589_RNA_11_DU_23S_2449_b --> 1 DU_23S_2449_inact + 1 b2589_RNA_12 + 1 nadp	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_12_modif_1	b2589_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 YmfC_mono + 1 b2589_RNA_12 <==> 1 b2589_RNA_12_YmfC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_12_modif_2	b2589_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 b2589_RNA_12_YmfC_mono --> 1 YmfC_mono_inact + 1 b2589_RNA_13	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_13_modif_1	b2589_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 MeT_23S_2498 + 1 amet + 1 b2589_RNA_13 <==> 1 b2589_RNA_13_MeT_23S_2498	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_13_modif_2	b2589_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 b2589_RNA_13_MeT_23S_2498 --> 1 MeT_23S_2498_inact + 1 ahcys + 1 b2589_RNA_14 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_14_modif_1	b2589_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 MeT_23S_2503 + 1 amet + 1 b2589_RNA_14 <==> 1 b2589_RNA_14_MeT_23S_2503	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_14_modif_2	b2589_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 b2589_RNA_14_MeT_23S_2503 --> 1 MeT_23S_2503_inact + 1 ahcys + 1 b2589_RNA_15 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_15_modif_1	b2589_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 RluC_mono + 1 b2589_RNA_15 <==> 1 b2589_RNA_15_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_15_modif_2	b2589_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 b2589_RNA_15_RluC_mono --> 1 RluC_mono_inact + 1 b2589_RNA_16	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_16_modif_1	b2589_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 RrmJ_mono + 1 amet + 1 b2589_RNA_16 <==> 1 b2589_RNA_16_RrmJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_16_modif_2	b2589_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 b2589_RNA_16_RrmJ_mono --> 1 RrmJ_mono_inact + 1 ahcys + b2589_RNA_17 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_17_modif_1	b2589_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 RluC_mono + 1 b2589_RNA_17 <==> 1 b2589_RNA_17_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_17_modif_2	b2589_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 b2589_RNA_17_RluC_mono --> 1 RluC_mono_inact + 1 b2589_RNA_18	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_18_modif_1	b2589_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 YjbC_mono + 1 b2589_RNA_18 <==> 1 b2589_RNA_18_YjbC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_18_modif_2	b2589_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 b2589_RNA_18_YjbC_mono --> 1 YjbC_mono_inact + 1 b2589_RNA_19	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_19_modif_1	b2589_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 RluB_mono + 1 b2589_RNA_19 <==> 1 b2589_RNA_19_RluB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_19_modif_2	b2589_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 b2589_RNA_19_RluB_mono --> 1 RluB_mono_inact + 1 b2589_RNA_20	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_1_modif_1	b2589_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 MeT_23S_1835 + 1 amet + 1 b2589_RNA_1 <==> 1 b2589_RNA_1_MeT_23S_1835	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_1_modif_2	b2589_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 b2589_RNA_1_MeT_23S_1835 --> 1 MeT_23S_1835_inact + 1 ahcys + 1 b2589_RNA_2 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_20_modif_1	b2589_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 RrmA_dim + 1 amet + 1 b2589_RNA_20 <==> 1 b2589_RNA_20_RrmA_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_20_modif_2	b2589_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 b2589_RNA_20_RrmA_dim --> 1 RrmA_dim_inact + 1 ahcys + 1 b2589_RNA_21 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_21_modif_1	b2589_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 RluA_mono + 1 b2589_RNA_21 <==> 1 b2589_RNA_21_RluA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_21_modif_2	b2589_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 b2589_RNA_21_RluA_mono --> 1 RluA_mono_inact + 1 b2589_RNA_22	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_22_modif_1	b2589_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 RumB_mono + 1 amet + 1 b2589_RNA_22 <==> 1 b2589_RNA_22_RumB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_22_modif_2	b2589_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 b2589_RNA_22_RumB_mono --> 1 RumB_mono_inact + 1 ahcys + 1 b2589_RNA_23 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_23_modif_1	b2589_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 RluC_mono + 1 b2589_RNA_23 <==> 1 b2589_RNA_23_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_23_modif_2	b2589_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 b2589_RNA_23_RluC_mono --> 1 RluC_mono_inact + 1 rrlG	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_2_modif_1	b2589_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 RluD_mono + 1 b2589_RNA_2 <==> 1 b2589_RNA_2_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_2_modif_2	b2589_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 b2589_RNA_2_RluD_mono --> 1 RluD_mono_inact + 1 b2589_RNA_3	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_3_modif_1	b2589_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 RluD_mono + 1 amet + 1 b2589_RNA_3 <==> 1 b2589_RNA_3_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_3_modif_2	b2589_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 b2589_RNA_3_RluD_mono --> 1 RluD_mono_inact + 1 ahcys + 1 b2589_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_4_modif_1	b2589_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 RluD_mono + 1 b2589_RNA_4 <==> 1 b2589_RNA_4_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0

b2589_RNA_4_modif_2	b2589_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 b2589_RNA_4_RluD_mono --> 1 RluD_mono_inact + 1 b2589_RNA_5	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_5_modif_1	b2589_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 RumA_mono + 1 amet + 1 b2589_RNA_5 <==> 1 b2589_RNA_5_RumA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_5_modif_2	b2589_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 b2589_RNA_5_RumA_mono --> 1 RumA_mono_inact + 1 ahcys + 1 b2589_RNA_6 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_6_modif_1	b2589_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 MeT_23S_1962 + 1 amet + 1 b2589_RNA_6 <==> 1 b2589_RNA_6_MeT_23S_1962	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_6_modif_2	b2589_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 b2589_RNA_6_MeT_23S_1962 --> 1 MeT_23S_1962_inact + 1 ahcys + 1 b2589_RNA_7 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_7_modif_1	b2589_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 MeT_23S_2030 + 1 amet + 1 b2589_RNA_7 <==> 1 b2589_RNA_7_MeT_23S_2030	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_7_modif_2	b2589_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 b2589_RNA_7_MeT_23S_2030 --> 1 MeT_23S_2030_inact + 1 ahcys + 1 b2589_RNA_8 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_8_modif_1	b2589_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 MeT_23S_2069 + 1 amet + 1 b2589_RNA_8 <==> 1 b2589_RNA_8_MeT_23S_2069	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_8_modif_2	b2589_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 b2589_RNA_8_MeT_23S_2069 --> 1 MeT_23S_2069_inact + 1 ahcys + 1 b2589_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_9_modif_1	b2589_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 RlmB_dim + 1 amet + 1 b2589_RNA_9 <==> 1 b2589_RNA_9_RlmB_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_9_modif_2	b2589_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 b2589_RNA_9_RlmB_dim --> 1 RlmB_dim_inact + 1 ahcys + 1 b2589_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_modif_1	b2589_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 MeT_23S_1618 + 1 amet + 1 b2589_RNA <==> 1 b2589_RNA_MeT_23S_1618	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_RNA_modif_2	b2589_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 b2589_RNA_MeT_23S_1618 --> 1 MeT_23S_1618_inact + 1 ahcy + 1 b2589_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2589_v1_RNA_10_modif_1	b2589_v1_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 MeT_23S_2445 + 1 amet + 1 b2589_v1_RNA_10 <==> 1 b2589_v1_RNA_10_MeT_23S_2445	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_10_modif_2	b2589_v1_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 b2589_v1_RNA_10_MeT_23S_2445 --> 1 MeT_23S_2445_inact + 1 ahcys + 1 b2589_v1_RNA_11 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_11_a_modif_1	b2589_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 DU_23S_2449 + 1 b2589_v1_RNA_11 + 1 h + 1 nadh <==> 1 b2589_v1_RNA_11_DU_23S_2449_a	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_11_a_modif_2	b2589_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 b2589_v1_RNA_11_DU_23S_2449_a --> 1 DU_23S_2449_inact + 1 b2589_v1_RNA_12 + 1 nad	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_11_b_modif_1	b2589_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 DU_23S_2449 + 1 b2589_v1_RNA_11 + 1 h + 1 nadph <==> 1 b2589_v1_RNA_11_DU_23S_2449_b	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_11_b_modif_2	b2589_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 b2589_v1_RNA_11_DU_23S_2449_b --> 1 DU_23S_2449_inact + 1 b2589_v1_RNA_12 + 1 nadp	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_12_modif_1	b2589_v1_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 YmfC_mono + 1 b2589_v1_RNA_12 <==> 1 b2589_v1_RNA_12_YmfC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_12_modif_2	b2589_v1_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 b2589_v1_RNA_12_YmfC_mono --> 1 YmfC_mono_inact + 1 b2589_v1_RNA_13	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_13_modif_1	b2589_v1_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 MeT_23S_2498 + 1 amet + 1 b2589_v1_RNA_13 <==> 1 b2589_v1_RNA_13_MeT_23S_2498	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_13_modif_2	b2589_v1_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 b2589_v1_RNA_13_MeT_23S_2498 --> 1 MeT_23S_2498_inact + 1 ahcys + 1 b2589_v1_RNA_14 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_14_modif_1	b2589_v1_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 MeT_23S_2503 + 1 amet + 1 b2589_v1_RNA_14 <==> 1 b2589_v1_RNA_14_MeT_23S_2503	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_14_modif_2	b2589_v1_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 b2589_v1_RNA_14_MeT_23S_2503 --> 1 MeT_23S_2503_inact + 1 ahcys + 1 b2589_v1_RNA_15 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_15_modif_1	b2589_v1_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 RluC_mono + 1 b2589_v1_RNA_15 <==> 1 b2589_v1_RNA_15_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_15_modif_2	b2589_v1_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 b2589_v1_RNA_15_RluC_mono --> 1 RluC_mono_inact + 1 b2589_v1_RNA_16	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_16_modif_1	b2589_v1_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 RrmJ_mono + 1 amet + 1 b2589_v1_RNA_16 <==> 1 b2589_v1_RNA_16_RrmJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_16_modif_2	b2589_v1_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 b2589_v1_RNA_16_RrmJ_mono --> 1 RrmJ_mono_inact + 1 ahcys + 1 b2589_v1_RNA_17 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_17_modif_1	b2589_v1_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 RluC_mono + 1 b2589_v1_RNA_17 <==> 1 b2589_v1_RNA_17_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_17_modif_2	b2589_v1_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 b2589_v1_RNA_17_RluC_mono --> 1 RluC_mono_inact + 1 b2589_v1_RNA_18	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_18_modif_1	b2589_v1_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 YjbC_mono + 1 b2589_v1_RNA_18 <==> 1 b2589_v1_RNA_18_YjbC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_18_modif_2	b2589_v1_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 b2589_v1_RNA_18_YjbC_mono --> 1 YjbC_mono_inact + 1 b2589_v1_RNA_19	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_19_modif_1	b2589_v1_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 RluB_mono + 1 b2589_v1_RNA_19 <==> 1 b2589_v1_RNA_19_RluB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_19_modif_2	b2589_v1_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 b2589_v1_RNA_19_RluB_mono --> 1 RluB_mono_inact + 1 b2589_v1_RNA_20	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_1_modif_1	b2589_v1_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 MeT_23S_1835 + 1 amet + 1 b2589_v1_RNA_1 <==> 1 b2589_v1_RNA_1_MeT_23S_1835	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_1_modif_2	b2589_v1_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 b2589_v1_RNA_1_MeT_23S_1835 --> 1 MeT_23S_1835_inact + 1 ahcys + 1 b2589_v1_RNA_2 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_20_modif_1	b2589_v1_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 RrmA_dim + 1 amet + 1 b2589_v1_RNA_20 <==> 1 b2589_v1_RNA_20_RrmA_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54

b2589_v1_RNA_20_modif_2	b2589_v1_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 b2589_v1_RNA_20_RrmA_dim --> 1 RrmA_dim_inact + 1 ahcys + 1 b2589_v1_RNA_21 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_21_modif_1	b2589_v1_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 RluA_mono + 1 b2589_v1_RNA_21 <==> 1 b2589_v1_RNA_21_RluA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_21_modif_2	b2589_v1_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 b2589_v1_RNA_21_RluA_mono --> 1 RluA_mono_inact + 1 b2589_v1_RNA_22	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_22_modif_1	b2589_v1_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 RumB_mono + 1 amet + 1 b2589_v1_RNA_22 <==> 1 b2589_v1_RNA_22_RumB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_22_modif_2	b2589_v1_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 b2589_v1_RNA_22_RumB_mono --> 1 RumB_mono_inact + 1 ahcys + 1 b2589_v1_RNA_23 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_23_modif_1	b2589_v1_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 RluC_mono + 1 b2589_v1_RNA_23 <==> 1 b2589_v1_RNA_23_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_23_modif_2	b2589_v1_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 b2589_v1_RNA_23_RluC_mono --> 1 RluC_mono_inact + 1 rrlG	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_2_modif_1	b2589_v1_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 RluD_mono + 1 b2589_v1_RNA_2 <==> 1 b2589_v1_RNA_2_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_2_modif_2	b2589_v1_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 b2589_v1_RNA_2_RluD_mono --> 1 RluD_mono_inact + 1 b2589_v1_RNA_3	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_3_modif_1	b2589_v1_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 RluD_mono + 1 amet + 1 b2589_v1_RNA_3 <==> 1 b2589_v1_RNA_3_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_3_modif_2	b2589_v1_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 b2589_v1_RNA_3_RluD_mono --> 1 RluD_mono_inact + 1 ahcys + 1 b2589_v1_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_4_modif_1	b2589_v1_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 RluD_mono + 1 b2589_v1_RNA_4 <==> 1 b2589_v1_RNA_4_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_4_modif_2	b2589_v1_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 b2589_v1_RNA_4_RluD_mono --> 1 RluD_mono_inact + 1 b2589_v1_RNA_5	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_5_modif_1	b2589_v1_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 RumA_mono + 1 amet + 1 b2589_v1_RNA_5 <==> 1 b2589_v1_RNA_5_RumA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_5_modif_2	b2589_v1_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 b2589_v1_RNA_5_RumA_mono --> 1 RumA_mono_inact + 1 ahcy + 1 b2589_v1_RNA_6 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_6_modif_1	b2589_v1_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 MeT_23S_1962 + 1 amet + 1 b2589_v1_RNA_6 <==> 1 b2589_v1_RNA_6_MeT_23S_1962	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_6_modif_2	b2589_v1_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 b2589_v1_RNA_6_MeT_23S_1962 --> 1 MeT_23S_1962_inact + 1 ahcys + 1 b2589_v1_RNA_7 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_7_modif_1	b2589_v1_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 MeT_23S_2030 + 1 amet + 1 b2589_v1_RNA_7 <==> 1 b2589_v1_RNA_7_MeT_23S_2030	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_7_modif_2	b2589_v1_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 b2589_v1_RNA_7_MeT_23S_2030 --> 1 MeT_23S_2030_inact + 1 ahcys + 1 b2589_v1_RNA_8 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_8_modif_1	b2589_v1_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 MeT_23S_2069 + 1 amet + 1 b2589_v1_RNA_8 <==> 1 b2589_v1_RNA_8_MeT_23S_2069	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_8_modif_2	b2589_v1_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 b2589_v1_RNA_8_MeT_23S_2069 --> 1 MeT_23S_2069_inact + 1 ahcys + 1 b2589_v1_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_9_modif_1	b2589_v1_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 RlmB_dim + 1 amet + 1 b2589_v1_RNA_9 <==> 1 b2589_v1_RNA_9_RlmB_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_9_modif_2	b2589_v1_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 b2589_v1_RNA_9_RlmB_dim --> 1 RlmB_dim_inact + 1 ahcys + 1 b2589_v1_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_modif_1	b2589_v1_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 MeT_23S_1618 + 1 amet + 1 b2589_v1_RNA <==> 1 b2589_v1_RNA_MeT_23S_1618	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2589_v1_RNA_modif_2	b2589_v1_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 b2589_v1_RNA_MeT_23S_1618 --> 1 MeT_23S_1618_inact + 1 ahcys + 1 b2589_v1_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_tRNA_13_MODIF_1	modification of position 13 nt (Y) in gltW by TruD_mono	1 TruD_mono + 1 b2590_tRNA_Mg2 <==> 1 b2590_tRNA_Mg2_TruD_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_13_MODIF_2	modification of position 13 nt (Y) in gltW by TruD_mono	1 b2590_tRNA_Mg2_TruD_mono_cplx --> 1 TruD_mono_inact + 1 b2590_tRNA_1	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_34_MODIF_1	modification of position 34 nt (mnm5s2U) in gltW by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 IscS_dim_S-SH + 1 TrmC_mono + 1 TrmE_dim + 1 TrmU_mono + 1 YccK_mono + 1 YheLMN_cplx + 1 YhhP_mono + 1 amet + 1 atp + 1 b2590_tRNA_1 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o + 1 mg2 + 1 trdrd <==> 1 b2590_tRNA_1_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_34_MODIF_2	modification of position 34 nt (mnm5s2U) in gltW by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 b2590_tRNA_1_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 IscS_dim_S-H + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 TrmU_mono_inact + 1 YccK_mono_inact + 1 YheLMN_cplx_inact + 1 YhhP_mono_inact + 1 ahcys + 1 amp + 1 b2590_tRNA_2 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 4 h + 1 mg2 + 1 pi + 1 ppi + 1 thf + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_34_MODIF_3	replacement of sulfur with selenium: b2590_tRNA_2	1 YbbB_dim + 1 b2590_tRNA_2 + 1 h2o + 1 selnp <==> 1 b2590_tRNA_2_YbbB_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_34_MODIF_4	replacement of sulfur with selenium: b2590_tRNA_2	1 b2590_tRNA_2_YbbB_dim_cplx --> 1 YbbB_dim_inact + 1 b2590_tRNA_2_Se + 1 h + 1 h2s + 1 pi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in gltW by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b2590_tRNA_2 <==> 1 b2590_tRNA_2_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_37_MODIF_1_Se	modification of position 37 nt (m2A) in gltW by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b2590_tRNA_2_Se <==> 1 b2590_tRNA_2_Se_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in gltW by MeT_tRNA_pos_37_m2A	1 b2590_tRNA_2_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b2590_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_37_MODIF_2_Se	modification of position 37 nt (m2A) in gltW by MeT_tRNA_pos_37_m2A	1 b2590_tRNA_2_Se_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b2590_tRNA_3_Se + h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in gltW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2590_tRNA_3 <==> 1 b2590_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_54_MODIF_1_Se	modification of position 54 nt (m5U) in gltW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2590_tRNA_3_Se <==> 1 b2590_tRNA_3_Se_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in gltW by TrmA_mono	1 b2590_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2590_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0

b2590_tRNA_54_MODIF_2_Se	modification of position 54 nt (m5U) in gltW by TrmA_mono	1 b2590_tRNA_3_Se_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2590_tRNA_4_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_55_MODIF_1	modification of position 55 nt (Y) in gltW by TruB_mono	1 TruB_mono + 1 b2590_tRNA_4 <==> 1 b2590_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_55_MODIF_1_Se	modification of position 55 nt (Y) in gltW by TruB_mono	1 TruB_mono + 1 b2590_tRNA_4_Se <==> 1 b2590_tRNA_4_Se_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_55_MODIF_2	modification of position 55 nt (Y) in gltW by TruB_mono	1 b2590_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 gltW_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_55_MODIF_2_Se	modification of position 55 nt (Y) in gltW by TruB_mono	1 b2590_tRNA_4_Se_TruB_mono_cplx --> 1 TruB_mono_inact + 1 gltW_tRNA_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_tRNA_Mg_BIND	Binding of two Mg2 to b2590_tRNA	1 b2590_RNA + 2 mg2 <==> 1 b2590_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2590_v1_tRNA_13_MODIF_1	modification of position 13 nt (Y) in gltW by TruD_mono	1 TruD_mono + 1 b2590_v1_tRNA_Mg2 <==> 1 b2590_v1_tRNA_Mg2_TruD_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_13_MODIF_2	modification of position 13 nt (Y) in gltW by TruD_mono	1 b2590_v1_tRNA_Mg2_TruD_mono_cplx --> 1 TruD_mono_inact + b2590_v1_tRNA_1	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_34_MODIF_1	modification of position 34 nt (mmm5s2U) in gltW by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 IscS_dim_S-SH + 1 TrmC_mono + 1 TrmE_dim + 1 TrmU_mono + 1 YccK_mono + 1 YheLMN_cplx + 1 YhhP_mono + 1 amet + 1 atp + 1 b2590_v1_tRNA_1 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o + 1 mg2 + 1 trdrd <==> 1 b2590_v1_tRNA_1_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_34_MODIF_2	modification of position 34 nt (mmm5s2U) in gltW by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 b2590_v1_tRNA_1_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 IscS_dim_S-H + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 TrmU_mono_inact + 1 YccK_mono_inact + 1 YheLMN_cplx_inact + 1 YhhP_mono_inact + 1 ahcys + 1 amp + 1 b2590_v1_tRNA_2 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 4 h + 1 mg2 + 1 pi + 1 ppi + 1 thf + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_34_MODIF_3	replacement of sulfur with selenium: b2590_tRNA_2	1 YbbB_dim + 1 b2590_v1_tRNA_2 + 1 h2o + 1 selnp <==> 1 b2590_v1_tRNA_2_YbbB_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_34_MODIF_4	replacement of sulfur with selenium: b2590_tRNA_2	1 b2590_v1_tRNA_2_YbbB_dim_cplx --> 1 YbbB_dim_inact + 1 b2590_v1_tRNA_2_Se + 1 h + 1 h2s + 1 pi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in gltW by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b2590_v1_tRNA_2 <==> 1 b2590_v1_tRNA_2_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_37_MODIF_1_Se	modification of position 37 nt (m2A) in gltW by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b2590_v1_tRNA_2_Se <==> 1 b2590_v1_tRNA_2_Se_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in gltW by MeT_tRNA_pos_37_m2A	1 b2590_v1_tRNA_2_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b2590_v1_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_37_MODIF_2_Se	modification of position 37 nt (m2A) in gltW by MeT_tRNA_pos_37_m2A	1 b2590_v1_tRNA_2_Se_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b2590_v1_tRNA_3_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in gltW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2590_v1_tRNA_3 <==> 1 b2590_v1_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_54_MODIF_1_Se	modification of position 54 nt (m5U) in gltW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2590_v1_tRNA_3_Se <==> 1 b2590_v1_tRNA_3_Se_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in gltW by TrmA_mono	1 b2590_v1_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2590_v1_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_54_MODIF_2_Se	modification of position 54 nt (m5U) in gltW by TrmA_mono	1 b2590_v1_tRNA_3_Se_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2590_v1_tRNA_4_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_55_MODIF_1	modification of position 55 nt (Y) in gltW by TruB_mono	1 TruB_mono + 1 b2590_v1_tRNA_4 <==> 1 b2590_v1_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_55_MODIF_1_Se	modification of position 55 nt (Y) in gltW by TruB_mono	1 TruB_mono + 1 b2590_v1_tRNA_4_Se <==> 1 b2590_v1_tRNA_4_Se_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_55_MODIF_2	modification of position 55 nt (Y) in gltW by TruB_mono	1 b2590_v1_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 gltW_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_55_MODIF_2_Se	modification of position 55 nt (Y) in gltW by TruB_mono	1 b2590_v1_tRNA_4_Se_TruB_mono_cplx --> 1 TruB_mono_inact + 1 gltW_tRNA_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2590_v1_tRNA_Mg_BIND	Binding of two Mg2 to b2590_v1_tRNA	1 b2590_v1_RNA + 2 mg2 <==> 1 b2590_v1_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_RNA_10_modif_1	b2591_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 RsmB_mono + 1 amet + 1 b2591_RNA_10 <==> 1 b2591_RNA_10_RsmB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_10_modif_2	b2591_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 b2591_RNA_10_RsmB_mono --> 1 RsmB_mono_inact + 1 ahcys + 1 h + 1 rrsG	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_1_modif_1	b2591_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 MeT_16S_1402 + 2 amet + 1 b2591_RNA_1 <==> 1 b2591_RNA_1_MeT_16S_1402	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_1_modif_2	b2591_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 b2591_RNA_1_MeT_16S_1402 --> 1 MeT_16S_1402_inact + 2 ahcys + 1 b2591_RNA_2 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_2_modif_1	b2591_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 MeT_16S_1407 + 1 amet + 1 b2591_RNA_2 <==> 1 b2591_RNA_2_MeT_16S_1407	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_2_modif_2	b2591_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 b2591_RNA_2_MeT_16S_1407 --> 1 MeT_16S_1407_inact + 1 ahcys + 1 b2591_RNA_3 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_3_modif_1	b2591_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 YggJ_mono + 1 amet + 1 b2591_RNA_3 <==> 1 b2591_RNA_3_YggJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_3_modif_2	b2591_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 b2591_RNA_3_YggJ_mono --> 1 YggJ_mono_inact + 1 ahcys + 1 b2591_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_4_modif_1	b2591_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 MeT_16S_1516 + 1 amet + 1 b2591_RNA_4 <==> 1 b2591_RNA_4_MeT_16S_1516	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_4_modif_2	b2591_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 b2591_RNA_4_MeT_16S_1516 --> 1 MeT_16S_1516_inact + 1 ahcys + 1 b2591_RNA_5 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_5_modif_1	b2591_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b2591_RNA_5 <==> 1 b2591_RNA_5_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_5_modif_2	b2591_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 b2591_RNA_5_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b2591_RNA_6 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_6_modif_1	b2591_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b2591_RNA_6 <==> 1 b2591_RNA_6_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_6_modif_2	b2591_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 b2591_RNA_6_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b2591_RNA_7 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_7_modif_1	b2591_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 RsuA_mono + 1 b2591_RNA_7 <==> 1 b2591_RNA_7_RsuA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_7_modif_2	b2591_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 b2591_RNA_7_RsuA_mono --> 1 RsuA_mono_inact + 1 b2591_RNA_8	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0

b2591_RNA_8_modif_1	b2591_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 MeT_16S_527 + 1 amet + 1 b2591_RNA_8 <==> 1 b2591_RNA_8_MeT_16S_527	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_8_modif_2	b2591_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 b2591_RNA_8_MeT_16S_527 --> 1 MeT_16S_527_inact + 1 ahcy + 1 b2591_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_9_modif_1	b2591_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 MeT_16S_966 + 1 amet + 1 b2591_RNA_9 <==> 1 b2591_RNA_9_MeT_16S_966	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_9_modif_2	b2591_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 b2591_RNA_9_MeT_16S_966 --> 1 MeT_16S_966_inact + 1 ahcy + 1 b2591_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_modif_1	b2591_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 RsmC_mono + 1 amet + 1 b2591_RNA <==> 1 b2591_RNA_RsmC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_RNA_modif_2	b2591_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 b2591_RNA_RsmC_mono --> 1 RsmC_mono_inact + 1 ahcys + 1 b2591_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b2591_v1_RNA_10_modif_1	b2591_v1_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 RsmB_mono + 1 amet + 1 b2591_v1_RNA_10 <==> 1 b2591_v1_RNA_10_RsmB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_10_modif_2	b2591_v1_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 b2591_v1_RNA_10_RsmB_mono --> 1 RsmB_mono_inact + 1 ahcys + 1 h + 1 rrsG	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_1_modif_1	b2591_v1_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 MeT_16S_1402 + 2 amet + 1 b2591_v1_RNA_1 <==> 1 b2591_v1_RNA_1_MeT_16S_1402	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_1_modif_2	b2591_v1_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 b2591_v1_RNA_1_MeT_16S_1402 --> 1 MeT_16S_1402_inact + 2 ahcys + 1 b2591_v1_RNA_2 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_2_modif_1	b2591_v1_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 MeT_16S_1407 + 1 amet + 1 b2591_v1_RNA_2 <==> 1 b2591_v1_RNA_2_MeT_16S_1407	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_2_modif_2	b2591_v1_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 b2591_v1_RNA_2_MeT_16S_1407 --> 1 MeT_16S_1407_inact + 1 ahcys + 1 b2591_v1_RNA_3 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_3_modif_1	b2591_v1_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 YggJ_mono + 1 amet + 1 b2591_v1_RNA_3 <==> 1 b2591_v1_RNA_3_YggJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_3_modif_2	b2591_v1_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 b2591_v1_RNA_3_YggJ_mono --> 1 YggJ_mono_inact + 1 ahcys + 1 b2591_v1_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_4_modif_1	b2591_v1_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 MeT_16S_1516 + 1 amet + 1 b2591_v1_RNA_4 <==> 1 b2591_v1_RNA_4_MeT_16S_1516	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_4_modif_2	b2591_v1_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 b2591_v1_RNA_4_MeT_16S_1516 --> 1 MeT_16S_1516_inact + 1 ahcys + 1 b2591_v1_RNA_5 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_5_modif_1	b2591_v1_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b2591_v1_RNA_5 <==> 1 b2591_v1_RNA_5_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_5_modif_2	b2591_v1_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 b2591_v1_RNA_5_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b2591_v1_RNA_6 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_6_modif_1	b2591_v1_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b2591_v1_RNA_6 <==> 1 b2591_v1_RNA_6_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_6_modif_2	b2591_v1_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 b2591_v1_RNA_6_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b2591_v1_RNA_7 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_7_modif_1	b2591_v1_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 RsuA_mono + 1 b2591_v1_RNA_7 <==> 1 b2591_v1_RNA_7_RsuA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_7_modif_2	b2591_v1_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 b2591_v1_RNA_7_RsuA_mono --> 1 RsuA_mono_inact + 1 b2591_v1_RNA_8	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_8_modif_1	b2591_v1_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 MeT_16S_527 + 1 amet + 1 b2591_v1_RNA_8 <==> 1 b2591_v1_RNA_8_MeT_16S_527	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_8_modif_2	b2591_v1_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 b2591_v1_RNA_8_MeT_16S_527 --> 1 MeT_16S_527_inact + 1 ahcys + 1 b2591_v1_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_9_modif_1	b2591_v1_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 MeT_16S_966 + 1 amet + 1 b2591_v1_RNA_9 <==> 1 b2591_v1_RNA_9_MeT_16S_966	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_9_modif_2	b2591_v1_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 b2591_v1_RNA_9_MeT_16S_966 --> 1 MeT_16S_966_inact + 1 ahcys + 1 b2591_v1_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_modif_1	b2591_v1_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 RsmC_mono + 1 amet + 1 b2591_v1_RNA <==> 1 b2591_v1_RNA_RsmC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2591_v1_RNA_modif_2	b2591_v1_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 b2591_v1_RNA_RsmC_mono --> 1 RsmC_mono_inact + 1 ahcys + 1 b2591_v1_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
b2593_fold_spon	b2593_m folding: spontanous	1 b2593_m --> 1 YfiH_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.94E+03	1935.472	0	9.40E+01	94.024
b2593_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2593_mRNA --> 1 b2593_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
b2593_mRNA_degr1	Degradation of b2593_mRNA I	1 Orn_dim + 182 atp + 1 b2593_mRNA_2 + 1 degradosome + 182 h2o <==> 182 adp + 1 b2593_mRNA_2_degr + 182 h + 182 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
b2593_mRNA_degr2	Degradation of b2593_mRNA II	1 b2593_mRNA_2_degr + 727 h2o --> 1 Orn_dim_inact + 148 amp + 181 cmp + 1 degradosome_inact + 219 gmp + 727 h + 180 ump	irreversible	mRNA degradation	0.00E+00	1.96E-01	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
b2593_maturation1	Polypeptide b2593 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2593_aa <==> 1 b2593_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.14E+03	1.14E+03	0	1.94E+03	1935.472	0	9.40E+01	94.024
b2593_maturation2	b2593 formation	1 b2593_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2593_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.94E+03	1935.472	0	9.40E+01	94.024
b2594_fold_spon	b2594_m folding: spontanous	1 b2594_m_Mg --> 1 RluD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.53E+03	1.53E+03	0	2.61E+03	2611.512	0	1.12E+02	112.404
b2594_ion_BIND	Binding of ions to b2594	1 b2594_m + 1 mg2 <==> 1 b2594_m_Mg	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	1.53E+03	1.53E+03	0	2.61E+03	2611.512	0	1.12E+02	112.404
b2594_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2594_mRNA --> 1 b2594_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
b2594_mRNA_degr1	Degradation of b2594_mRNA I	1 Orn_dim + 245 atp + 1 b2594_mRNA_2 + 1 degradosome + 245 h2o <==> 245 adp + 1 b2594_mRNA_2_degr + 245 h + 245 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
b2594_mRNA_degr2	Degradation of b2594_mRNA II	1 b2594_mRNA_2_degr + 980 h2o --> 1 Orn_dim_inact + 241 amp + 1 atp + 247 cmp + 1 degradosome_inact + 271 gmp + 980 h + 221 ump	irreversible	mRNA degradation	0.00E+00	3.72E-01	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
b2594_maturation1	Polypeptide b2594 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2594_aa <==> 1 b2594_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.53E+03	1.53E+03	0	2.61E+03	2611.512	0	1.12E+02	112.404

b2594_maturation2	b2594 formation	1 b2594_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2594_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.53E+03	1.53E+03	0	2.61E+03	2611.512	0	1.12E+02	112.404
b2606_fold_spon	b2606_m folding: spontanous	1 b2606_m --> 1 RplS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b2606_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2606_mRNA --> 1 b2606_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
b2606_mRNA_degr1	Degradation of b2606_mRNA I	1 Orn_dim + 87 atp + 1 b2606_mRNA_2 + 1 degradosome + 87 h2o <==> 87 adp + 1 b2606_mRNA_2_degr + 87 h + 87 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
b2606_mRNA_degr2	Degradation of b2606_mRNA II	1 b2606_mRNA_2_degr + 347 h2o --> 1 Orn_dim_inact + 88 amp + 78 cmp + 1 degradosome_inact + 90 gmp + 347 h + 92 ump	irreversible	mRNA degradation	0.00E+00	3.37E-01	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
b2606_maturation1	Polypeptide b2606 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2606_aa <==> 1 b2606_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b2606_maturation2	b2606 formation	1 b2606_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2606_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b2607_fold_GroEL/ES_1	b2607_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b2607_m + 1 transGroES_hepta --> 7 adp + 1 b2607_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.41E+03	1.41E+03	0	1.57E+03	1565.008	0	3.82E+02	382.185
b2607_fold_GroEL/ES_2	b2607_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b2607_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 TrmD_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.41E+03	1.41E+03	0	1.57E+03	1565.008	0	3.82E+02	382.185
b2607_fold_GroEL/ES_3	b2607_m folding: GroEL/ES mediated; release of native protein	1 TrmD_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 TrmD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.41E+03	1.41E+03	0	1.57E+03	1565.008	0	3.82E+02	382.185
b2607_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2607_mRNA --> 1 b2607_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
b2607_mRNA_degr1	Degradation of b2607_mRNA I	1 Orn_dim + 192 atp + 1 b2607_mRNA_2 + 1 degradosome + 192 h2o <==> 192 adp + 1 b2607_mRNA_2_degr + 192 h + 192 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
b2607_mRNA_degr2	Degradation of b2607_mRNA II	1 b2607_mRNA_2_degr + 767 h2o --> 1 Orn_dim_inact + 192 amp + 179 cmp + 1 degradosome_inact + 231 gmp + 767 h + 166 ump	irreversible	mRNA degradation	0.00E+00	6.18E-01	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
b2607_maturation1	Polypeptide b2607 peptide deformylase complex	1 Def_mono + 1 b2607_aa <==> 1 b2607_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.41E+03	1.41E+03	0	1.57E+03	1565.008	0	3.82E+02	382.185
b2607_maturation2	b2607 formation	1 b2607_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b2607_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.41E+03	1.41E+03	0	1.57E+03	1565.008	0	3.82E+02	382.185
b2608_fold_GroEL/ES_1	b2608_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b2608_m + 1 transGroES_hepta --> 7 adp + 1 b2608_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.59E+02	8.59E+02	0	9.60E+02	960.3389	0	1.72E+02	171.79
b2608_fold_GroEL/ES_2	b2608_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b2608_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 RimM_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.59E+02	8.59E+02	0	9.60E+02	960.3389	0	1.72E+02	171.79
b2608_fold_GroEL/ES_3	b2608_m folding: GroEL/ES mediated; release of native protein	1 RimM_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 RimM_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.59E+02	8.59E+02	0	9.60E+02	960.3389	0	1.72E+02	171.79
b2608_fold_KJE_1	b2608_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b2608_m <==> 1 b2608_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	8.59E+02	8.59E+02	0	9.60E+02	960.3389	0	1.72E+02	171.79
b2608_fold_KJE_2	b2608_m folding: KJE mediated	1 GrpE_dim + 1 b2608_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 RimM_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.59E+02	8.59E+02	0	9.60E+02	960.3389	0	1.72E+02	171.79
b2608_fold_KJE_3	b2608_m folding: KJE mediated	1 RimM_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 RimM_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.59E+02	8.59E+02	0	9.60E+02	960.3389	0	1.72E+02	171.79
b2608_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2608_mRNA --> 1 b2608_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
b2608_mRNA_degr1	Degradation of b2608_mRNA I	1 Orn_dim + 137 atp + 1 b2608_mRNA_2 + 1 degradosome + 137 h2o <==> 137 adp + 1 b2608_mRNA_2_degr + 137 h + 137 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
b2608_mRNA_degr2	Degradation of b2608_mRNA II	1 b2608_mRNA_2_degr + 548 h2o --> 1 Orn_dim_inact + 145 amp + 121 cmp + 1 degradosome_inact + 148 gmp + 548 h + 135 ump	irreversible	mRNA degradation	0.00E+00	3.11E-01	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
b2608_maturation1	Polypeptide b2608 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2608_aa <==> 1 b2608_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	8.59E+02	8.59E+02	0	9.60E+02	960.3389	0	1.72E+02	171.79
b2608_maturation2	b2608 formation	1 b2608_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2608_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	8.59E+02	8.59E+02	0	9.60E+02	960.3389	0	1.72E+02	171.79
b2609_fold_spon	b2609_m folding: spontanous	1 b2609_m --> 1 RpsP_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b2609_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2609_mRNA --> 1 b2609_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
b2609_mRNA_degr1	Degradation of b2609_mRNA I	1 Orn_dim + 62 atp + 1 b2609_mRNA_2 + 1 degradosome + 62 h2o <==> 62 adp + 1 b2609_mRNA_2_degr + 62 h + 62 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
b2609_mRNA_degr2	Degradation of b2609_mRNA II	1 b2609_mRNA_2_degr + 248 h2o --> 1 Orn_dim_inact + 61 amp + 1 atp + 64 cmp + 1 degradosome_inact + 64 gmp + 248 h + 59 ump	irreversible	mRNA degradation	0.00E+00	2.79E-01	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
b2609_maturation1	Polypeptide b2609 peptide deformylase complex	1 Def_mono + 1 b2609_aa <==> 1 b2609_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b2609_maturation2	b2609 formation	1 b2609_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b2609_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b2614_fold_GroEL/ES_1	b2614_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b2614_m + 1 transGroES_hepta --> 7 adp + 1 b2614_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.11E+03	3.11E+03	0	5.33E+03	5328.918	0	2.07E+02	206.657
b2614_fold_GroEL/ES_2	b2614_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b2614_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 GrpE_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.11E+03	3.11E+03	0	5.33E+03	5328.918	0	2.07E+02	206.657
b2614_fold_GroEL/ES_3	b2614_m folding: GroEL/ES mediated; release of native protein	1 GrpE_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 GrpE_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.11E+03	3.11E+03	0	5.33E+03	5328.918	0	2.07E+02	206.657
b2614_fold_KJE_1	b2614_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b2614_m <==> 1 b2614_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	3.11E+03	3.11E+03	0	5.33E+03	5328.918	0	2.07E+02	206.657
b2614_fold_KJE_2	b2614_m folding: KJE mediated	1 GrpE_dim + 1 b2614_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 GrpE_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.11E+03	3.11E+03	0	5.33E+03	5328.918	0	2.07E+02	206.657
b2614_fold_KJE_3	b2614_m folding: KJE mediated	1 GrpE_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 GrpE_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.11E+03	3.11E+03	0	5.33E+03	5328.918	0	2.07E+02	206.657
b2614_fold_spon	b2614_m folding: spontanous	1 b2614_m --> 1 GrpE_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.11E+03	3.11E+03	0	5.33E+03	5328.918	0	2.07E+02	206.657
b2614_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2614_mRNA --> 1 b2614_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.64E+02	2.64E+02	0	4.66E+02	465.9471	0	2.87E-01	0.287
b2614_mRNA_degr1	Degradation of b2614_mRNA I	1 Orn_dim + 148 atp + 1 b2614_mRNA_2 + 1 degradosome + 148 h2o <==> 148 adp + 1 b2614_mRNA_2_degr + 148 h + 148 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.64E+02	2.64E+02	0	4.66E+02	465.9471	0	2.87E-01	0.287
b2614_mRNA_degr2	Degradation of b2614_mRNA II	1 b2614_mRNA_2_degr + 593 h2o --> 1 Orn_dim_inact + 165 amp + 1 atp + 121 cmp + 1 degradosome_inact + 178 gmp + 593 h + 129 ump	irreversible	mRNA degradation	0.00E+00	2.87E-01	0	2.64E+02	2.64E+02	0	4.66E+02	465.9471	0	2.87E-01	0.287
b2614_maturation1	Polypeptide b2614 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2614_aa <==> 1 b2614_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.11E+03	3.11E+03	0	5.33E+03	5328.918	0	2.07E+02	206.657
b2614_maturation2	b2614 formation	1 b2614_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2614_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.11E+03	3.11E+03	0	5.33E+03	5328.918	0	2.07E+02	206.657
b2652_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in ileY by TrmH_dim	1 TrmH_dim + 1 amet + 1 b2652_tRNA_Mg2 <==> 1 b2652_tRNA_Mg2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001

b2652_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in ileY by TrmH_dim	1 b2652_tRNA_Mg2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b2652_tRNA_1 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_20A_MODIF_1	modification of position 20A nt (D) in ileY by Dus_gen	1 Dus_gen + 1 b2652_tRNA_2 + 1 h + 1 nadph <==> 1 b2652_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_20A_MODIF_2	modification of position 20A nt (D) in ileY by Dus_gen	1 b2652_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2652_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_20_MODIF_1	modification of position 20 nt (D) in ileY by Dus_gen	1 Dus_gen + 1 b2652_tRNA_1 + 1 h + 1 nadph <==> 1 b2652_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_20_MODIF_2	modification of position 20 nt (D) in ileY by Dus_gen	1 b2652_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2652_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_34_MODIF_1	modification of position 34 nt (k2C) in ileY by TilS_mono	1 TilS_mono + 1 atp + 1 b2652_tRNA_3 + 1 lys-L <==> 1 b2652_tRNA_3_TilS_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_34_MODIF_2	modification of position 34 nt (k2C) in ileY by TilS_mono	1 b2652_tRNA_3_TilS_mono_cplx --> 1 TilS_mono_inact + 1 amp + b2652_tRNA_4 + 2 h + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in ileY by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b2652_tRNA_4 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b2652_tRNA_4_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in ileY by Up_tRNA_pos_37_t6A	1 b2652_tRNA_4_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b2652_tRNA_5 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_39_MODIF_1	modification of position 39 nt (Y) in ileY by TruA_dim	1 TruA_dim + 1 b2652_tRNA_5 <==> 1 b2652_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_39_MODIF_2	modification of position 39 nt (Y) in ileY by TruA_dim	1 b2652_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b2652_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in ileY by YggH_mono	1 YggH_mono + 1 amet + 1 b2652_tRNA_6 <==> 1 b2652_tRNA_6_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in ileY by YggH_mono	1 b2652_tRNA_6_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2652_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in ileY by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b2652_tRNA_7 <==> 1 b2652_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in ileY by AcpT_tRNA_pos_47_acp3U	1 b2652_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b2652_tRNA_8 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in ileY by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2652_tRNA_8 <==> 1 b2652_tRNA_8_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in ileY by TrmA_mono	1 b2652_tRNA_8_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2652_tRNA_9 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_55_MODIF_1	modification of position 55 nt (Y) in ileY by TruB_mono	1 TruB_mono + 1 b2652_tRNA_9 <==> 1 b2652_tRNA_9_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_55_MODIF_2	modification of position 55 nt (Y) in ileY by TruB_mono	1 b2652_tRNA_9_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2652_tRNA_10	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in ileY by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b2652_tRNA_10 + 1 mg2 + 1 trdrd <==> 1 b2652_tRNA_10_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in ileY by ThiI_mono	1 b2652_tRNA_10_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 ileY_tRNA + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2652_tRNA_Mg_BIND	Binding of two Mg2 to b2652_tRNA	1 b2652_RNA + 2 mg2 <==> 1 b2652_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
b2691_tRNA_17_MODIF_1	modification of position 17 nt (D) in argQ by Dus_gen	1 Dus_gen + 1 b2691_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2691_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_17_MODIF_2	modification of position 17 nt (D) in argQ by Dus_gen	1 b2691_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2691_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_20A_MODIF_1	modification of position 20A nt (D) in argQ by Dus_gen	1 Dus_gen + 1 b2691_tRNA_1 + 1 h + 1 nadph <==> 1 b2691_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_20A_MODIF_2	modification of position 20A nt (D) in argQ by Dus_gen	1 b2691_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2691_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_34_MODIF_1	modification of position 34 nt (I) in argQ by TadA_dim	1 TadA_dim + 1 b2691_tRNA_2 + 1 h2o <==> 1 b2691_tRNA_2_TadA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_34_MODIF_2	modification of position 34 nt (I) in argQ by TadA_dim	1 b2691_tRNA_2_TadA_dim_cplx --> 1 TadA_dim_inact + 1 b2691_tRNA_3 + 1 nh3	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in argQ by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b2691_tRNA_3 <==> 1 b2691_tRNA_3_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in argQ by MeT_tRNA_pos_37_m2A	1 b2691_tRNA_3_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b2691_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in argQ by YggH_mono	1 YggH_mono + 1 amet + 1 b2691_tRNA_4 <==> 1 b2691_tRNA_4_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in argQ by YggH_mono	1 b2691_tRNA_4_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2691_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in argQ by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b2691_tRNA_5 <==> 1 b2691_tRNA_5_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in argQ by AcpT_tRNA_pos_47_acp3U	1 b2691_tRNA_5_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b2691_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in argQ by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2691_tRNA_6 <==> 1 b2691_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in argQ by TrmA_mono	1 b2691_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2691_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_55_MODIF_1	modification of position 55 nt (Y) in argQ by TruB_mono	1 TruB_mono + 1 b2691_tRNA_7 <==> 1 b2691_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_55_MODIF_2	modification of position 55 nt (Y) in argQ by TruB_mono	1 b2691_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2691_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in argQ by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b2691_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b2691_tRNA_8_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in argQ by ThiI_mono	1 b2691_tRNA_8_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 argQ_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2691_tRNA_Mg_BIND	Binding of two Mg2 to b2691_tRNA	1 b2691_RNA + 2 mg2 <==> 1 b2691_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_17_MODIF_1	modification of position 17 nt (D) in argZ by Dus_gen	1 Dus_gen + 1 b2692_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2692_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_17_MODIF_2	modification of position 17 nt (D) in argZ by Dus_gen	1 b2692_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2692_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_20A_MODIF_1	modification of position 20A nt (D) in argZ by Dus_gen	1 Dus_gen + 1 b2692_tRNA_1 + 1 h + 1 nadph <==> 1 b2692_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_20A_MODIF_2	modification of position 20A nt (D) in argZ by Dus_gen	1 b2692_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2692_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_34_MODIF_1	modification of position 34 nt (I) in argZ by TadA_dim	1 TadA_dim + 1 b2692_tRNA_2 + 1 h2o <==> 1 b2692_tRNA_2_TadA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_34_MODIF_2	modification of position 34 nt (I) in argZ by TadA_dim	1 b2692_tRNA_2_TadA_dim_cplx --> 1 TadA_dim_inact + 1 b2692_tRNA_3 + 1 nh3	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in argZ by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b2692_tRNA_3 <==> 1 b2692_tRNA_3_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in argZ by MeT_tRNA_pos_37_m2A	1 b2692_tRNA_3_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b2692_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in argZ by YggH_mono	1 YggH_mono + 1 amet + 1 b2692_tRNA_4 <==> 1 b2692_tRNA_4_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in argZ by YggH_mono	1 b2692_tRNA_4_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2692_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87

b2692_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in argZ by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b2692_tRNA_5 <==> 1 b2692_tRNA_5_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in argZ by AcpT_tRNA_pos_47_acp3U	1 b2692_tRNA_5_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b2692_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in argZ by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2692_tRNA_6 <==> 1 b2692_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in argZ by TrmA_mono	1 b2692_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2692_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_55_MODIF_1	modification of position 55 nt (Y) in argZ by TruB_mono	1 TruB_mono + 1 b2692_tRNA_7 <==> 1 b2692_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_55_MODIF_2	modification of position 55 nt (Y) in argZ by TruB_mono	1 b2692_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2692_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in argZ by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b2692_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b2692_tRNA_8_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in argZ by ThiI_mono	1 b2692_tRNA_8_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 argZ_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2692_tRNA_Mg_BIND	Binding of two Mg2 to b2692_tRNA	1 b2692_RNA + 2 mg2 <==> 1 b2692_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_17_MODIF_1	modification of position 17 nt (D) in argY by Dus_gen	1 Dus_gen + 1 b2693_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2693_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_17_MODIF_2	modification of position 17 nt (D) in argY by Dus_gen	1 b2693_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2693_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_20A_MODIF_1	modification of position 20A nt (D) in argY by Dus_gen	1 Dus_gen + 1 b2693_tRNA_1 + 1 h + 1 nadph <==> 1 b2693_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_20A_MODIF_2	modification of position 20A nt (D) in argY by Dus_gen	1 b2693_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2693_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_34_MODIF_1	modification of position 34 nt (I) in argY by TadA_dim	1 TadA_dim + 1 b2693_tRNA_2 + 1 h2o <==> 1 b2693_tRNA_2_TadA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_34_MODIF_2	modification of position 34 nt (I) in argY by TadA_dim	1 b2693_tRNA_2_TadA_dim_cplx --> 1 TadA_dim_inact + 1 b2693_tRNA_3 + 1 nh3	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in argY by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b2693_tRNA_3 <==> 1 b2693_tRNA_3_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in argY by MeT_tRNA_pos_37_m2A	1 b2693_tRNA_3_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b2693_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in argY by YggH_mono	1 YggH_mono + 1 amet + 1 b2693_tRNA_4 <==> 1 b2693_tRNA_4_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in argY by YggH_mono	1 b2693_tRNA_4_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2693_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in argY by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b2693_tRNA_5 <==> 1 b2693_tRNA_5_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in argY by AcpT_tRNA_pos_47_acp3U	1 b2693_tRNA_5_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b2693_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in argY by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2693_tRNA_6 <==> 1 b2693_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in argY by TrmA_mono	1 b2693_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2693_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_55_MODIF_1	modification of position 55 nt (Y) in argY by TruB_mono	1 TruB_mono + 1 b2693_tRNA_7 <==> 1 b2693_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_55_MODIF_2	modification of position 55 nt (Y) in argY by TruB_mono	1 b2693_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2693_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in argY by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b2693_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b2693_tRNA_8_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in argY by ThiI_mono	1 b2693_tRNA_8_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 argY_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2693_tRNA_Mg_BIND	Binding of two Mg2 to b2693_tRNA	1 b2693_RNA + 2 mg2 <==> 1 b2693_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_17_MODIF_1	modification of position 17 nt (D) in argV by Dus_gen	1 Dus_gen + 1 b2694_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2694_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_17_MODIF_2	modification of position 17 nt (D) in argV by Dus_gen	1 b2694_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2694_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_20A_MODIF_1	modification of position 20A nt (D) in argV by Dus_gen	1 Dus_gen + 1 b2694_tRNA_1 + 1 h + 1 nadph <==> 1 b2694_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_20A_MODIF_2	modification of position 20A nt (D) in argV by Dus_gen	1 b2694_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2694_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_34_MODIF_1	modification of position 34 nt (I) in argV by TadA_dim	1 TadA_dim + 1 b2694_tRNA_2 + 1 h2o <==> 1 b2694_tRNA_2_TadA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_34_MODIF_2	modification of position 34 nt (I) in argV by TadA_dim	1 b2694_tRNA_2_TadA_dim_cplx --> 1 TadA_dim_inact + 1 b2694_tRNA_3 + 1 nh3	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in argV by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b2694_tRNA_3 <==> 1 b2694_tRNA_3_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in argV by MeT_tRNA_pos_37_m2A	1 b2694_tRNA_3_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b2694_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in argV by YggH_mono	1 YggH_mono + 1 amet + 1 b2694_tRNA_4 <==> 1 b2694_tRNA_4_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in argV by YggH_mono	1 b2694_tRNA_4_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2694_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in argV by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b2694_tRNA_5 <==> 1 b2694_tRNA_5_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in argV by AcpT_tRNA_pos_47_acp3U	1 b2694_tRNA_5_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b2694_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in argV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2694_tRNA_6 <==> 1 b2694_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in argV by TrmA_mono	1 b2694_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2694_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_55_MODIF_1	modification of position 55 nt (Y) in argV by TruB_mono	1 TruB_mono + 1 b2694_tRNA_7 <==> 1 b2694_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_55_MODIF_2	modification of position 55 nt (Y) in argV by TruB_mono	1 b2694_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2694_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in argV by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b2694_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b2694_tRNA_8_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in argV by ThiI_mono	1 b2694_tRNA_8_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 argV_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2694_tRNA_Mg_BIND	Binding of two Mg2 to b2694_tRNA	1 b2694_RNA + 2 mg2 <==> 1 b2694_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2695_tRNA_20A_MODIF_1	modification of position 20A nt (D) in serV by Dus_gen	1 Dus_gen + 1 b2695_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2695_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2695_tRNA_20A_MODIF_2	modification of position 20A nt (D) in serV by Dus_gen	1 b2695_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2695_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2695_tRNA_32_MODIF_1	modification of position 32 nt (s2C) in serV by YdaO_mono	1 IscS_dim_S-SH + 1 YdaO_mono + 1 atp + 1 b2695_tRNA_1 + 1 mg2 + 1 trdrd <==> 1 b2695_tRNA_1_YdaO_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87

b2695_tRNA_32_MODIF_2	modification of position 32 nt (s2C) in serV by YdaO_mono	1 b2695_tRNA_1_YdaO_mono_cplx --> 1 IscS_dim_S-H + 1 YdaO_mono_inact + 1 amp + 1 b2695_tRNA_2 + 1 h + 1 mg2 + 1 pp + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2695_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in serV by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b2695_tRNA_2 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b2695_tRNA_2_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2695_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in serV by Up_tRNA_pos_37_t6A	1 b2695_tRNA_2_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b2695_tRNA_3 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2695_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in serV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2695_tRNA_3 <==> 1 b2695_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2695_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in serV by TrmA_mono	1 b2695_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2695_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2695_tRNA_55_MODIF_1	modification of position 55 nt (Y) in serV by TruB_mono	1 TruB_mono + 1 b2695_tRNA_4 <==> 1 b2695_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2695_tRNA_55_MODIF_2	modification of position 55 nt (Y) in serV by TruB_mono	1 b2695_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2695_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2695_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in serV by Thil_mono	1 IscS_dim_S-SH + 1 Thil_mono + 1 atp + 1 b2695_tRNA_5 + 1 mg2 + 1 trdrd <==> 1 b2695_tRNA_5_Thil_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2695_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in serV by Thil_mono	1 b2695_tRNA_5_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 serV_tRNA + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2695_tRNA_Mg_BIND	Binding of two Mg2 to b2695_tRNA	1 b2695_RNA + 2 mg2 <==> 1 b2695_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
b2697_fold_KJE_1	b2697_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b2697_m_Zn <==> 1 b2697_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.65E+03	2.65E+03	0	3.08E+03	3080.363	0	1.25E+02	125.409
b2697_fold_KJE_2	b2697_m folding: KJE mediated	1 GrpE_dim + 1 b2697_m_DnaKJ_complex + 1 h2o --> 1 AlaS_DnaK_GrpE_complex + 1 DnaJ_dim_inact + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.65E+03	2.65E+03	0	3.08E+03	3080.363	0	1.25E+02	125.409
b2697_fold_KJE_3	b2697_m folding: KJE mediated	1 AlaS_DnaK_GrpE_complex + 1 atp --> 1 AlaS_mono + 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.65E+03	2.65E+03	0	3.08E+03	3080.363	0	1.25E+02	125.409
b2697_fold_spon	b2697_m folding: spontanous	1 b2697_m_Zn --> 1 AlaS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.65E+03	2.65E+03	0	3.08E+03	3080.363	0	1.25E+02	125.409
b2697_ion_BIND	Binding of ions to b2697	1 b2697_m + 1 zn2 <==> 1 b2697_m_Zn	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	2.65E+03	2.65E+03	0	3.08E+03	3080.363	0	1.25E+02	125.409
b2697_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2697_mRNA --> 1 b2697_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.01E+01	5.01E+01	0	8.85E+01	88.508	0	5.39E-01	0.539
b2697_mRNA_degr1	Degradation of b2697_mRNA I	1 Orn_dim + 657 atp + 1 b2697_mRNA_2 + 1 degradosome + 657 h2o <==> 657 adp + 1 b2697_mRNA_2_degr + 657 h + 657 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.01E+01	5.01E+01	0	8.85E+01	88.508	0	5.39E-01	0.539
b2697_mRNA_degr2	Degradation of b2697_mRNA II	1 b2697_mRNA_2_degr + 2630 h2o --> 1 Orn_dim_inact + 626 amp + 1 atp + 637 cmp + 1 degradosome_inact + 774 gmp + 2630 h + 593 ump	irreversible	mRNA degradation	0.00E+00	5.39E-01	0	5.01E+01	5.01E+01	0	8.85E+01	88.508	0	5.39E-01	0.539
b2697_maturation1	Polypeptide b2697 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2697_aa <==> 1 b2697_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.65E+03	2.65E+03	0	3.08E+03	3080.363	0	1.25E+02	125.409
b2697_maturation2	b2697 formation	1 b2697_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2697_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.65E+03	2.65E+03	0	3.08E+03	3080.363	0	1.25E+02	125.409
b2697_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2697_v1_mRNA --> 1 b2697_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.01E+01	5.01E+01	0	8.85E+01	88.508	0	5.39E-01	0.539
b2741_fold_spon	b2741_m folding: spontanous	1 b2741_m --> 1 RpoS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.83E+03	2.83E+03	0	4.81E+03	4808.371	0	1.39E+02	138.719
b2741_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2741_mRNA --> 1 b2741_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.51E+02	250.576	0	2.31E-01	0.231
b2741_mRNA_degr1	Degradation of b2741_mRNA I	1 Orn_dim + 248 atp + 1 b2741_mRNA_2 + 1 degradosome + 248 h2o <==> 248 adp + 1 b2741_mRNA_2_degr + 248 h + 248 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.42E+02	1.42E+02	0	2.51E+02	250.576	0	2.31E-01	0.231
b2741_mRNA_degr2	Degradation of b2741_mRNA II	1 b2741_mRNA_2_degr + 992 h2o --> 1 Orn_dim_inact + 253 amp + 1 atp + 225 cmp + 1 degradosome_inact + 292 gmp + 992 h + 222 ump	irreversible	mRNA degradation	0.00E+00	2.31E-01	0	1.42E+02	1.42E+02	0	2.51E+02	250.576	0	2.31E-01	0.231
b2741_maturation1	Polypeptide b2741 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2741_aa <==> 1 b2741_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.83E+03	2.83E+03	0	4.81E+03	4808.371	0	1.39E+02	138.719
b2741_maturation2	b2741 formation	1 b2741_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2741_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.83E+03	2.83E+03	0	4.81E+03	4808.371	0	1.39E+02	138.719
b2741_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2741_v1_mRNA --> 1 b2741_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
b2741_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2741_v2_mRNA --> 1 b2741_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
b2742_fold_spon	b2742_m folding: spontanous	1 b2742_m --> 1 NlpD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.55E+03	1.55E+03	0	2.53E+03	2529.614	0	2.71E+02	271.282
b2742_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2742_mRNA --> 1 b2742_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
b2742_mRNA_degr1	Degradation of b2742_mRNA I	1 Orn_dim + 285 atp + 1 b2742_mRNA_2 + 1 degradosome + 285 h2o <==> 285 adp + 1 b2742_mRNA_2_degr + 285 h + 285 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
b2742_mRNA_degr2	Degradation of b2742_mRNA II	1 b2742_mRNA_2_degr + 1139 h2o --> 1 Orn_dim_inact + 312 amp + 1 atp + 308 cmp + 1 degradosome_inact + 290 gmp + 1139 h + 229 ump	irreversible	mRNA degradation	0.00E+00	4.02E-01	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
b2742_maturation1	Polypeptide b2742 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2742_aa <==> 1 b2742_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.55E+03	1.55E+03	0	2.53E+03	2529.614	0	2.71E+02	271.282
b2742_maturation2	b2742 formation	1 b2742_def_map_cplx + 26 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 4 ala-L + 2 arg-L + 1 b2742_m + 1 for + 2 gly + 1 ile-L + 4 leu-L + 1 lys-L + 1 met-L + 1 phe-L + 1 pro-L + 4 ser-L + 1 thL + 1 trp-L + 2 val-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.55E+03	1.55E+03	0	2.53E+03	2529.614	0	2.71E+02	271.282
b2742_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2742_v1_mRNA --> 1 b2742_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
b2745_DNA_act_bind	b2745_DNA binding of activator	1 b2745_DNA_neu --> 1 b2745_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.34E+02	1.34E+02	0	2.37E+02	236.8891	0	2.29E-01	0.229
b2745_fold_spon	b2745_m folding: spontanous	1 b2745_m --> 1 TruD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.77E+03	2.77E+03	0	4.82E+03	4823.381	0	9.02E+01	90.18
b2745_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2745_mRNA --> 1 b2745_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.34E+02	1.34E+02	0	2.37E+02	236.8891	0	2.29E-01	0.229
b2745_mRNA_degr1	Degradation of b2745_mRNA I	1 Orn_dim + 262 atp + 1 b2745_mRNA_2 + 1 degradosome + 262 h2o <==> 262 adp + 1 b2745_mRNA_2_degr + 262 h + 262 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.34E+02	1.34E+02	0	2.37E+02	236.8891	0	2.29E-01	0.229
b2745_mRNA_degr2	Degradation of b2745_mRNA II	1 b2745_mRNA_2_degr + 1049 h2o --> 1 Orn_dim_inact + 261 amp + 1 atp + 238 cmp + 1 degradosome_inact + 310 gmp + 1049 h + 240 ump	irreversible	mRNA degradation	0.00E+00	2.29E-01	0	1.34E+02	1.34E+02	0	2.37E+02	236.8891	0	2.29E-01	0.229
b2745_maturation1	Polypeptide b2745 peptide deformylase complex	1 Def_mono + 1 b2745_aa <==> 1 b2745_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.77E+03	2.77E+03	0	4.82E+03	4823.381	0	9.02E+01	90.18
b2745_maturation2	b2745 formation	1 b2745_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b2745_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.77E+03	2.77E+03	0	4.82E+03	4823.381	0	9.02E+01	90.18
b2779_fold_GroEL/ES_1	b2779_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b2779_m_Mg + 1 transGroES_hepta --> 7 adp + 1 b2779_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b2779_fold_GroEL/ES_2	b2779_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b2779_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 Eno_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b2779_fold_GroEL/ES_3	b2779_m folding: GroEL/ES mediated; release of native protein	1 Eno_GroEL.(7)ADP.transGroES --> 1 Eno_mono + 1 GroEL.(7)ADP.transGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629

b2779_fold_KJE_1	b2779_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b2779_m_Mg <==> 1 b2779_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b2779_fold_KJE_2	b2779_m folding: KJE mediated	1 GrpE_dim + 1 b2779_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 Eno_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b2779_fold_KJE_3	b2779_m folding: KJE mediated	1 Eno_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + Eno_mono + 1 GrpE_dim_inact	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b2779_fold_spon	b2779_m folding: spontanous	1 b2779_m_Mg --> 1 Eno_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b2779_ion_BIND	Binding of ions to b2779	1 b2779_m + 2 mg2 <==> 1 b2779_m_Mg	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b2779_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2779_mRNA --> 1 b2779_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.52E+01	75.1818	0	4.14E-01	0.414
b2779_mRNA_degr1	Degradation of b2779_mRNA I	1 Orn_dim + 324 atp + 1 b2779_mRNA_2 + 1 degradosome + 324 h2o <==> 324 adp + 1 b2779_mRNA_2_degr + 324 h + 324 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.31E+01	4.31E+01	0	7.52E+01	75.1818	0	4.14E-01	0.414
b2779_mRNA_degr2	Degradation of b2779_mRNA II	1 b2779_mRNA_2_degr + 1298 h2o --> 1 Orn_dim_inact + 354 amp 320 cmp + 1 degradosome_inact + 334 gmp + 1298 h + 291 ump	irreversible	mRNA degradation	0.00E+00	4.14E-01	0	4.31E+01	4.31E+01	0	7.52E+01	75.1818	0	4.14E-01	0.414
b2779_maturation1	Polypeptide b2779 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2779_aa <==> 1 b2779_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b2779_maturation2	b2779 formation	1 b2779_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2779_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b2780_fold_KJE_1	b2780_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b2780_m <==> 1 b2780_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	1.57E+03	1.57E+03	0	2.60E+03	2597.498	0	2.05E+02	204.928
b2780_fold_KJE_2	b2780_m folding: KJE mediated	1 GrpE_dim + 1 b2780_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 PyrG_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.57E+03	1.57E+03	0	2.60E+03	2597.498	0	2.05E+02	204.928
b2780_fold_KJE_3	b2780_m folding: KJE mediated	1 PyrG_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 PyrG_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.57E+03	1.57E+03	0	2.60E+03	2597.498	0	2.05E+02	204.928
b2780_fold_spon	b2780_m folding: spontanous	1 b2780_m --> 1 PyrG_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.57E+03	1.57E+03	0	2.60E+03	2597.498	0	2.05E+02	204.928
b2780_mRNA_degr1	Degradation of b2780_mRNA I	1 Orn_dim + 409 atp + 1 b2780_mRNA_2 + 1 degradosome + 409 h2o <==> 409 adp + 1 b2780_mRNA_2_degr + 409 h + 409 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.31E+01	4.31E+01	0	7.52E+01	75.1818	0	4.14E-01	0.414
b2780_mRNA_degr2	Degradation of b2780_mRNA II	1 b2780_mRNA_2_degr + 1637 h2o --> 1 Orn_dim_inact + 397 amp 1 atp + 406 cmp + 1 degradosome_inact + 444 gmp + 1637 h + 390 ump	irreversible	mRNA degradation	0.00E+00	5.82E-01	0	4.31E+01	4.31E+01	0	7.52E+01	75.1818	0	4.14E-01	0.414
b2780_maturation1	Polypeptide b2780 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2780_aa <==> 1 b2780_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.57E+03	1.57E+03	0	2.60E+03	2597.498	0	2.05E+02	204.928
b2780_maturation2	b2780 formation	1 b2780_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2780_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.57E+03	1.57E+03	0	2.60E+03	2597.498	0	2.05E+02	204.928
b2780_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2780_v2_mRNA --> 1 b2780_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.52E+01	75.1818	0	4.14E-01	0.414
b2785_fold_spon	b2785_m folding: spontanous	1 b2785_m_FeS --> 1 RumA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.56E+03	2.56E+03	0	4.47E+03	4466.434	0	7.79E+01	77.8625
b2785_iron_sulfur_BIND1	Incorporation of [4Fe-4S]2+ in b2785	1 IscU_dim_[4Fe-4S] + 1 b2785_m <==> 1 b2785_m_IscU_cplx	reversible	Iron-sulfur cluster incorporation	-1.00E+09	1.00E+09	0	2.56E+03	2.56E+03	0	4.47E+03	4466.434	0	7.79E+01	77.8625
b2785_iron_sulfur_BIND2	Incorporation of [4Fe-4S]2+ in b2785	1 b2785_m_IscU_cplx <==> 2 IscU_mono + 1 b2785_m_FeS	reversible	Iron-sulfur cluster incorporation	-1.00E+09	1.00E+09	0	2.56E+03	2.56E+03	0	4.47E+03	4466.434	0	7.79E+01	77.8625
b2785_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2785_mRNA --> 1 b2785_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.95E+01	9.95E+01	0	1.76E+02	175.6374	0	9.45E-02	0.0945
b2785_mRNA_degr1	Degradation of b2785_mRNA I	1 Orn_dim + 325 atp + 1 b2785_mRNA_2 + 1 degradosome + 325 h2o <==> 325 adp + 1 b2785_mRNA_2_degr + 325 h + 325 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.95E+01	9.95E+01	0	1.76E+02	175.6374	0	9.45E-02	0.0945
b2785_mRNA_degr2	Degradation of b2785_mRNA II	1 b2785_mRNA_2_degr + 1301 h2o --> 1 Orn_dim_inact + 330 amp 1 atp + 321 cmp + 1 degradosome_inact + 349 gmp + 1301 h + 301 ump	irreversible	mRNA degradation	0.00E+00	9.45E-02	0	9.95E+01	9.95E+01	0	1.76E+02	175.6374	0	9.45E-02	0.0945
b2785_maturation1	Polypeptide b2785 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2785_aa <==> 1 b2785_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.56E+03	2.56E+03	0	4.47E+03	4466.434	0	7.79E+01	77.8625
b2785_maturation2	b2785 formation	1 b2785_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2785_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.56E+03	2.56E+03	0	4.47E+03	4466.434	0	7.79E+01	77.8625
b2790_fold_spon	b2790_m folding: spontanous	1 b2790_m --> 1 YqcA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.47E+02	7.47E+02	0	1.25E+03	1253.289	0	8.63E+01	86.312
b2790_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2790_mRNA --> 1 b2790_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
b2790_mRNA_degr1	Degradation of b2790_mRNA I	1 Orn_dim + 112 atp + 1 b2790_mRNA_2 + 1 degradosome + 112 h2o <==> 112 adp + 1 b2790_mRNA_2_degr + 112 h + 112 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
b2790_mRNA_degr2	Degradation of b2790_mRNA II	1 b2790_mRNA_2_degr + 449 h2o --> 1 Orn_dim_inact + 107 amp + 100 cmp + 1 degradosome_inact + 137 gmp + 449 h + 106 ump	irreversible	mRNA degradation	0.00E+00	2.69E-01	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
b2790_maturation1	Polypeptide b2790 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2790_aa <==> 1 b2790_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.47E+02	7.47E+02	0	1.25E+03	1253.289	0	8.63E+01	86.312
b2790_maturation2	b2790 formation	1 b2790_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2790_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.47E+02	7.47E+02	0	1.25E+03	1253.289	0	8.63E+01	86.312
b2791_fold_spon	b2791_m folding: spontanous	1 b2791_m --> 1 YqcB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	2.28E+03	2282.417	0	9.43E+01	94.335
b2791_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2791_mRNA --> 1 b2791_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
b2791_mRNA_degr1	Degradation of b2791_mRNA I	1 Orn_dim + 195 atp + 1 b2791_mRNA_2 + 1 degradosome + 195 h2o <==> 195 adp + 1 b2791_mRNA_2_degr + 195 h + 195 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
b2791_mRNA_degr2	Degradation of b2791_mRNA II	1 b2791_mRNA_2_degr + 781 h2o --> 1 Orn_dim_inact + 184 amp + 196 cmp + 1 degradosome_inact + 227 gmp + 781 h + 175 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
b2791_maturation1	Polypeptide b2791 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2791_aa <==> 1 b2791_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	2.28E+03	2282.417	0	9.43E+01	94.335
b2791_maturation2	b2791 formation	1 b2791_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2791_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	2.28E+03	2282.417	0	9.43E+01	94.335
b2792_fold_spon	b2792_m folding: spontanous	1 b2792_m --> 1 YqcC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.73E+02	5.73E+02	0	9.53E+02	953.1668	0	7.79E+01	77.934
b2792_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2792_mRNA --> 1 b2792_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
b2792_mRNA_degr1	Degradation of b2792_mRNA I	1 Orn_dim + 82 atp + 1 b2792_mRNA_2 + 1 degradosome + 82 h2o <==> 82 adp + 1 b2792_mRNA_2_degr + 82 h + 82 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
b2792_mRNA_degr2	Degradation of b2792_mRNA II	1 b2792_mRNA_2_degr + 329 h2o --> 1 Orn_dim_inact + 77 amp + 1 atp + 87 cmp + 1 degradosome_inact + 86 gmp + 329 h + 79 ump	irreversible	mRNA degradation	0.00E+00	2.03E-01	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
b2792_maturation1	Polypeptide b2792 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2792_aa <==> 1 b2792_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.73E+02	5.73E+02	0	9.53E+02	953.1668	0	7.79E+01	77.934
b2792_maturation2	b2792 formation	1 b2792_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2792_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.73E+02	5.73E+02	0	9.53E+02	953.1668	0	7.79E+01	77.934
b2794_fold_spon	b2794_m folding: spontanous	1 b2794_m --> 1 QueF_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.52E+03	2.52E+03	0	4.40E+03	4400.412	0	6.52E+01	65.184
b2794_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2794_mRNA --> 1 b2794_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.71E+02	271.0557	0	1.04E-01	0.104

b2794_mRNA_degr1	Degradation of b2794_mRNA I	1 Orn_dim + 212 atp + 1 b2794_mRNA_2 + 1 degradosome + 212 h2o <==> 212 adp + 1 b2794_mRNA_2_degr + 212 h + 212 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.54E+02	1.54E+02	0	2.71E+02	271.0557	0	1.04E-01	0.104
b2794_mRNA_degr2	Degradation of b2794_mRNA II	1 b2794_mRNA_2_degr + 848 h2o --> 1 Orn_dim_inact + 219 amp + 1 atp + 208 cmp + 1 degradosome_inact + 207 gmp + 848 h + 214 ump	irreversible	mRNA degradation	0.00E+00	1.04E-01	0	1.54E+02	1.54E+02	0	2.71E+02	271.0557	0	1.04E-01	0.104
b2794_maturation1	Polypeptide b2794 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2794_aa <==> 1 b2794_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.52E+03	2.52E+03	0	4.40E+03	4400.412	0	6.52E+01	65.184
b2794_maturation2	b2794 formation	1 b2794_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2794_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.52E+03	2.52E+03	0	4.40E+03	4400.412	0	6.52E+01	65.184
b2814_tRNA_20_MODIF_1	modification of position 20 nt (D) in metZ by DusA_mono	1 DusA_mono + 1 b2814_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2814_tRNA_Mg2_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2814_tRNA_20_MODIF_2	modification of position 20 nt (D) in metZ by DusA_mono	1 b2814_tRNA_Mg2_DusA_mono_cplx --> 1 DusA_mono + 1 b2814_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2814_tRNA_32_MODIF_1	modification of position 32 nt (Cm) in metZ by MeT_tRNA_pos_32_Cm	1 MeT_tRNA_pos_32_Cm + 1 amet + 1 b2814_tRNA_1 <==> 1 b2814_tRNA_1_MeT_tRNA_pos_32_Cm_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2814_tRNA_32_MODIF_2	modification of position 32 nt (Cm) in metZ by MeT_tRNA_pos_32_Cm	1 b2814_tRNA_1_MeT_tRNA_pos_32_Cm_cplx --> 1 MeT_tRNA_pos_32_Cm_inact + 1 ahcys + 1 b2814_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2814_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in metZ by YggH_mono	1 YggH_mono + 1 amet + 1 b2814_tRNA_2 <==> 1 b2814_tRNA_2_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2814_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in metZ by YggH_mono	1 b2814_tRNA_2_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2814_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2814_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in metZ by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2814_tRNA_3 <==> 1 b2814_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2814_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in metZ by TrmA_mono	1 b2814_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2814_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2814_tRNA_55_MODIF_1	modification of position 55 nt (Y) in metZ by TruB_mono	1 TruB_mono + 1 b2814_tRNA_4 <==> 1 b2814_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2814_tRNA_55_MODIF_2	modification of position 55 nt (Y) in metZ by TruB_mono	1 b2814_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2814_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2814_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in metZ by Thil_mono	1 IscS_dim_S-SH + 1 Thil_mono + 1 atp + 1 b2814_tRNA_5 + 1 mg2 + 1 trdrd <==> 1 b2814_tRNA_5_Thil_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2814_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in metZ by Thil_mono	1 b2814_tRNA_5_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 h + 1 metZ_tRNA + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2814_tRNA_Mg_BIND	Binding of two Mg2 to b2814_tRNA	1 b2814_RNA + 2 mg2 <==> 1 b2814_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2815_tRNA_20_MODIF_1	modification of position 20 nt (D) in metW by DusA_mono	1 DusA_mono + 1 b2815_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2815_tRNA_Mg2_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2815_tRNA_20_MODIF_2	modification of position 20 nt (D) in metW by DusA_mono	1 b2815_tRNA_Mg2_DusA_mono_cplx --> 1 DusA_mono + 1 b2815_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2815_tRNA_32_MODIF_1	modification of position 32 nt (Cm) in metW by MeT_tRNA_pos_32_Cm	1 MeT_tRNA_pos_32_Cm + 1 amet + 1 b2815_tRNA_1 <==> 1 b2815_tRNA_1_MeT_tRNA_pos_32_Cm_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2815_tRNA_32_MODIF_2	modification of position 32 nt (Cm) in metW by MeT_tRNA_pos_32_Cm	1 b2815_tRNA_1_MeT_tRNA_pos_32_Cm_cplx --> 1 MeT_tRNA_pos_32_Cm_inact + 1 ahcys + 1 b2815_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2815_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in metW by YggH_mono	1 YggH_mono + 1 amet + 1 b2815_tRNA_2 <==> 1 b2815_tRNA_2_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2815_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in metW by YggH_mono	1 b2815_tRNA_2_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2815_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2815_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in metW by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2815_tRNA_3 <==> 1 b2815_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2815_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in metW by TrmA_mono	1 b2815_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2815_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2815_tRNA_55_MODIF_1	modification of position 55 nt (Y) in metW by TruB_mono	1 TruB_mono + 1 b2815_tRNA_4 <==> 1 b2815_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2815_tRNA_55_MODIF_2	modification of position 55 nt (Y) in metW by TruB_mono	1 b2815_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2815_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2815_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in metW by Thil_mono	1 IscS_dim_S-SH + 1 Thil_mono + 1 atp + 1 b2815_tRNA_5 + 1 mg2 + 1 trdrd <==> 1 b2815_tRNA_5_Thil_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2815_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in metW by Thil_mono	1 b2815_tRNA_5_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 h + 1 metW_tRNA + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2815_tRNA_Mg_BIND	Binding of two Mg2 to b2815_tRNA	1 b2815_RNA + 2 mg2 <==> 1 b2815_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2816_tRNA_20_MODIF_1	modification of position 20 nt (D) in metV by DusA_mono	1 DusA_mono + 1 b2816_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2816_tRNA_Mg2_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2816_tRNA_20_MODIF_2	modification of position 20 nt (D) in metV by DusA_mono	1 b2816_tRNA_Mg2_DusA_mono_cplx --> 1 DusA_mono + 1 b2816_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2816_tRNA_32_MODIF_1	modification of position 32 nt (Cm) in metV by MeT_tRNA_pos_32_Cm	1 MeT_tRNA_pos_32_Cm + 1 amet + 1 b2816_tRNA_1 <==> 1 b2816_tRNA_1_MeT_tRNA_pos_32_Cm_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2816_tRNA_32_MODIF_2	modification of position 32 nt (Cm) in metV by MeT_tRNA_pos_32_Cm	1 b2816_tRNA_1_MeT_tRNA_pos_32_Cm_cplx --> 1 MeT_tRNA_pos_32_Cm_inact + 1 ahcys + 1 b2816_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2816_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in metV by YggH_mono	1 YggH_mono + 1 amet + 1 b2816_tRNA_2 <==> 1 b2816_tRNA_2_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2816_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in metV by YggH_mono	1 b2816_tRNA_2_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2816_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2816_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in metV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2816_tRNA_3 <==> 1 b2816_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2816_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in metV by TrmA_mono	1 b2816_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2816_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2816_tRNA_55_MODIF_1	modification of position 55 nt (Y) in metV by TruB_mono	1 TruB_mono + 1 b2816_tRNA_4 <==> 1 b2816_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2816_tRNA_55_MODIF_2	modification of position 55 nt (Y) in metV by TruB_mono	1 b2816_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2816_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2816_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in metV by Thil_mono	1 IscS_dim_S-SH + 1 Thil_mono + 1 atp + 1 b2816_tRNA_5 + 1 mg2 + 1 trdrd <==> 1 b2816_tRNA_5_Thil_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2816_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in metV by Thil_mono	1 b2816_tRNA_5_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 h + 1 metV_tRNA + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2816_tRNA_Mg_BIND	Binding of two Mg2 to b2816_tRNA	1 b2816_RNA + 2 mg2 <==> 1 b2816_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
b2864_tRNA_20_MODIF_1	modification of position 20 nt (D) in glyU by Dus_gen	1 Dus_gen + 1 b2864_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2864_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
b2864_tRNA_20_MODIF_2	modification of position 20 nt (D) in glyU by Dus_gen	1 b2864_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2864_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
b2864_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in glyU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2864_tRNA_1 <==> 1 b2864_tRNA_1_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
b2864_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in glyU by TrmA_mono	1 b2864_tRNA_1_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2864_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
b2864_tRNA_55_MODIF_1	modification of position 55 nt (Y) in glyU by TruB_mono	1 TruB_mono + 1 b2864_tRNA_2 <==> 1 b2864_tRNA_2_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
b2864_tRNA_55_MODIF_2	modification of position 55 nt (Y) in glyU by TruB_mono	1 b2864_tRNA_2_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2864_tRNA_3	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
b2864_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in glyU by Thil_mono	1 IscS_dim_S-SH + 1 Thil_mono + 1 atp + 1 b2864_tRNA_3 + 1 mg2 + 1 trdrd <==> 1 b2864_tRNA_3_Thil_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
b2864_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in glyU by Thil_mono	1 b2864_tRNA_3_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 glyU_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58

b2864_tRNA_Mg_BIND	Binding of two Mg2 to b2864_tRNA	1 b2864_RNA + 2 mg2 <==> 1 b2864_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
b2864_v1_tRNA_20_MODIF_1	modification of position 20 nt (D) in glyU by Dus_gen	1 Dus_gen + 1 b2864_v1_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2864_v1_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b2864_v1_tRNA_20_MODIF_2	modification of position 20 nt (D) in glyU by Dus_gen	1 b2864_v1_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2864_v1_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b2864_v1_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in glyU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2864_v1_tRNA_1 <==> 1 b2864_v1_tRNA_1_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b2864_v1_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in glyU by TrmA_mono	1 b2864_v1_tRNA_1_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2864_v1_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b2864_v1_tRNA_55_MODIF_1	modification of position 55 nt (Y) in glyU by TruB_mono	1 TruB_mono + 1 b2864_v1_tRNA_2 <==> 1 b2864_v1_tRNA_2_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b2864_v1_tRNA_55_MODIF_2	modification of position 55 nt (Y) in glyU by TruB_mono	1 b2864_v1_tRNA_2_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2864_v1_tRNA_3	irreversible	tRNA modification	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b2864_v1_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in glyU by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b2864_v1_tRNA_3 + 1 mg2 + 1 trdrd <==> 1 b2864_v1_tRNA_3_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b2864_v1_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in glyU by ThiI_mono	1 b2864_v1_tRNA_3_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 glyU_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b2864_v1_tRNA_Mg_BIND	Binding of two Mg2 to b2864_v1_tRNA	1 b2864_v1_RNA + 2 mg2 <==> 1 b2864_v1_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b2890_fold_spon	b2890_m folding: spontanous	1 b2890_m --> 1 LysS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.47E+03	1.47E+03	0	2.51E+03	2514.975	0	1.15E+02	115.449
b2890_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2890_mRNA --> 1 b2890_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.70E+01	4.70E+01	0	8.30E+01	83.03328	0	2.91E-01	0.291
b2890_mRNA_degr1	Degradation of b2890_mRNA I	1 Orn_dim + 379 atp + 1 b2890_mRNA_2 + 1 degradosome + 379 h2o <==> 379 adp + 1 b2890_mRNA_2_degr + 379 h + 379 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.70E+01	4.70E+01	0	8.30E+01	83.03328	0	2.91E-01	0.291
b2890_mRNA_degr2	Degradation of b2890_mRNA II	1 b2890_mRNA_2_degr + 1517 h2o --> 1 Orn_dim_inact + 376 amp + 402 cmp + 1 degradosome_inact + 404 gmp + 1517 h + 336 ump	irreversible	mRNA degradation	0.00E+00	4.90E-01	0	4.70E+01	4.70E+01	0	8.30E+01	83.03328	0	2.91E-01	0.291
b2890_maturation1	Polypeptide b2890 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2890_aa <==> 1 b2890_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.47E+03	1.47E+03	0	2.51E+03	2514.975	0	1.15E+02	115.449
b2890_maturation2	b2890 formation	1 b2890_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2890_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.47E+03	1.47E+03	0	2.51E+03	2514.975	0	1.15E+02	115.449
b2891_fold_spon	b2891_m folding: spontanous	1 b2891_m --> 1 PrfB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.07E+03	1.07E+03	0	1.82E+03	1824.129	0	8.65E+01	86.541
b2891_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2891_mRNA --> 1 b2891_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.70E+01	4.70E+01	0	8.30E+01	83.03328	0	2.91E-01	0.291
b2891_mRNA_degr1	Degradation of b2891_mRNA I	1 Orn_dim + 274 atp + 1 b2891_mRNA_2 + 1 degradosome + 274 h2o <==> 274 adp + 1 b2891_mRNA_2_degr + 274 h + 274 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.70E+01	4.70E+01	0	8.30E+01	83.03328	0	2.91E-01	0.291
b2891_mRNA_degr2	Degradation of b2891_mRNA II	1 b2891_mRNA_2_degr + 1098 h2o --> 1 Orn_dim_inact + 286 amp + 1 atp + 274 cmp + 1 degradosome_inact + 314 gmp + 1098 h + 224 ump	irreversible	mRNA degradation	0.00E+00	2.91E-01	0	4.70E+01	4.70E+01	0	8.30E+01	83.03328	0	2.91E-01	0.291
b2891_maturation1	Polypeptide b2891 peptide deformylase complex	1 Def_mono + 1 b2891_aa <==> 1 b2891_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.07E+03	1.07E+03	0	1.82E+03	1824.129	0	8.65E+01	86.541
b2891_maturation2	b2891 formation	1 b2891_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b2891_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.07E+03	1.07E+03	0	1.82E+03	1824.129	0	8.65E+01	86.541
b2891_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2891_v1_mRNA --> 1 b2891_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.54E+01	3.54E+01	0	6.24E+01	62.43587	0	1.42E-01	0.142
b2892_fold_spon	b2892_m folding: spontanous	1 b2892_m --> 1 RecJ_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	2.12E+03	2119.124	0	6.34E+01	63.426
b2892_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2892_mRNA --> 1 b2892_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.54E+01	3.54E+01	0	6.24E+01	62.43587	0	1.42E-01	0.142
b2892_mRNA_degr1	Degradation of b2892_mRNA I	1 Orn_dim + 433 atp + 1 b2892_mRNA_2 + 1 degradosome + 433 h2o <==> 433 adp + 1 b2892_mRNA_2_degr + 433 h + 433 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.54E+01	3.54E+01	0	6.24E+01	62.43587	0	1.42E-01	0.142
b2892_mRNA_degr2	Degradation of b2892_mRNA II	1 b2892_mRNA_2_degr + 1733 h2o --> 1 Orn_dim_inact + 364 amp + 449 cmp + 1 degradosome_inact + 533 gmp + 1733 h + 388 ump	irreversible	mRNA degradation	0.00E+00	1.42E-01	0	3.54E+01	3.54E+01	0	6.24E+01	62.43587	0	1.42E-01	0.142
b2892_maturation1	Polypeptide b2892 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2892_aa <==> 1 b2892_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	2.12E+03	2119.124	0	6.34E+01	63.426
b2892_maturation2	b2892 formation	1 b2892_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2892_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	2.12E+03	2119.124	0	6.34E+01	63.426
b2893_fold_spon	b2893_m folding: spontanous	1 b2893_m --> 1 DsbC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.47E+02	5.47E+02	0	8.99E+02	899.0264	0	8.92E+01	89.206
b2893_mRNA_degr1	Degradation of b2893_mRNA I	1 Orn_dim + 177 atp + 1 b2893_mRNA_2 + 1 degradosome + 177 h2o <==> 177 adp + 1 b2893_mRNA_2_degr + 177 h + 177 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.54E+01	3.54E+01	0	6.24E+01	62.43587	0	1.42E-01	0.142
b2893_mRNA_degr2	Degradation of b2893_mRNA II	1 b2893_mRNA_2_degr + 710 h2o --> 1 Orn_dim_inact + 202 amp + 1 atp + 156 cmp + 1 degradosome_inact + 188 gmp + 710 h + 164 ump	irreversible	mRNA degradation	0.00E+00	3.48E-01	0	3.54E+01	3.54E+01	0	6.24E+01	62.43587	0	1.42E-01	0.142
b2893_maturation1	Polypeptide b2893 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2893_aa <==> 1 b2893_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.47E+02	5.47E+02	0	8.99E+02	899.0264	0	8.92E+01	89.206
b2893_maturation2	b2893 formation	1 b2893_def_map_cplx + 21 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 4 ala-L + 1 b2893_m + 1 for + 1 gln-L + 2 gly + 3 leu-L + 2 lys-L + 2 met-L + 4 phe-L + 1 ser-L + 1 thr-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.47E+02	5.47E+02	0	8.99E+02	899.0264	0	8.92E+01	89.206
b2893_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2893_v1_mRNA --> 1 b2893_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.54E+01	3.54E+01	0	6.24E+01	62.43587	0	1.42E-01	0.142
b2946_fold_spon	b2946_m folding: spontanous	1 b2946_m --> 1 YggJ_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.13E+03	1.13E+03	0	1.92E+03	1924.832	0	8.34E+01	83.384
b2946_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2946_mRNA --> 1 b2946_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
b2946_mRNA_degr1	Degradation of b2946_mRNA I	1 Orn_dim + 183 atp + 1 b2946_mRNA_2 + 1 degradosome + 183 h2o <==> 183 adp + 1 b2946_mRNA_2_degr + 183 h + 183 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
b2946_mRNA_degr2	Degradation of b2946_mRNA II	1 b2946_mRNA_2_degr + 731 h2o --> 1 Orn_dim_inact + 175 amp + 1 atp + 188 cmp + 1 degradosome_inact + 201 gmp + 731 h + 167 ump	irreversible	mRNA degradation	0.00E+00	1.96E-01	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
b2946_maturation1	Polypeptide b2946 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2946_aa <==> 1 b2946_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.13E+03	1.13E+03	0	1.92E+03	1924.832	0	8.34E+01	83.384
b2946_maturation2	b2946 formation	1 b2946_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2946_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.13E+03	1.13E+03	0	1.92E+03	1924.832	0	8.34E+01	83.384
b2947_fold_spon	b2947_m folding: spontanous	1 b2947_m --> 1 GshB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.47E+03	1.47E+03	0	2.50E+03	2498.544	0	1.31E+02	130.968
b2947_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2947_mRNA --> 1 b2947_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
b2947_mRNA_degr1	Degradation of b2947_mRNA I	1 Orn_dim + 237 atp + 1 b2947_mRNA_2 + 1 degradosome + 237 h2o <==> 237 adp + 1 b2947_mRNA_2_degr + 237 h + 237 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
b2947_mRNA_degr2	Degradation of b2947_mRNA II	1 b2947_mRNA_2_degr + 950 h2o --> 1 Orn_dim_inact + 238 amp + 239 cmp + 1 degradosome_inact + 269 gmp + 950 h + 205 ump	irreversible	mRNA degradation	0.00E+00	4.14E-01	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
b2947_maturation1	Polypeptide b2947 peptide deformylase complex	1 Def_mono + 1 b2947_aa <==> 1 b2947_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.47E+03	1.47E+03	0	2.50E+03	2498.544	0	1.31E+02	130.968
b2947_maturation2	b2947 formation	1 b2947_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b2947_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.47E+03	1.47E+03	0	2.50E+03	2498.544	0	1.31E+02	130.968
b2959_fold_spon	b2959_m folding: spontanous	1 b2959_m --> 1 YggL_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.54E+02	9.54E+02	0	1.59E+03	1588.605	0	1.25E+02	125.112

b2959_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2959_mRNA --> 1 b2959_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.44E+02	244.0675	0	1.52E-01	0.152
b2959_mRNA_degr1	Degradation of b2959_mRNA I	1 Orn_dim + 81 atp + 1 b2959_mRNA_2 + 1 degradosome + 81 h2o <==> 81 adp + 1 b2959_mRNA_2_degr + 81 h + 81 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.38E+02	1.38E+02	0	2.44E+02	244.0675	0	1.52E-01	0.152
b2959_mRNA_degr2	Degradation of b2959_mRNA II	1 b2959_mRNA_2_degr + 325 h2o --> 1 Orn_dim_inact + 95 amp + 65 cmp + 1 degradosome_inact + 94 gmp + 325 h + 72 ump	irreversible	mRNA degradation	0.00E+00	1.52E-01	0	1.38E+02	1.38E+02	0	2.44E+02	244.0675	0	1.52E-01	0.152
b2959_maturation1	Polypeptide b2959 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2959_aa <==> 1 b2959_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	9.54E+02	9.54E+02	0	1.59E+03	1588.605	0	1.25E+02	125.112
b2959_maturation2	b2959 formation	1 b2959_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2959_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	9.54E+02	9.54E+02	0	1.59E+03	1588.605	0	1.25E+02	125.112
b2960_fold_GroEL/ES_1	b2960_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b2960_m + 1 transGroES_hepta --> 7 adp + 1 b2960_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.03E+03	2.03E+03	0	3.51E+03	3509.765	0	9.49E+01	94.948
b2960_fold_GroEL/ES_2	b2960_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b2960_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 YggH_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.03E+03	2.03E+03	0	3.51E+03	3509.765	0	9.49E+01	94.948
b2960_fold_GroEL/ES_3	b2960_m folding: GroEL/ES mediated; release of native protein	1 YggH_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 YggH_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.03E+03	2.03E+03	0	3.51E+03	3509.765	0	9.49E+01	94.948
b2960_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b2960_mRNA --> 1 b2960_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.44E+02	244.0675	0	1.52E-01	0.152
b2960_mRNA_degr1	Degradation of b2960_mRNA I	1 Orn_dim + 180 atp + 1 b2960_mRNA_2 + 1 degradosome + 180 h2o <==> 180 adp + 1 b2960_mRNA_2_degr + 180 h + 180 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.38E+02	1.38E+02	0	2.44E+02	244.0675	0	1.52E-01	0.152
b2960_mRNA_degr2	Degradation of b2960_mRNA II	1 b2960_mRNA_2_degr + 719 h2o --> 1 Orn_dim_inact + 166 amp + 1 atp + 166 cmp + 1 degradosome_inact + 213 gmp + 719 h + 174 ump	irreversible	mRNA degradation	0.00E+00	2.84E-01	0	1.38E+02	1.38E+02	0	2.44E+02	244.0675	0	1.52E-01	0.152
b2960_maturation1	Polypeptide b2960 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b2960_aa <==> 1 b2960_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.03E+03	2.03E+03	0	3.51E+03	3509.765	0	9.49E+01	94.948
b2960_maturation2	b2960 formation	1 b2960_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b2960_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.03E+03	2.03E+03	0	3.51E+03	3509.765	0	9.49E+01	94.948
b2967_tRNA_16_MODIF_1	modification of position 16 nt (D) in pheV by Dus_gen	1 Dus_gen + 1 b2967_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b2967_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_16_MODIF_2	modification of position 16 nt (D) in pheV by Dus_gen	1 b2967_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2967_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_20_MODIF_1	modification of position 20 nt (D) in pheV by Dus_gen	1 Dus_gen + 1 b2967_tRNA_1 + 1 h + 1 nadph <==> 1 b2967_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_20_MODIF_2	modification of position 20 nt (D) in pheV by Dus_gen	1 b2967_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b2967_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_32_MODIF_1	modification of position 32 nt (Y) in pheV by RluA_mono	1 RluA_mono + 1 b2967_tRNA_2 <==> 1 b2967_tRNA_2_RluA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_32_MODIF_2	modification of position 32 nt (Y) in pheV by RluA_mono	1 b2967_tRNA_2_RluA_mono_cplx --> 1 RluA_mono_inact + 1 b2967_tRNA_3	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_37_MODIF_1	modification of position 37 nt (ms2i6A) in pheV by MiaA_dim-MiaB_mono	1 IscS_dim_S-SH + 1 MiaA_dim + 1 MiaB_mono + 2 amet + 1 b2967_tRNA_3 + 1 dmpp + 1 fldrd <==> 1 b2967_tRNA_3_MiaA_dim-MiaB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_37_MODIF_2	modification of position 37 nt (ms2i6A) in pheV by MiaA_dim-MiaB_mono	1 b2967_tRNA_3_MiaA_dim-MiaB_mono_cplx --> 1 IscS_dim_S-H + 1 MiaA_dim_inact + 1 MiaB_mono_inact + 1 ahcys + 1 b2967_tRNA_4 + 1 dad-5 + 1 fldox + 2 h + 1 met-L + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_39_MODIF_1	modification of position 39 nt (Y) in pheV by TruA_dim	1 TruA_dim + 1 b2967_tRNA_4 <==> 1 b2967_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_39_MODIF_2	modification of position 39 nt (Y) in pheV by TruA_dim	1 b2967_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b2967_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in pheV by YggH_mono	1 YggH_mono + 1 amet + 1 b2967_tRNA_5 <==> 1 b2967_tRNA_5_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in pheV by YggH_mono	1 b2967_tRNA_5_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b2967_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in pheV by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b2967_tRNA_6 <==> 1 b2967_tRNA_6_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in pheV by AcpT_tRNA_pos_47_acp3U	1 b2967_tRNA_6_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b2967_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in pheV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b2967_tRNA_7 <==> 1 b2967_tRNA_7_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in pheV by TrmA_mono	1 b2967_tRNA_7_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b2967_tRNA_8 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_55_MODIF_1	modification of position 55 nt (Y) in pheV by TruB_mono	1 TruB_mono + 1 b2967_tRNA_8 <==> 1 b2967_tRNA_8_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_55_MODIF_2	modification of position 55 nt (Y) in pheV by TruB_mono	1 b2967_tRNA_8_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b2967_tRNA_9	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in pheV by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b2967_tRNA_9 + 1 mg2 + 1 trdrd <==> 1 b2967_tRNA_9_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in pheV by ThiI_mono	1 b2967_tRNA_9_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 pheV_tRNA + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b2967_tRNA_Mg_BIND	Binding of two Mg2 to b2967_tRNA	1 b2967_RNA + 2 mg2 <==> 1 b2967_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
b3065_fold_spon	b3065_m folding: spontanous	1 b3065_m --> 1 RpsU_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3065_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3065_mRNA --> 1 b3065_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	2.19E+00	2.19
b3065_mRNA_degr1	Degradation of b3065_mRNA I	1 Orn_dim + 54 atp + 1 b3065_mRNA_2 + 1 degradosome + 54 h2o <==> 54 adp + 1 b3065_mRNA_2_degr + 54 h + 54 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	2.19E+00	2.19
b3065_mRNA_degr2	Degradation of b3065_mRNA II	1 b3065_mRNA_2_degr + 215 h2o --> 1 Orn_dim_inact + 58 amp + 1 atp + 55 cmp + 1 degradosome_inact + 57 gmp + 215 h + 45 ump	irreversible	mRNA degradation	0.00E+00	2.19E+00	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	2.19E+00	2.19
b3065_maturation1	Polypeptide b3065 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3065_aa <==> 1 b3065_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3065_maturation2	b3065 formation	1 b3065_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3065_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3065_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3065_v1_mRNA --> 1 b3065_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
b3065_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3065_v2_mRNA --> 1 b3065_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
b3065_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3065_v3_mRNA --> 1 b3065_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
b3066_fold_spon	b3066_m folding: spontanous	1 b3066_m --> 1 DnaG_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.09E+03	1.09E+03	0	1.88E+03	1877.153	0	6.85E+01	68.51
b3066_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3066_mRNA --> 1 b3066_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
b3066_mRNA_degr1	Degradation of b3066_mRNA I	1 Orn_dim + 436 atp + 1 b3066_mRNA_2 + 1 degradosome + 436 h2o <==> 436 adp + 1 b3066_mRNA_2_degr + 436 h + 436 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
b3066_mRNA_degr2	Degradation of b3066_mRNA II	1 b3066_mRNA_2_degr + 1745 h2o --> 1 Orn_dim_inact + 439 amp 449 cmp + 1 degradosome_inact + 464 gmp + 1745 h + 394 ump	irreversible	mRNA degradation	0.00E+00	2.45E-01	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
b3066_maturation1	Polypeptide b3066 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3066_aa <==> 1 b3066_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.09E+03	1.09E+03	0	1.88E+03	1877.153	0	6.85E+01	68.51

b3066_maturation2	b3066 formation	1 b3066_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3066_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.09E+03	1.09E+03	0	1.88E+03	1877.153	0	6.85E+01	68.51
b3066_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3066_v1_mRNA --> 1 b3066_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
b3066_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3066_v2_mRNA --> 1 b3066_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
b3067_fold_KJE_1	b3067_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3067_m <==> 1 b3067_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.50E+03	2.50E+03	0	2.78E+03	2776.665	0	1.02E+02	101.844
b3067_fold_KJE_2	b3067_m folding: KJE mediated	1 GrpE_dim + 1 b3067_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 RpoD_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.50E+03	2.50E+03	0	2.78E+03	2776.665	0	1.02E+02	101.844
b3067_fold_KJE_3	b3067_m folding: KJE mediated	1 RpoD_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 RpoD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.50E+03	2.50E+03	0	2.78E+03	2776.665	0	1.02E+02	101.844
b3067_fold_spon	b3067_m folding: spontanous	1 b3067_m --> 1 RpoD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.50E+03	2.50E+03	0	2.78E+03	2776.665	0	1.02E+02	101.844
b3067_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3067_mRNA --> 1 b3067_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
b3067_mRNA_degr1	Degradation of b3067_mRNA I	1 Orn_dim + 460 atp + 1 b3067_mRNA_2 + 1 degradosome + 460 h2o <==> 460 adp + 1 b3067_mRNA_2_degr + 460 h + 460 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
b3067_mRNA_degr2	Degradation of b3067_mRNA II	1 b3067_mRNA_2_degr + 1841 h2o --> 1 Orn_dim_inact + 501 amp + 1 atp + 477 cmp + 1 degradosome_inact + 499 gmp + 1841 h + 364 ump	irreversible	mRNA degradation	0.00E+00	3.99E-01	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
b3067_maturation1	Polypeptide b3067 peptide deformylase complex	1 Def_mono + 1 b3067_aa <==> 1 b3067_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.50E+03	2.50E+03	0	2.78E+03	2776.665	0	1.02E+02	101.844
b3067_maturation2	b3067 formation	1 b3067_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3067_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.50E+03	2.50E+03	0	2.78E+03	2776.665	0	1.02E+02	101.844
b3067_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3067_v1_mRNA --> 1 b3067_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
b3067_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3067_v2_mRNA --> 1 b3067_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
b3067_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3067_v3_mRNA --> 1 b3067_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
b3067_v4_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3067_v4_mRNA --> 1 b3067_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
b3067_v5_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3067_v5_mRNA --> 1 b3067_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
b3069_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in ileX by TrmH_dim	1 TrmH_dim + 1 amet + 1 b3069_tRNA_Mg2 <==> 1 b3069_tRNA_Mg2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in ileX by TrmH_dim	1 b3069_tRNA_Mg2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b3069_tRNA_1 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_20A_MODIF_1	modification of position 20A nt (D) in ileX by Dus_gen	1 Dus_gen + 1 b3069_tRNA_2 + 1 h + 1 nadph <==> 1 b3069_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_20A_MODIF_2	modification of position 20A nt (D) in ileX by Dus_gen	1 b3069_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3069_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_20_MODIF_1	modification of position 20 nt (D) in ileX by Dus_gen	1 Dus_gen + 1 b3069_tRNA_1 + 1 h + 1 nadph <==> 1 b3069_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_20_MODIF_2	modification of position 20 nt (D) in ileX by Dus_gen	1 b3069_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3069_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_34_MODIF_1	modification of position 34 nt (k2C) in ileX by TilS_mono	1 TilS_mono + 1 atp + 1 b3069_tRNA_3 + 1 lys-L <==> 1 b3069_tRNA_3_TilS_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_34_MODIF_2	modification of position 34 nt (k2C) in ileX by TilS_mono	1 b3069_tRNA_3_TilS_mono_cplx --> 1 TilS_mono_inact + 1 amp + b3069_tRNA_4 + 2 h + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in ileX by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b3069_tRNA_4 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b3069_tRNA_4_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in ileX by Up_tRNA_pos_37_t6A	1 b3069_tRNA_4_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b3069_tRNA_5 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_39_MODIF_1	modification of position 39 nt (Y) in ileX by TruA_dim	1 TruA_dim + 1 b3069_tRNA_5 <==> 1 b3069_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_39_MODIF_2	modification of position 39 nt (Y) in ileX by TruA_dim	1 b3069_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b3069_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in ileX by YggH_mono	1 YggH_mono + 1 amet + 1 b3069_tRNA_6 <==> 1 b3069_tRNA_6_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in ileX by YggH_mono	1 b3069_tRNA_6_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3069_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in ileX by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b3069_tRNA_7 <==> 1 b3069_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in ileX by AcpT_tRNA_pos_47_acp3U	1 b3069_tRNA_7_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b3069_tRNA_8 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in ileX by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3069_tRNA_8 <==> 1 b3069_tRNA_8_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in ileX by TrmA_mono	1 b3069_tRNA_8_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3069_tRNA_9 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_55_MODIF_1	modification of position 55 nt (Y) in ileX by TruB_mono	1 TruB_mono + 1 b3069_tRNA_9 <==> 1 b3069_tRNA_9_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_55_MODIF_2	modification of position 55 nt (Y) in ileX by TruB_mono	1 b3069_tRNA_9_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3069_tRNA_10	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in ileX by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b3069_tRNA_10 + 1 mg2 + 1 trdrd <==> 1 b3069_tRNA_10_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in ileX by ThiI_mono	1 b3069_tRNA_10_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 ileX_tRNA + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3069_tRNA_Mg_BIND	Binding of two Mg2 to b3069_tRNA	1 b3069_RNA + 2 mg2 <==> 1 b3069_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
b3123_v1_trimming	Cutting of stable b3123_v1_RNA	1 b3123_v1_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b3123_v1_RNA + 1 + 1 ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
b3123_v1_trimming_cplx	Cutting complex formation of stable b3123_v1_RNA (,)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 b3123_v1_RNA_pre <==> 1 b3123_v1_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
b3124_fold_spon	b3124_m folding: spontanous	1 b3124_m --> 1 GarK_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.65E+02	7.65E+02	0	1.28E+03	1279.259	0	9.46E+01	94.55759
b3124_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3124_mRNA --> 1 b3124_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
b3124_mRNA_degr1	Degradation of b3124_mRNA I	1 Orn_dim + 306 atp + 1 b3124_mRNA_2 + 1 degradosome + 306 h2o <==> 306 adp + 1 b3124_mRNA_2_degr + 306 h + 306 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
b3124_mRNA_degr2	Degradation of b3124_mRNA II	1 b3124_mRNA_2_degr + 1226 h2o --> 1 Orn_dim_inact + 294 amp + 275 cmp + 1 degradosome_inact + 386 gmp + 1226 h + 272 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
b3124_maturation1	Polypeptide b3124 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3124_aa <==> 1 b3124_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.65E+02	7.65E+02	0	1.28E+03	1279.259	0	9.46E+01	94.55759
b3124_maturation2	b3124 formation	1 b3124_def_map_cplx + 29 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 2 ala-L + 4 arg-L + 3 asn-L + 1 b3124_m + 1 cys-L + 1 for + 1 glu-L + 3 gly + 1 his-L + 1 ile-L + 2 leu-L + 1 lys-L + 2 met-L + 2 pro-L + 1 ser-L + 1 thr-L + 1 tyr-L + 2 val-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.65E+02	7.65E+02	0	1.28E+03	1279.259	0	9.46E+01	94.55759
b3125_fold_spon	b3125_m folding: spontanous	1 b3125_m --> 1 GarR_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.40E+02	5.40E+02	0	9.04E+02	904.2715	0	6.51E+01	65.1083
b3125_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3125_mRNA --> 1 b3125_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499

b3125_mRNA_degr1	Degradation of b3125_mRNA I	1 Orn_dim + 222 atp + 1 b3125_mRNA_2 + 1 degradosome + 222 h2o <==> 222 adp + 1 b3125_mRNA_2_degr + 222 h + 222 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
b3125_mRNA_degr2	Degradation of b3125_mRNA II	1 b3125_mRNA_2_degr + 890 h2o --> 1 Orn_dim_inact + 224 amp + 198 cmp + 1 degradosome_inact + 273 gmp + 890 h + 196 ump	irreversible	mRNA degradation	0.00E+00	9.62E-02	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
b3125_maturation1	Polypeptide b3125 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3125_aa <==> 1 b3125_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.40E+02	5.40E+02	0	9.04E+02	904.2715	0	6.51E+01	65.1083
b3125_maturation2	b3125 formation	1 b3125_def_map_cplx + 4 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3125_m + 1 for + 2 met-L + 1 thr-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.40E+02	5.40E+02	0	9.04E+02	904.2715	0	6.51E+01	65.1083
b3126_fold_spon	b3126_m folding: spontanous	1 b3126_m --> 1 GarL_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.13E+02	5.13E+02	0	8.34E+02	834.0366	0	9.36E+01	93.5985
b3126_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3126_mRNA --> 1 b3126_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
b3126_mRNA_degr1	Degradation of b3126_mRNA I	1 Orn_dim + 192 atp + 1 b3126_mRNA_2 + 1 degradosome + 192 h2o <==> 192 adp + 1 b3126_mRNA_2_degr + 192 h + 192 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
b3126_mRNA_degr2	Degradation of b3126_mRNA II	1 b3126_mRNA_2_degr + 770 h2o --> 1 Orn_dim_inact + 183 amp + 206 cmp + 1 degradosome_inact + 202 gmp + 770 h + 180 ump	irreversible	mRNA degradation	0.00E+00	1.71E-01	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
b3126_maturation1	Polypeptide b3126 peptide deformylase complex	1 Def_mono + 1 b3126_aa <==> 1 b3126_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.13E+02	5.13E+02	0	8.34E+02	834.0366	0	9.36E+01	93.5985
b3126_maturation2	b3126 formation	1 b3126_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3126_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.13E+02	5.13E+02	0	8.34E+02	834.0366	0	9.36E+01	93.5985
b3127_fold_spon	b3127_m folding: spontanous	1 b3127_m --> 1 GarP_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.88E+02	7.88E+02	0	1.34E+03	1344.783	0	6.14E+01	61.3574
b3127_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3127_mRNA --> 1 b3127_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
b3127_mRNA_degr1	Degradation of b3127_mRNA I	1 Orn_dim + 333 atp + 1 b3127_mRNA_2 + 1 degradosome + 333 h2o <==> 333 adp + 1 b3127_mRNA_2_degr + 333 h + 333 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
b3127_mRNA_degr2	Degradation of b3127_mRNA II	1 b3127_mRNA_2_degr + 1334 h2o --> 1 Orn_dim_inact + 264 amp + 1 atp + 333 cmp + 1 degradosome_inact + 352 gmp + 1334 h + 385 ump	irreversible	mRNA degradation	0.00E+00	4.99E-02	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
b3127_maturation1	Polypeptide b3127 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3127_aa <==> 1 b3127_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.88E+02	7.88E+02	0	1.34E+03	1344.783	0	6.14E+01	61.3574
b3127_maturation2	b3127 formation	1 b3127_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3127_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.88E+02	7.88E+02	0	1.34E+03	1344.783	0	6.14E+01	61.3574
b3164_fold_GroEL/ES_1	b3164_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3164_m + 1 transGroES_hepta --> 7 adp + 1 b3164_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.59E+02	6.59E+02	0	7.16E+02	716.1174	0	8.64E+01	86.4435
b3164_fold_GroEL/ES_2	b3164_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3164_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 Pnp_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.59E+02	6.59E+02	0	7.16E+02	716.1174	0	8.64E+01	86.4435
b3164_fold_GroEL/ES_3	b3164_m folding: GroEL/ES mediated; release of native protein	1 Pnp_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 Pnp_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.59E+02	6.59E+02	0	7.16E+02	716.1174	0	8.64E+01	86.4435
b3164_fold_KJE_1	b3164_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3164_m <==> 1 b3164_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	6.59E+02	6.59E+02	0	7.16E+02	716.1174	0	8.64E+01	86.4435
b3164_fold_KJE_2	b3164_m folding: KJE mediated	1 GrpE_dim + 1 b3164_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 Pnp_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.59E+02	6.59E+02	0	7.16E+02	716.1174	0	8.64E+01	86.4435
b3164_fold_KJE_3	b3164_m folding: KJE mediated	1 Pnp_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + GrpE_dim_inact + 1 Pnp_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.59E+02	6.59E+02	0	7.16E+02	716.1174	0	8.64E+01	86.4435
b3164_fold_spon	b3164_m folding: spontanous	1 b3164_m --> 1 Pnp_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.59E+02	6.59E+02	0	7.16E+02	716.1174	0	8.64E+01	86.4435
b3164_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3164_mRNA --> 1 b3164_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3164_mRNA_degr1	Degradation of b3164_mRNA I	1 Orn_dim + 551 atp + 1 b3164_mRNA_2 + 1 degradosome + 551 h2o <==> 551 adp + 1 b3164_mRNA_2_degr + 551 h + 551 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.71E+01	5.71E+01	0	1.00E+02	100.0923	0	6.46E-01	0.646
b3164_mRNA_degr2	Degradation of b3164_mRNA II	1 b3164_mRNA_2_degr + 2204 h2o --> 1 Orn_dim_inact + 531 amp 559 cmp + 1 degradosome_inact + 625 gmp + 2204 h + 490 ump	irreversible	mRNA degradation	0.00E+00	6.46E-01	0	5.71E+01	5.71E+01	0	1.00E+02	100.0923	0	6.46E-01	0.646
b3164_maturation1	Polypeptide b3164 peptide deformylase complex	1 Def_mono + 1 b3164_aa <==> 1 b3164_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.59E+02	6.59E+02	0	7.16E+02	716.1174	0	8.64E+01	86.4435
b3164_maturation2	b3164 formation	1 b3164_def_cplx + 24 h2o --> 1 Def_mono_inact + 1 ala-L + 6 arg-L + 1 asn-L + 1 asp-L + 1 b3164_m + 1 cys-L + 1 for + 1 gly + 2 ile-L + leu-L + 2 lys-L + 2 ser-L + 2 thr-L + 1 tyr-L + 1 val-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.59E+02	6.59E+02	0	7.16E+02	716.1174	0	8.64E+01	86.4435
b3164_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3164_v1_mRNA --> 1 b3164_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.03E+01	70.31333	0	4.81E-01	0.481
b3164_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3164_v2_mRNA --> 1 b3164_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.71E+01	5.71E+01	0	1.00E+02	100.0923	0	6.46E-01	0.646
b3164_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3164_v3_mRNA --> 1 b3164_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3165_fold_spon	b3165_m folding: spontanous	1 b3165_m --> 1 RpsO_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3165_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3165_mRNA --> 1 b3165_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3165_mRNA_degr1	Degradation of b3165_mRNA I	1 Orn_dim + 67 atp + 1 b3165_mRNA_2 + 1 degradosome + 67 h2o <==> 67 adp + 1 b3165_mRNA_2_degr + 67 h + 67 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	4.81E-01	0.481
b3165_mRNA_degr2	Degradation of b3165_mRNA II	1 b3165_mRNA_2_degr + 269 h2o --> 1 Orn_dim_inact + 71 amp + 76 cmp + 1 degradosome_inact + 64 gmp + 269 h + 59 ump	irreversible	mRNA degradation	0.00E+00	4.81E-01	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	4.81E-01	0.481
b3165_maturation1	Polypeptide b3165 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3165_aa <==> 1 b3165_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3165_maturation2	b3165 formation	1 b3165_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3165_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3165_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3165_v1_mRNA --> 1 b3165_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	4.81E-01	0.481
b3165_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3165_v2_mRNA --> 1 b3165_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.03E+01	70.31333	0	4.81E-01	0.481
b3165_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3165_v3_mRNA --> 1 b3165_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3166_fold_spon	b3166_m folding: spontanous	1 b3166_m --> 1 TruB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.26E+02	3.26E+02	0	5.23E+02	522.5303	0	7.21E+01	72.108
b3166_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3166_mRNA --> 1 b3166_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3166_mRNA_degr1	Degradation of b3166_mRNA I	1 Orn_dim + 236 atp + 1 b3166_mRNA_2 + 1 degradosome + 236 h2o <==> 236 adp + 1 b3166_mRNA_2_degr + 236 h + 236 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3166_mRNA_degr2	Degradation of b3166_mRNA II	1 b3166_mRNA_2_degr + 943 h2o --> 1 Orn_dim_inact + 220 amp + 231 cmp + 1 degradosome_inact + 265 gmp + 943 h + 228 ump	irreversible	mRNA degradation	0.00E+00	1.58E-01	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3166_maturation1	Polypeptide b3166 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3166_aa <==> 1 b3166_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.26E+02	3.26E+02	0	5.23E+02	522.5303	0	7.21E+01	72.108
b3166_maturation2	b3166 formation	1 b3166_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3166_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.26E+02	3.26E+02	0	5.23E+02	522.5303	0	7.21E+01	72.108
b3166_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3166_v1_mRNA --> 1 b3166_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146

b3167_fold_spon	b3167_m folding: spontanous	1 b3167_m --> 1 RbfA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.69E+02	1.69E+02	0	2.45E+02	244.9262	0	6.98E+01	69.762
b3167_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3167_mRNA --> 1 b3167_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3167_mRNA_degr1	Degradation of b3167_mRNA I	1 Orn_dim + 100 atp + 1 b3167_mRNA_2 + 1 degradosome + 100 h2o <==> 100 adp + 1 b3167_mRNA_2_degr + 100 h + 100 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3167_mRNA_degr2	Degradation of b3167_mRNA II	1 b3167_mRNA_2_degr + 401 h2o --> 1 Orn_dim_inact + 107 amp + 100 cmp + 1 degradosome_inact + 113 gmp + 401 h + 82 ump	irreversible	mRNA degradation	0.00E+00	1.46E-01	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3167_maturation1	Polypeptide b3167 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3167_aa <==> 1 b3167_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.69E+02	1.69E+02	0	2.45E+02	244.9262	0	6.98E+01	69.762
b3167_maturation2	b3167 formation	1 b3167_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3167_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.69E+02	1.69E+02	0	2.45E+02	244.9262	0	6.98E+01	69.762
b3167_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3167_v1_mRNA --> 1 b3167_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3168_fold_GroEL/ES_1	b3168_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3168_m + 1 transGroES_hepta --> 7 adp + 1 b3168_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.60E+03	1.60E+03	0	2.03E+03	2028.084	0	1.11E+02	111.28
b3168_fold_GroEL/ES_2	b3168_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3168_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 InfB_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.60E+03	1.60E+03	0	2.03E+03	2028.084	0	1.11E+02	111.28
b3168_fold_GroEL/ES_3	b3168_m folding: GroEL/ES mediated; release of native protein	1 InfB_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 InfB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.60E+03	1.60E+03	0	2.03E+03	2028.084	0	1.11E+02	111.28
b3168_fold_KJE_1	b3168_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3168_m <==> 1 b3168_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	1.60E+03	1.60E+03	0	2.03E+03	2028.084	0	1.11E+02	111.28
b3168_fold_KJE_2	b3168_m folding: KJE mediated	1 GrpE_dim + 1 b3168_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 InfB_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.60E+03	1.60E+03	0	2.03E+03	2028.084	0	1.11E+02	111.28
b3168_fold_KJE_3	b3168_m folding: KJE mediated	1 InfB_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + GrpE_dim_inact + 1 InfB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.60E+03	1.60E+03	0	2.03E+03	2028.084	0	1.11E+02	111.28
b3168_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3168_mRNA --> 1 b3168_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3168_mRNA_degr1	Degradation of b3168_mRNA I	1 Orn_dim + 668 atp + 1 b3168_mRNA_2 + 1 degradosome + 668 h2o <==> 668 adp + 1 b3168_mRNA_2_degr + 668 h + 668 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
b3168_mRNA_degr2	Degradation of b3168_mRNA II	1 b3168_mRNA_2_degr + 2672 h2o --> 1 Orn_dim_inact + 730 amp 647 cmp + 1 degradosome_inact + 781 gmp + 2672 h + 515 ump	irreversible	mRNA degradation	0.00E+00	4.31E-01	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
b3168_maturation1	Polypeptide b3168 peptide deformylase complex	1 Def_mono + 1 b3168_aa <==> 1 b3168_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.60E+03	1.52E+03	6.22E+01	2.03E+03	1965.924	6.22E+01	1.11E+02	49.12
b3168_maturation2	b3168 formation	1 b3168_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3168_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.60E+03	1.52E+03	6.22E+01	2.03E+03	1965.924	6.22E+01	1.11E+02	49.12
b3168_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3168_v1_mRNA --> 1 b3168_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3168_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3168_v2_mRNA --> 1 b3168_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
b3168_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3168_v3_mRNA --> 1 b3168_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3169_fold_spon	b3169_m folding: spontanous	1 b3169_m --> 1 NusA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.12E+02	9.12E+02	0	1.55E+03	1550.869	0	8.09E+01	80.91
b3169_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3169_mRNA --> 1 b3169_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3169_mRNA_degr1	Degradation of b3169_mRNA I	1 Orn_dim + 372 atp + 1 b3169_mRNA_2 + 1 degradosome + 372 h2o <==> 372 adp + 1 b3169_mRNA_2_degr + 372 h + 372 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
b3169_mRNA_degr2	Degradation of b3169_mRNA II	1 b3169_mRNA_2_degr + 1487 h2o --> 1 Orn_dim_inact + 387 amp 352 cmp + 1 degradosome_inact + 433 gmp + 1487 h + 316 ump	irreversible	mRNA degradation	0.00E+00	1.50E-01	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
b3169_maturation1	Polypeptide b3169 peptide deformylase complex	1 Def_mono + 1 b3169_aa <==> 1 b3169_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	9.12E+02	9.12E+02	0	1.55E+03	1550.869	0	8.09E+01	80.91
b3169_maturation2	b3169 formation	1 b3169_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3169_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	9.12E+02	9.12E+02	0	1.55E+03	1550.869	0	8.09E+01	80.91
b3169_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3169_v1_mRNA --> 1 b3169_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3169_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3169_v2_mRNA --> 1 b3169_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
b3169_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3169_v3_mRNA --> 1 b3169_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3170_fold_spon	b3170_m folding: spontanous	1 b3170_m --> 1 YhbC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.10E+02	3.10E+02	0	4.86E+02	486.3058	0	8.08E+01	80.8
b3170_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3170_mRNA --> 1 b3170_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3170_mRNA_degr1	Degradation of b3170_mRNA I	1 Orn_dim + 113 atp + 1 b3170_mRNA_2 + 1 degradosome + 113 h2o <==> 113 adp + 1 b3170_mRNA_2_degr + 113 h + 113 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
b3170_mRNA_degr2	Degradation of b3170_mRNA II	1 b3170_mRNA_2_degr + 452 h2o --> 1 Orn_dim_inact + 114 amp + 101 cmp + 1 degradosome_inact + 119 gmp + 452 h + 119 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
b3170_maturation1	Polypeptide b3170 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3170_aa <==> 1 b3170_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.10E+02	3.10E+02	0	4.86E+02	486.3058	0	8.08E+01	80.8
b3170_maturation2	b3170 formation	1 b3170_def_map_cplx + 12 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3170_m + 1 for + 1 gln-L + 2 glu-L + 2 leu-L + lys-L + 2 met-L + 1 ser-L + 2 thr-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.10E+02	3.10E+02	0	4.86E+02	486.3058	0	8.08E+01	80.8
b3170_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3170_v1_mRNA --> 1 b3170_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3170_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3170_v2_mRNA --> 1 b3170_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
b3170_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3170_v3_mRNA --> 1 b3170_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_tRNA_20_MODIF_1	modification of position 20 nt (D) in metY by DusA_mono	1 DusA_mono + 1 b3171_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3171_tRNA_Mg2_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_tRNA_20_MODIF_2	modification of position 20 nt (D) in metY by DusA_mono	1 b3171_tRNA_Mg2_DusA_mono_cplx --> 1 DusA_mono + 1 b3171_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_tRNA_32_MODIF_1	modification of position 32 nt (Cm) in metY by MeT_tRNA_pos_32_Cm	1 MeT_tRNA_pos_32_Cm + 1 amet + 1 b3171_tRNA_1 <==> 1 b3171_tRNA_1_MeT_tRNA_pos_32_Cm_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_tRNA_32_MODIF_2	modification of position 32 nt (Cm) in metY by MeT_tRNA_pos_32_Cm	1 b3171_tRNA_1_MeT_tRNA_pos_32_Cm_cplx --> 1 MeT_tRNA_pos_32_Cm_inact + 1 ahcys + 1 b3171_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in metY by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3171_tRNA_2 <==> 1 b3171_tRNA_2_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in metY by TrmA_mono	1 b3171_tRNA_2_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3171_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_tRNA_55_MODIF_1	modification of position 55 nt (Y) in metY by TruB_mono	1 TruB_mono + 1 b3171_tRNA_3 <==> 1 b3171_tRNA_3_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_tRNA_55_MODIF_2	modification of position 55 nt (Y) in metY by TruB_mono	1 b3171_tRNA_3_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3171_tRNA_4	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in metY by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b3171_tRNA_4 + 1 mg2 + 1 trdrd <==> 1 b3171_tRNA_4_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11

b3171_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in metY by Thil_mono	1 b3171_tRNA_4_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 h + 1 metY_tRNA + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_tRNA_Mg_BIND	Binding of two Mg2 to b3171_tRNA	1 b3171_RNA + 2 mg2 <==> 1 b3171_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_v1_tRNA_20_MODIF_1	modification of position 20 nt (D) in metY by DusA_mono	1 DusA_mono + 1 b3171_v1_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3171_v1_tRNA_Mg2_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v1_tRNA_20_MODIF_2	modification of position 20 nt (D) in metY by DusA_mono	1 b3171_v1_tRNA_Mg2_DusA_mono_cplx --> 1 DusA_mono + 1 b3171_v1_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v1_tRNA_32_MODIF_1	modification of position 32 nt (Cm) in metY by MeT_tRNA_pos_32_Cm	1 MeT_tRNA_pos_32_Cm + 1 amet + 1 b3171_v1_tRNA_1 <==> 1 b3171_v1_tRNA_1_MeT_tRNA_pos_32_Cm_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v1_tRNA_32_MODIF_2	modification of position 32 nt (Cm) in metY by MeT_tRNA_pos_32_Cm	1 b3171_v1_tRNA_1_MeT_tRNA_pos_32_Cm_cplx --> 1 MeT_tRNA_pos_32_Cm_inact + 1 ahcys + 1 b3171_v1_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v1_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in metY by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3171_v1_tRNA_2 <==> 1 b3171_v1_tRNA_2_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v1_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in metY by TrmA_mono	1 b3171_v1_tRNA_2_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3171_v1_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v1_tRNA_55_MODIF_1	modification of position 55 nt (Y) in metY by TruB_mono	1 TruB_mono + 1 b3171_v1_tRNA_3 <==> 1 b3171_v1_tRNA_3_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v1_tRNA_55_MODIF_2	modification of position 55 nt (Y) in metY by TruB_mono	1 b3171_v1_tRNA_3_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3171_v1_tRNA_4	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v1_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in metY by Thil_mono	1 IscS_dim_S-SH + 1 Thil_mono + 1 atp + 1 b3171_v1_tRNA_4 + 1 mg2 + 1 trdrd <==> 1 b3171_v1_tRNA_4_Thil_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v1_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in metY by Thil_mono	1 b3171_v1_tRNA_4_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 h + 1 metY_tRNA + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v1_tRNA_Mg_BIND	Binding of two Mg2 to b3171_v1_tRNA	1 b3171_v1_RNA + 2 mg2 <==> 1 b3171_v1_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v1_trimming	Cutting of stable b3171_v1_RNA	1 b3171_v1_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b3171_v1_RNA + 1 + 1 ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v1_trimming_cplx	Cutting complex formation of stable b3171_v1_RNA (,)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 b3171_v1_RNA_pre <==> 1 b3171_v1_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v2_tRNA_20_MODIF_1	modification of position 20 nt (D) in metY by DusA_mono	1 DusA_mono + 1 b3171_v2_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3171_v2_tRNA_Mg2_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3171_v2_tRNA_20_MODIF_2	modification of position 20 nt (D) in metY by DusA_mono	1 b3171_v2_tRNA_Mg2_DusA_mono_cplx --> 1 DusA_mono + 1 b3171_v2_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3171_v2_tRNA_32_MODIF_1	modification of position 32 nt (Cm) in metY by MeT_tRNA_pos_32_Cm	1 MeT_tRNA_pos_32_Cm + 1 amet + 1 b3171_v2_tRNA_1 <==> 1 b3171_v2_tRNA_1_MeT_tRNA_pos_32_Cm_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3171_v2_tRNA_32_MODIF_2	modification of position 32 nt (Cm) in metY by MeT_tRNA_pos_32_Cm	1 b3171_v2_tRNA_1_MeT_tRNA_pos_32_Cm_cplx --> 1 MeT_tRNA_pos_32_Cm_inact + 1 ahcys + 1 b3171_v2_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3171_v2_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in metY by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3171_v2_tRNA_2 <==> 1 b3171_v2_tRNA_2_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3171_v2_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in metY by TrmA_mono	1 b3171_v2_tRNA_2_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3171_v2_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3171_v2_tRNA_55_MODIF_1	modification of position 55 nt (Y) in metY by TruB_mono	1 TruB_mono + 1 b3171_v2_tRNA_3 <==> 1 b3171_v2_tRNA_3_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3171_v2_tRNA_55_MODIF_2	modification of position 55 nt (Y) in metY by TruB_mono	1 b3171_v2_tRNA_3_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3171_v2_tRNA_4	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3171_v2_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in metY by Thil_mono	1 IscS_dim_S-SH + 1 Thil_mono + 1 atp + 1 b3171_v2_tRNA_4 + 1 mg2 + 1 trdrd <==> 1 b3171_v2_tRNA_4_Thil_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3171_v2_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in metY by Thil_mono	1 b3171_v2_tRNA_4_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 h + 1 metY_tRNA + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3171_v2_tRNA_Mg_BIND	Binding of two Mg2 to b3171_v2_tRNA	1 b3171_v2_RNA + 2 mg2 <==> 1 b3171_v2_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3171_v2_trimming	Cutting of stable b3171_v2_RNA	1 b3171_v2_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b3171_v2_RNA + 1 + 1 ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3171_v2_trimming_cplx	Cutting complex formation of stable b3171_v2_RNA (,)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 b3171_v2_RNA_pre <==> 1 b3171_v2_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
b3171_v3_tRNA_20_MODIF_1	modification of position 20 nt (D) in metY by DusA_mono	1 DusA_mono + 1 b3171_v3_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3171_v3_tRNA_Mg2_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_v3_tRNA_20_MODIF_2	modification of position 20 nt (D) in metY by DusA_mono	1 b3171_v3_tRNA_Mg2_DusA_mono_cplx --> 1 DusA_mono + 1 b3171_v3_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_v3_tRNA_32_MODIF_1	modification of position 32 nt (Cm) in metY by MeT_tRNA_pos_32_Cm	1 MeT_tRNA_pos_32_Cm + 1 amet + 1 b3171_v3_tRNA_1 <==> 1 b3171_v3_tRNA_1_MeT_tRNA_pos_32_Cm_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_v3_tRNA_32_MODIF_2	modification of position 32 nt (Cm) in metY by MeT_tRNA_pos_32_Cm	1 b3171_v3_tRNA_1_MeT_tRNA_pos_32_Cm_cplx --> 1 MeT_tRNA_pos_32_Cm_inact + 1 ahcys + 1 b3171_v3_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_v3_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in metY by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3171_v3_tRNA_2 <==> 1 b3171_v3_tRNA_2_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_v3_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in metY by TrmA_mono	1 b3171_v3_tRNA_2_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3171_v3_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_v3_tRNA_55_MODIF_1	modification of position 55 nt (Y) in metY by TruB_mono	1 TruB_mono + 1 b3171_v3_tRNA_3 <==> 1 b3171_v3_tRNA_3_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_v3_tRNA_55_MODIF_2	modification of position 55 nt (Y) in metY by TruB_mono	1 b3171_v3_tRNA_3_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3171_v3_tRNA_4	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_v3_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in metY by Thil_mono	1 IscS_dim_S-SH + 1 Thil_mono + 1 atp + 1 b3171_v3_tRNA_4 + 1 mg2 + 1 trdrd <==> 1 b3171_v3_tRNA_4_Thil_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_v3_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in metY by Thil_mono	1 b3171_v3_tRNA_4_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 h + 1 metY_tRNA + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_v3_tRNA_Mg_BIND	Binding of two Mg2 to b3171_v3_tRNA	1 b3171_v3_RNA + 2 mg2 <==> 1 b3171_v3_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
b3171_v4_tRNA_20_MODIF_1	modification of position 20 nt (D) in metY by DusA_mono	1 DusA_mono + 1 b3171_v4_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3171_v4_tRNA_Mg2_DusA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v4_tRNA_20_MODIF_2	modification of position 20 nt (D) in metY by DusA_mono	1 b3171_v4_tRNA_Mg2_DusA_mono_cplx --> 1 DusA_mono + 1 b3171_v4_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v4_tRNA_32_MODIF_1	modification of position 32 nt (Cm) in metY by MeT_tRNA_pos_32_Cm	1 MeT_tRNA_pos_32_Cm + 1 amet + 1 b3171_v4_tRNA_1 <==> 1 b3171_v4_tRNA_1_MeT_tRNA_pos_32_Cm_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v4_tRNA_32_MODIF_2	modification of position 32 nt (Cm) in metY by MeT_tRNA_pos_32_Cm	1 b3171_v4_tRNA_1_MeT_tRNA_pos_32_Cm_cplx --> 1 MeT_tRNA_pos_32_Cm_inact + 1 ahcys + 1 b3171_v4_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v4_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in metY by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3171_v4_tRNA_2 <==> 1 b3171_v4_tRNA_2_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v4_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in metY by TrmA_mono	1 b3171_v4_tRNA_2_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3171_v4_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v4_tRNA_55_MODIF_1	modification of position 55 nt (Y) in metY by TruB_mono	1 TruB_mono + 1 b3171_v4_tRNA_3 <==> 1 b3171_v4_tRNA_3_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v4_tRNA_55_MODIF_2	modification of position 55 nt (Y) in metY by TruB_mono	1 b3171_v4_tRNA_3_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3171_v4_tRNA_4	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v4_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in metY by Thil_mono	1 IscS_dim_S-SH + 1 Thil_mono + 1 atp + 1 b3171_v4_tRNA_4 + 1 mg2 + 1 trdrd <==> 1 b3171_v4_tRNA_4_Thil_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v4_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in metY by Thil_mono	1 b3171_v4_tRNA_4_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 h + 1 metY_tRNA + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v4_tRNA_Mg_BIND	Binding of two Mg2 to b3171_v4_tRNA	1 b3171_v4_RNA + 2 mg2 <==> 1 b3171_v4_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146

b3171_v4_trimming	Cutting of stable b3171_v4_RNA	1 b3171_v4_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b3171_v4_RNA + 1 + 1 ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3171_v4_trimming_cplx	Cutting complex formation of stable b3171_v4_RNA (,)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 b3171_v4_RNA_pre <==> 1 b3171_v4_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
b3174_tRNA_16_MODIF_1	modification of position 16 nt (D) in leuU by Dus_gen	1 Dus_gen + 1 b3174_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3174_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3174_tRNA_16_MODIF_2	modification of position 16 nt (D) in leuU by Dus_gen	1 b3174_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3174_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3174_tRNA_17_MODIF_1	modification of position 17 nt (D) in leuU by Dus_gen	1 Dus_gen + 1 b3174_tRNA_1 + 1 h + 1 nadph <==> 1 b3174_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3174_tRNA_17_MODIF_2	modification of position 17 nt (D) in leuU by Dus_gen	1 b3174_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3174_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3174_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in leuU by TrmH_dim	1 TrmH_dim + 1 amet + 1 b3174_tRNA_2 <==> 1 b3174_tRNA_2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3174_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in leuU by TrmH_dim	1 b3174_tRNA_2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b3174_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3174_tRNA_20_MODIF_1	modification of position 20 nt (D) in leuU by Dus_gen	1 Dus_gen + 1 b3174_tRNA_3 + 1 h + 1 nadph <==> 1 b3174_tRNA_3_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3174_tRNA_20_MODIF_2	modification of position 20 nt (D) in leuU by Dus_gen	1 b3174_tRNA_3_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3174_tRNA_4 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3174_tRNA_38_MODIF_1	modification of position 38 nt (Y) in leuU by TruA_dim	1 TruA_dim + 1 b3174_tRNA_4 <==> 1 b3174_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3174_tRNA_38_MODIF_2	modification of position 38 nt (Y) in leuU by TruA_dim	1 b3174_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b3174_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3174_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in leuU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3174_tRNA_5 <==> 1 b3174_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3174_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in leuU by TrmA_mono	1 b3174_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3174_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3174_tRNA_55_MODIF_1	modification of position 55 nt (Y) in leuU by TruB_mono	1 TruB_mono + 1 b3174_tRNA_6 <==> 1 b3174_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3174_tRNA_55_MODIF_2	modification of position 55 nt (Y) in leuU by TruB_mono	1 b3174_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 leuU_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3174_tRNA_Mg_BIND	Binding of two Mg2 to b3174_tRNA	1 b3174_RNA + 2 mg2 <==> 1 b3174_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
b3178_fold_spon	b3178_m folding: spontanous	1 b3178_m --> 1 FtsH_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.97E+03	1.97E+03	0	3.41E+03	3407.568	0	9.49E+01	94.905
b3178_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3178_mRNA --> 1 b3178_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
b3178_mRNA_degr1	Degradation of b3178_mRNA I	1 Orn_dim + 483 atp + 1 b3178_mRNA_2 + 1 degradosome + 483 h2o <==> 483 adp + 1 b3178_mRNA_2_degr + 483 h + 483 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
b3178_mRNA_degr2	Degradation of b3178_mRNA II	1 b3178_mRNA_2_degr + 1934 h2o --> 1 Orn_dim_inact + 462 amp 476 cmp + 1 degradosome_inact + 561 gmp + 1934 h + 436 ump	irreversible	mRNA degradation	0.00E+00	4.90E-01	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
b3178_maturation1	Polypeptide b3178 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3178_aa <==> 1 b3178_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.97E+03	1.97E+03	0	3.41E+03	3407.568	0	9.49E+01	94.905
b3178_maturation2	b3178 formation	1 b3178_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3178_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.97E+03	1.97E+03	0	3.41E+03	3407.568	0	9.49E+01	94.905
b3178_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3178_v1_mRNA --> 1 b3178_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
b3179_fold_spon	b3179_m folding: spontanous	1 b3179_m --> 1 RrmJ_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.23E+02	7.23E+02	0	1.19E+03	1189.757	0	1.15E+02	115.38
b3179_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3179_mRNA --> 1 b3179_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
b3179_mRNA_degr1	Degradation of b3179_mRNA I	1 Orn_dim + 157 atp + 1 b3179_mRNA_2 + 1 degradosome + 157 h2o <==> 157 adp + 1 b3179_mRNA_2_degr + 157 h + 157 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
b3179_mRNA_degr2	Degradation of b3179_mRNA II	1 b3179_mRNA_2_degr + 629 h2o --> 1 Orn_dim_inact + 150 amp + 1 atp + 137 cmp + 1 degradosome_inact + 181 gmp + 629 h + 161 ump	irreversible	mRNA degradation	0.00E+00	2.45E-01	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
b3179_maturation1	Polypeptide b3179 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3179_aa <==> 1 b3179_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.23E+02	7.23E+02	0	1.19E+03	1189.757	0	1.15E+02	115.38
b3179_maturation2	b3179 formation	1 b3179_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3179_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.23E+02	7.23E+02	0	1.19E+03	1189.757	0	1.15E+02	115.38
b3179_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3179_v1_mRNA --> 1 b3179_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
b3181_fold_GroEL/ES_1	b3181_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3181_m + 1 transGroES_hepta --> 7 adp + 1 b3181_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.85E+03	2.85E+03	0	4.97E+03	4969.003	0	9.22E+01	92.205
b3181_fold_GroEL/ES_2	b3181_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3181_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 GreA_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.85E+03	2.85E+03	0	4.97E+03	4969.003	0	9.22E+01	92.205
b3181_fold_GroEL/ES_3	b3181_m folding: GroEL/ES mediated; release of native protein	1 GreA_GroEL.(7)ADP.transGroES --> 1 GreA_mono + 1 GroEL.(7)ADP.transGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.85E+03	2.85E+03	0	4.97E+03	4969.003	0	9.22E+01	92.205
b3181_fold_KJE_1	b3181_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3181_m <==> 1 b3181_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.85E+03	2.85E+03	0	4.97E+03	4969.003	0	9.22E+01	92.205
b3181_fold_KJE_2	b3181_m folding: KJE mediated	1 GrpE_dim + 1 b3181_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 GreA_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.85E+03	2.85E+03	0	4.97E+03	4969.003	0	9.22E+01	92.205
b3181_fold_KJE_3	b3181_m folding: KJE mediated	1 GreA_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GreA_mono + 1 GrpE_dim_inact	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.85E+03	2.85E+03	0	4.97E+03	4969.003	0	9.22E+01	92.205
b3181_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3181_mRNA --> 1 b3181_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.07E+02	3.07E+02	0	5.42E+02	542.1115	0	2.45E-01	0.245
b3181_mRNA_degr1	Degradation of b3181_mRNA I	1 Orn_dim + 119 atp + 1 b3181_mRNA_2 + 1 degradosome + 119 h2o <==> 119 adp + 1 b3181_mRNA_2_degr + 119 h + 119 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.07E+02	3.07E+02	0	5.42E+02	542.1115	0	2.45E-01	0.245
b3181_mRNA_degr2	Degradation of b3181_mRNA II	1 b3181_mRNA_2_degr + 476 h2o --> 1 Orn_dim_inact + 135 amp + 1 atp + 104 cmp + 1 degradosome_inact + 127 gmp + 476 h + 110 ump	irreversible	mRNA degradation	0.00E+00	2.45E-01	0	3.07E+02	3.07E+02	0	5.42E+02	542.1115	0	2.45E-01	0.245
b3181_maturation1	Polypeptide b3181 peptide deformylase complex	1 Def_mono + 1 b3181_aa <==> 1 b3181_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.85E+03	2.85E+03	0	4.97E+03	4969.003	0	9.22E+01	92.205
b3181_maturation2	b3181 formation	1 b3181_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3181_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.85E+03	2.85E+03	0	4.97E+03	4969.003	0	9.22E+01	92.205
b3185_fold_spon	b3185_m folding: spontanous	1 b3185_m --> 1 RpmA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3185_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3185_mRNA --> 1 b3185_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.01E+02	1.01E+02	0	8.29E+01	82.88	0	5.39E-01	0.539
b3185_mRNA_degr1	Degradation of b3185_mRNA I	1 Orn_dim + 64 atp + 1 b3185_mRNA_2 + 1 degradosome + 64 h2o <==> 64 adp + 1 b3185_mRNA_2_degr + 64 h + 64 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.01E+02	1.01E+02	0	8.29E+01	82.88	0	5.39E-01	0.539
b3185_mRNA_degr2	Degradation of b3185_mRNA II	1 b3185_mRNA_2_degr + 257 h2o --> 1 Orn_dim_inact + 72 amp + 60 cmp + 1 degradosome_inact + 69 gmp + 257 h + 57 ump	irreversible	mRNA degradation	0.00E+00	5.39E-01	0	1.01E+02	1.01E+02	0	8.29E+01	82.88	0	5.39E-01	0.539
b3185_maturation1	Polypeptide b3185 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3185_aa <==> 1 b3185_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3185_maturation2	b3185 formation	1 b3185_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3185_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3186_fold_spon	b3186_m folding: spontanous	1 b3186_m --> 1 RplU_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3186_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3186_mRNA --> 1 b3186_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.01E+02	1.01E+02	0	8.29E+01	82.88	0	5.39E-01	0.539

b3186_mRNA_degr1	Degradation of b3186_mRNA I	1 Orn_dim + 78 atp + 1 b3186_mRNA_2 + 1 degradosome + 78 h2o <==> 78 adp + 1 b3186_mRNA_2_degr + 78 h + 78 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.01E+02	1.01E+02	0	8.29E+01	82.88	0	5.39E-01	0.539
b3186_mRNA_degr2	Degradation of b3186_mRNA II	1 b3186_mRNA_2_degr + 311 h2o --> 1 Orn_dim_inact + 85 amp + 1 atp + 64 cmp + 1 degradosome_inact + 87 gmp + 311 h + 75 ump	irreversible	mRNA degradation	0.00E+00	9.29E-01	0	1.01E+02	1.01E+02	0	8.29E+01	82.88	0	5.39E-01	0.539
b3186_maturation1	Polypeptide b3186 peptide deformylase complex	1 Def_mono + 1 b3186_aa <==> 1 b3186_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3186_maturation2	b3186 formation	1 b3186_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3186_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3201_fold_spon	b3201_m folding: spontanous	1 b3201_m --> 1 YhbG_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.07E+02	5.07E+02	0	8.34E+02	833.6445	0	8.41E+01	84.098
b3201_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3201_mRNA --> 1 b3201_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.04E+01	3.04E+01	0	5.37E+01	53.74604	0	2.07E-01	0.207
b3201_mRNA_degr1	Degradation of b3201_mRNA I	1 Orn_dim + 181 atp + 1 b3201_mRNA_2 + 1 degradosome + 181 h2o <==> 181 adp + 1 b3201_mRNA_2_degr + 181 h + 181 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.04E+01	3.04E+01	0	5.37E+01	53.74604	0	2.07E-01	0.207
b3201_mRNA_degr2	Degradation of b3201_mRNA II	1 b3201_mRNA_2_degr + 725 h2o --> 1 Orn_dim_inact + 169 amp + 1 atp + 195 cmp + 1 degradosome_inact + 200 gmp + 725 h + 161 ump	irreversible	mRNA degradation	0.00E+00	5.13E-01	0	3.04E+01	3.04E+01	0	5.37E+01	53.74604	0	2.07E-01	0.207
b3201_maturation1	Polypeptide b3201 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3201_aa <==> 1 b3201_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.07E+02	5.07E+02	0	8.34E+02	833.6445	0	8.41E+01	84.098
b3201_maturation2	b3201 formation	1 b3201_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3201_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.07E+02	5.07E+02	0	8.34E+02	833.6445	0	8.41E+01	84.098
b3202_fold_spon	b3202_m folding: spontanous	1 b3202_m --> 1 RpoN_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.44E+03	2.44E+03	0	4.24E+03	4236.416	0	1.10E+02	109.676
b3202_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3202_mRNA --> 1 b3202_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
b3202_mRNA_degr1	Degradation of b3202_mRNA I	1 Orn_dim + 358 atp + 1 b3202_mRNA_2 + 1 degradosome + 358 h2o <==> 358 adp + 1 b3202_mRNA_2_degr + 358 h + 358 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.36E+01	8.36E+01	0	1.48E+02	147.5906	0	2.07E-01	0.207
b3202_mRNA_degr2	Degradation of b3202_mRNA II	1 b3202_mRNA_2_degr + 1433 h2o --> 1 Orn_dim_inact + 376 amp + 1 atp + 382 cmp + 1 degradosome_inact + 376 gmp + 1433 h + 299 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	8.36E+01	8.36E+01	0	1.48E+02	147.5906	0	2.07E-01	0.207
b3202_maturation1	Polypeptide b3202 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3202_aa <==> 1 b3202_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.44E+03	2.44E+03	0	4.24E+03	4236.416	0	1.10E+02	109.676
b3202_maturation2	b3202 formation	1 b3202_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3202_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.44E+03	2.44E+03	0	4.24E+03	4236.416	0	1.10E+02	109.676
b3202_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3202_v1_mRNA --> 1 b3202_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.36E+01	8.36E+01	0	1.48E+02	147.5906	0	2.07E-01	0.207
b3202_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3202_v2_mRNA --> 1 b3202_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.04E+01	3.04E+01	0	5.37E+01	53.74604	0	2.07E-01	0.207
b3203_fold_spon	b3203_m folding: spontanous	1 b3203_m --> 1 YhbH_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.43E+02	3.43E+02	0	4.78E+02	477.8026	0	1.68E+02	168.035
b3203_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3203_mRNA --> 1 b3203_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
b3203_mRNA_degr1	Degradation of b3203_mRNA I	1 Orn_dim + 72 atp + 1 b3203_mRNA_2 + 1 degradosome + 72 h2o <==> 72 adp + 1 b3203_mRNA_2_degr + 72 h + 72 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
b3203_mRNA_degr2	Degradation of b3203_mRNA II	1 b3203_mRNA_2_degr + 287 h2o --> 1 Orn_dim_inact + 96 amp + 66 cmp + 1 degradosome_inact + 63 gmp + 287 h + 63 ump	irreversible	mRNA degradation	0.00E+00	2.84E-01	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
b3203_maturation1	Polypeptide b3203 peptide deformylase complex	1 Def_mono + 1 b3203_aa <==> 1 b3203_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.43E+02	3.43E+02	0	4.78E+02	477.8026	0	1.68E+02	168.035
b3203_maturation2	b3203 formation	1 b3203_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3203_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.43E+02	3.43E+02	0	4.78E+02	477.8026	0	1.68E+02	168.035
b3203_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3203_v1_mRNA --> 1 b3203_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.04E+01	3.04E+01	0	5.37E+01	53.74604	0	2.07E-01	0.207
b3204_fold_spon	b3204_m folding: spontanous	1 b3204_m --> 1 PtsN_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.55E+02	4.55E+02	0	6.98E+02	698.0447	0	1.40E+02	140.463
b3204_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3204_mRNA --> 1 b3204_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
b3204_mRNA_degr1	Degradation of b3204_mRNA I	1 Orn_dim + 123 atp + 1 b3204_mRNA_2 + 1 degradosome + 123 h2o <==> 123 adp + 1 b3204_mRNA_2_degr + 123 h + 123 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
b3204_mRNA_degr2	Degradation of b3204_mRNA II	1 b3204_mRNA_2_degr + 491 h2o --> 1 Orn_dim_inact + 131 amp + 130 cmp + 1 degradosome_inact + 127 gmp + 491 h + 104 ump	irreversible	mRNA degradation	0.00E+00	4.14E-01	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
b3204_maturation1	Polypeptide b3204 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3204_aa <==> 1 b3204_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.55E+02	4.55E+02	0	6.98E+02	698.0447	0	1.40E+02	140.463
b3204_maturation2	b3204 formation	1 b3204_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3204_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.55E+02	4.55E+02	0	6.98E+02	698.0447	0	1.40E+02	140.463
b3204_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3204_v1_mRNA --> 1 b3204_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.04E+01	3.04E+01	0	5.37E+01	53.74604	0	2.07E-01	0.207
b3205_fold_spon	b3205_m folding: spontanous	1 b3205_m --> 1 YhbJ_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.89E+02	6.89E+02	0	1.12E+03	1120.648	0	1.29E+02	129.392
b3205_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3205_mRNA --> 1 b3205_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
b3205_mRNA_degr1	Degradation of b3205_mRNA I	1 Orn_dim + 213 atp + 1 b3205_mRNA_2 + 1 degradosome + 213 h2o <==> 213 adp + 1 b3205_mRNA_2_degr + 213 h + 213 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
b3205_mRNA_degr2	Degradation of b3205_mRNA II	1 b3205_mRNA_2_degr + 854 h2o --> 1 Orn_dim_inact + 198 amp + 233 cmp + 1 degradosome_inact + 213 gmp + 854 h + 211 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
b3205_maturation1	Polypeptide b3205 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3205_aa <==> 1 b3205_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.89E+02	6.89E+02	0	1.12E+03	1120.648	0	1.29E+02	129.392
b3205_maturation2	b3205 formation	1 b3205_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3205_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.89E+02	6.89E+02	0	1.12E+03	1120.648	0	1.29E+02	129.392
b3205_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3205_v1_mRNA --> 1 b3205_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.04E+01	3.04E+01	0	5.37E+01	53.74604	0	2.07E-01	0.207
b3206_fold_spon	b3206_m folding: spontanous	1 b3206_m --> 1 Npr_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.85E+02	2.85E+02	0	4.20E+02	419.8026	0	1.10E+02	110.035
b3206_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3206_mRNA --> 1 b3206_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
b3206_mRNA_degr1	Degradation of b3206_mRNA I	1 Orn_dim + 67 atp + 1 b3206_mRNA_2 + 1 degradosome + 67 h2o <==> 67 adp + 1 b3206_mRNA_2_degr + 67 h + 67 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
b3206_mRNA_degr2	Degradation of b3206_mRNA II	1 b3206_mRNA_2_degr + 268 h2o --> 1 Orn_dim_inact + 72 amp + 59 cmp + 1 degradosome_inact + 74 gmp + 268 h + 64 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
b3206_maturation1	Polypeptide b3206 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3206_aa <==> 1 b3206_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.85E+02	2.85E+02	0	4.20E+02	419.8026	0	1.10E+02	110.035
b3206_maturation2	b3206 formation	1 b3206_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3206_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.85E+02	2.85E+02	0	4.20E+02	419.8026	0	1.10E+02	110.035
b3230_fold_spon	b3230_m folding: spontanous	1 b3230_m --> 1 RpsI_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3230_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3230_mRNA --> 1 b3230_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.48E+01	9.48E+01	0	8.29E+01	82.88	0	4.68E-01	0.468
b3230_mRNA_degr1	Degradation of b3230_mRNA I	1 Orn_dim + 98 atp + 1 b3230_mRNA_2 + 1 degradosome + 98 h2o <==> 98 adp + 1 b3230_mRNA_2_degr + 98 h + 98 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.48E+01	9.48E+01	0	8.29E+01	82.88	0	4.68E-01	0.468
b3230_mRNA_degr2	Degradation of b3230_mRNA II	1 b3230_mRNA_2_degr + 392 h2o --> 1 Orn_dim_inact + 93 amp + 102 cmp + 1 degradosome_inact + 104 gmp + 392 h + 94 ump	irreversible	mRNA degradation	0.00E+00	4.68E-01	0	9.48E+01	9.48E+01	0	8.29E+01	82.88	0	4.68E-01	0.468

b3230_maturation1	Polypeptide b3230 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3230_aa <==> 1 b3230_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3230_maturation2	b3230 formation	1 b3230_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3230_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3231_fold_spon	b3231_m folding: spontanous	1 b3231_m --> 1 RplM_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3231_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3231_mRNA --> 1 b3231_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.48E+01	9.48E+01	0	8.29E+01	82.88	0	4.68E-01	0.468
b3231_mRNA_degr1	Degradation of b3231_mRNA I	1 Orn_dim + 107 atp + 1 b3231_mRNA_2 + 1 degradosome + 107 h2o <==> 107 adp + 1 b3231_mRNA_2_degr + 107 h + 107 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.48E+01	9.48E+01	0	8.29E+01	82.88	0	4.68E-01	0.468
b3231_mRNA_degr2	Degradation of b3231_mRNA II	1 b3231_mRNA_2_degr + 428 h2o --> 1 Orn_dim_inact + 120 amp + 1 atp + 110 cmp + 1 degradosome_inact + 107 gmp + 428 h + 91 ump	irreversible	mRNA degradation	0.00E+00	1.08E+00	0	9.48E+01	9.48E+01	0	8.29E+01	82.88	0	4.68E-01	0.468
b3231_maturation1	Polypeptide b3231 peptide deformylase complex	1 Def_mono + 1 b3231_aa <==> 1 b3231_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3231_maturation2	b3231 formation	1 b3231_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3231_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3247_fold_spon	b3247_m folding: spontanous	1 b3247_m --> 1 Rng_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.47E+02	8.47E+02	0	1.44E+03	1437.997	0	7.77E+01	77.672
b3247_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3247_mRNA --> 1 b3247_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3247_mRNA_degr1	Degradation of b3247_mRNA I	1 Orn_dim + 364 atp + 1 b3247_mRNA_2 + 1 degradosome + 364 h2o <==> 364 adp + 1 b3247_mRNA_2_degr + 364 h + 364 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3247_mRNA_degr2	Degradation of b3247_mRNA II	1 b3247_mRNA_2_degr + 1458 h2o --> 1 Orn_dim_inact + 365 amp 347 cmp + 1 degradosome_inact + 413 gmp + 1458 h + 334 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3247_maturation1	Polypeptide b3247 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3247_aa <==> 1 b3247_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	8.47E+02	8.47E+02	0	1.44E+03	1437.997	0	7.77E+01	77.672
b3247_maturation2	b3247 formation	1 b3247_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3247_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	8.47E+02	8.47E+02	0	1.44E+03	1437.997	0	7.77E+01	77.672
b3248_fold_spon	b3248_m folding: spontanous	1 b3248_m --> 1 YhdE_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.76E+02	3.76E+02	0	6.08E+02	608.4875	0	7.41E+01	74.074
b3248_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3248_mRNA --> 1 b3248_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3248_mRNA_degr1	Degradation of b3248_mRNA I	1 Orn_dim + 148 atp + 1 b3248_mRNA_2 + 1 degradosome + 148 h2o <==> 148 adp + 1 b3248_mRNA_2_degr + 148 h + 148 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3248_mRNA_degr2	Degradation of b3248_mRNA II	1 b3248_mRNA_2_degr + 593 h2o --> 1 Orn_dim_inact + 141 amp + 133 cmp + 1 degradosome_inact + 186 gmp + 593 h + 134 ump	irreversible	mRNA degradation	0.00E+00	1.86E-01	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3248_maturation1	Polypeptide b3248 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3248_aa <==> 1 b3248_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.76E+02	3.76E+02	0	6.08E+02	608.4875	0	7.41E+01	74.074
b3248_maturation2	b3248 formation	1 b3248_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3248_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.76E+02	3.76E+02	0	6.08E+02	608.4875	0	7.41E+01	74.074
b3249_fold_spon	b3249_m folding: spontanous	1 b3249_m --> 1 MreD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.36E+02	3.36E+02	0	5.26E+02	526.2934	0	8.90E+01	89.046
b3249_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3249_mRNA --> 1 b3249_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3249_mRNA_degr1	Degradation of b3249_mRNA I	1 Orn_dim + 122 atp + 1 b3249_mRNA_2 + 1 degradosome + 122 h2o <==> 122 adp + 1 b3249_mRNA_2_degr + 122 h + 122 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3249_mRNA_degr2	Degradation of b3249_mRNA II	1 b3249_mRNA_2_degr + 487 h2o --> 1 Orn_dim_inact + 85 amp + 109 cmp + 1 degradosome_inact + 141 gmp + 487 h + 153 ump	irreversible	mRNA degradation	0.00E+00	2.15E-01	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3249_maturation1	Polypeptide b3249 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3249_aa <==> 1 b3249_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.36E+02	3.36E+02	0	5.26E+02	526.2934	0	8.90E+01	89.046
b3249_maturation2	b3249 formation	1 b3249_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3249_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.36E+02	3.36E+02	0	5.26E+02	526.2934	0	8.90E+01	89.046
b3250_fold_spon	b3250_m folding: spontanous	1 b3250_m --> 1 MreC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.48E+02	6.48E+02	0	1.09E+03	1091.728	0	7.15E+01	71.484
b3250_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3250_mRNA --> 1 b3250_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3250_mRNA_degr1	Degradation of b3250_mRNA I	1 Orn_dim + 276 atp + 1 b3250_mRNA_2 + 1 degradosome + 276 h2o <==> 276 adp + 1 b3250_mRNA_2_degr + 276 h + 276 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3250_mRNA_degr2	Degradation of b3250_mRNA II	1 b3250_mRNA_2_degr + 1103 h2o --> 1 Orn_dim_inact + 227 amp 290 cmp + 1 degradosome_inact + 328 gmp + 1103 h + 259 ump	irreversible	mRNA degradation	0.00E+00	1.04E-01	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3250_maturation1	Polypeptide b3250 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3250_aa <==> 1 b3250_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.48E+02	6.48E+02	0	1.09E+03	1091.728	0	7.15E+01	71.484
b3250_maturation2	b3250 formation	1 b3250_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3250_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.48E+02	6.48E+02	0	1.09E+03	1091.728	0	7.15E+01	71.484
b3251_fold_GroEL/ES_1	b3251_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3251_m + 1 transGroES_hepta --> 7 adp + 1 b3251_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.64E+02	6.64E+02	0	1.09E+03	1086.541	0	1.15E+02	114.88
b3251_fold_GroEL/ES_2	b3251_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3251_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 MreB_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.64E+02	6.64E+02	0	1.09E+03	1086.541	0	1.15E+02	114.88
b3251_fold_GroEL/ES_3	b3251_m folding: GroEL/ES mediated; release of native protein	1 MreB_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 MreB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.64E+02	6.64E+02	0	1.09E+03	1086.541	0	1.15E+02	114.88
b3251_fold_KJE_1	b3251_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3251_m <==> 1 b3251_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	6.64E+02	6.64E+02	0	1.09E+03	1086.541	0	1.15E+02	114.88
b3251_fold_KJE_2	b3251_m folding: KJE mediated	1 GrpE_dim + 1 b3251_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 MreB_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.64E+02	6.64E+02	0	1.09E+03	1086.541	0	1.15E+02	114.88
b3251_fold_KJE_3	b3251_m folding: KJE mediated	1 MreB_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 MreB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.64E+02	6.64E+02	0	1.09E+03	1086.541	0	1.15E+02	114.88
b3251_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3251_mRNA --> 1 b3251_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3251_mRNA_degr1	Degradation of b3251_mRNA I	1 Orn_dim + 261 atp + 1 b3251_mRNA_2 + 1 degradosome + 261 h2o <==> 261 adp + 1 b3251_mRNA_2_degr + 261 h + 261 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3251_mRNA_degr2	Degradation of b3251_mRNA II	1 b3251_mRNA_2_degr + 1043 h2o --> 1 Orn_dim_inact + 222 amp 1 atp + 264 cmp + 1 degradosome_inact + 303 gmp + 1043 h + 254 ump	irreversible	mRNA degradation	0.00E+00	3.08E-01	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
b3251_maturation1	Polypeptide b3251 peptide deformylase complex	1 Def_mono + 1 b3251_aa <==> 1 b3251_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.64E+02	6.64E+02	0	1.09E+03	1086.541	0	1.15E+02	114.88
b3251_maturation2	b3251 formation	1 b3251_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3251_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.64E+02	6.64E+02	0	1.09E+03	1086.541	0	1.15E+02	114.88
b3257_fold_spon	b3257_m folding: spontanous	1 b3257_m --> 1 YhdT_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.74E+02	2.74E+02	0	4.24E+02	423.5029	0	8.00E+01	79.984
b3257_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3257_mRNA --> 1 b3257_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196
b3257_mRNA_degr1	Degradation of b3257_mRNA I	1 Orn_dim + 60 atp + 1 b3257_mRNA_2 + 1 degradosome + 60 h2o <==> 60 adp + 1 b3257_mRNA_2_degr + 60 h + 60 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196

b3257_mRNA_degr2	Degradation of b3257_mRNA II	1 b3257_mRNA_2_degr + 242 h2o --> 1 Orn_dim_inact + 37 amp + 1 atp + 59 cmp + 1 degradosome_inact + 73 gmp + 242 h + 73 ump	irreversible	mRNA degradation	0.00E+00	1.96E-01	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196
b3257_maturation1	Polypeptide b3257 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3257_aa <==> 1 b3257_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.74E+02	2.74E+02	0	4.24E+02	423.5029	0	8.00E+01	79.984
b3257_maturation2	b3257 formation	1 b3257_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3257_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.74E+02	2.74E+02	0	4.24E+02	423.5029	0	8.00E+01	79.984
b3258_fold_spon	b3258_m folding: spontanous	1 b3258_m --> 1 PanF_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.46E+03	1.46E+03	0	2.50E+03	2501.96	0	9.73E+01	97.328
b3258_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3258_mRNA --> 1 b3258_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196
b3258_mRNA_degr1	Degradation of b3258_mRNA I	1 Orn_dim + 360 atp + 1 b3258_mRNA_2 + 1 degradosome + 360 h2o <==> 360 adp + 1 b3258_mRNA_2_degr + 360 h + 360 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196
b3258_mRNA_degr2	Degradation of b3258_mRNA II	1 b3258_mRNA_2_degr + 1440 h2o --> 1 Orn_dim_inact + 261 amp 369 cmp + 1 degradosome_inact + 415 gmp + 1440 h + 396 ump	irreversible	mRNA degradation	0.00E+00	2.29E-01	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196
b3258_maturation1	Polypeptide b3258 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3258_aa <==> 1 b3258_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.46E+03	1.46E+03	0	2.50E+03	2501.96	0	9.73E+01	97.328
b3258_maturation2	b3258 formation	1 b3258_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3258_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.46E+03	1.46E+03	0	2.50E+03	2501.96	0	9.73E+01	97.328
b3259_fold_spon	b3259_m folding: spontanous	1 b3259_m --> 1 PrmA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.21E+02	9.21E+02	0	1.56E+03	1555.257	0	9.53E+01	95.302
b3259_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3259_mRNA --> 1 b3259_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196
b3259_mRNA_degr1	Degradation of b3259_mRNA I	1 Orn_dim + 220 atp + 1 b3259_mRNA_2 + 1 degradosome + 220 h2o <==> 220 adp + 1 b3259_mRNA_2_degr + 220 h + 220 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196
b3259_mRNA_degr2	Degradation of b3259_mRNA II	1 b3259_mRNA_2_degr + 881 h2o --> 1 Orn_dim_inact + 208 amp + 225 cmp + 1 degradosome_inact + 254 gmp + 881 h + 195 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196
b3259_maturation1	Polypeptide b3259 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3259_aa <==> 1 b3259_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	9.21E+02	9.21E+02	0	1.56E+03	1555.257	0	9.53E+01	95.302
b3259_maturation2	b3259 formation	1 b3259_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3259_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	9.21E+02	9.21E+02	0	1.56E+03	1555.257	0	9.53E+01	95.302
b3260_fold_GroEL/ES_1	b3260_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3260_m + 1 transGroES_hepta --> 7 adp + 1 b3260_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.90E+03	1.90E+03	0	3.31E+03	3305.097	0	6.51E+01	65.124
b3260_fold_GroEL/ES_2	b3260_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3260_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 DusB_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.90E+03	1.90E+03	0	3.31E+03	3305.097	0	6.51E+01	65.124
b3260_fold_GroEL/ES_3	b3260_m folding: GroEL/ES mediated; release of native protein	1 DusB_GroEL.(7)ADP.transGroES --> 1 DusB_mono + 1 GroEL.(7)ADP.transGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.90E+03	1.90E+03	0	3.31E+03	3305.097	0	6.51E+01	65.124
b3260_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3260_mRNA --> 1 b3260_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	1.28E-01	0.128
b3260_mRNA_degr1	Degradation of b3260_mRNA I	1 Orn_dim + 241 atp + 1 b3260_mRNA_2 + 1 degradosome + 241 h2o <==> 241 adp + 1 b3260_mRNA_2_degr + 241 h + 241 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	1.28E-01	0.128
b3260_mRNA_degr2	Degradation of b3260_mRNA II	1 b3260_mRNA_2_degr + 965 h2o --> 1 Orn_dim_inact + 238 amp + 1 atp + 240 cmp + 1 degradosome_inact + 265 gmp + 965 h + 222 ump	irreversible	mRNA degradation	0.00E+00	1.28E-01	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	1.28E-01	0.128
b3260_maturation1	Polypeptide b3260 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3260_aa <==> 1 b3260_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.90E+03	1.90E+03	0	3.31E+03	3305.097	0	6.51E+01	65.124
b3260_maturation2	b3260 formation	1 b3260_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3260_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.90E+03	1.90E+03	0	3.31E+03	3305.097	0	6.51E+01	65.124
b3261_fold_spon	b3261_m folding: spontanous	1 b3261_m --> 1 Fis_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.34E+02	6.34E+02	0	1.02E+03	1024.133	0	1.24E+02	124.14
b3261_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3261_mRNA --> 1 b3261_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	1.28E-01	0.128
b3261_mRNA_degr1	Degradation of b3261_mRNA I	1 Orn_dim + 74 atp + 1 b3261_mRNA_2 + 1 degradosome + 74 h2o <==> 74 adp + 1 b3261_mRNA_2_degr + 74 h + 74 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	1.28E-01	0.128
b3261_mRNA_degr2	Degradation of b3261_mRNA II	1 b3261_mRNA_2_degr + 296 h2o --> 1 Orn_dim_inact + 88 amp + 69 cmp + 1 degradosome_inact + 71 gmp + 296 h + 69 ump	irreversible	mRNA degradation	0.00E+00	4.90E-01	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	1.28E-01	0.128
b3261_maturation1	Polypeptide b3261 peptide deformylase complex	1 Def_mono + 1 b3261_aa <==> 1 b3261_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.34E+02	6.34E+02	0	1.02E+03	1024.133	0	1.24E+02	124.14
b3261_maturation2	b3261 formation	1 b3261_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3261_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.34E+02	6.34E+02	0	1.02E+03	1024.133	0	1.24E+02	124.14
b3273_tRNA_16_MODIF_1	modification of position 16 nt (D) in thrV by Dus_gen	1 Dus_gen + 1 b3273_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3273_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_tRNA_16_MODIF_2	modification of position 16 nt (D) in thrV by Dus_gen	1 b3273_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3273_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_tRNA_17_MODIF_1	modification of position 17 nt (D) in thrV by Dus_gen	1 Dus_gen + 1 b3273_tRNA_1 + 1 h + 1 nadph <==> 1 b3273_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_tRNA_17_MODIF_2	modification of position 17 nt (D) in thrV by Dus_gen	1 b3273_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3273_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_tRNA_20_MODIF_1	modification of position 20 nt (D) in thrV by Dus_gen	1 Dus_gen + 1 b3273_tRNA_2 + 1 h + 1 nadph <==> 1 b3273_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_tRNA_20_MODIF_2	modification of position 20 nt (D) in thrV by Dus_gen	1 b3273_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3273_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_tRNA_37_MODIF_1	modification of position 37 nt (m6t6A) in thrV by Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A	1 MeT_tRNA_pos_37_m6t6A + 1 Up_tRNA_pos_37_t6A + 1 amet + atp + 1 b3273_tRNA_3 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b3273_tRNA_3_Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_tRNA_37_MODIF_2	modification of position 37 nt (m6t6A) in thrV by Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A	1 b3273_tRNA_3_Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A_cplx --> 1 MeT_tRNA_pos_37_m6t6A_inact + 1 Up_tRNA_pos_37_t6A_inact + 1 ahcys + 1 amp + 1 b3273_tRNA_4 + 2 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in thrV by YggH_mono	1 YggH_mono + 1 amet + 1 b3273_tRNA_4 <==> 1 b3273_tRNA_4_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in thrV by YggH_mono	1 b3273_tRNA_4_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3273_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in thrV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3273_tRNA_5 <==> 1 b3273_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in thrV by TrmA_mono	1 b3273_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3273_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_tRNA_55_MODIF_1	modification of position 55 nt (Y) in thrV by TruB_mono	1 TruB_mono + 1 b3273_tRNA_6 <==> 1 b3273_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_tRNA_55_MODIF_2	modification of position 55 nt (Y) in thrV by TruB_mono	1 b3273_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 thrV_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_tRNA_Mg_BIND	Binding of two Mg2 to b3273_tRNA	1 b3273_RNA + 2 mg2 <==> 1 b3273_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3273_v1_tRNA_16_MODIF_1	modification of position 16 nt (D) in thrV by Dus_gen	1 Dus_gen + 1 b3273_v1_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3273_v1_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3273_v1_tRNA_16_MODIF_2	modification of position 16 nt (D) in thrV by Dus_gen	1 b3273_v1_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3273_v1_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3273_v1_tRNA_17_MODIF_1	modification of position 17 nt (D) in thrV by Dus_gen	1 Dus_gen + 1 b3273_v1_tRNA_1 + 1 h + 1 nadph <==> 1 b3273_v1_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5

b3273_v1_tRNA_17_MODIF_2	modification of position 17 nt (D) in thrV by Dus_gen	1 b3273_v1_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3273_v1_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3273_v1_tRNA_20_MODIF_1	modification of position 20 nt (D) in thrV by Dus_gen	1 Dus_gen + 1 b3273_v1_tRNA_2 + 1 h + 1 nadph <==> 1 b3273_v1_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3273_v1_tRNA_20_MODIF_2	modification of position 20 nt (D) in thrV by Dus_gen	1 b3273_v1_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3273_v1_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3273_v1_tRNA_37_MODIF_1	modification of position 37 nt (m6t6A) in thrV by Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A	1 MeT_tRNA_pos_37_m6t6A + 1 Up_tRNA_pos_37_t6A + 1 amet + atp + 1 b3273_v1_tRNA_3 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b3273_v1_tRNA_3_Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3273_v1_tRNA_37_MODIF_2	modification of position 37 nt (m6t6A) in thrV by Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A	1 b3273_v1_tRNA_3_Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A_cplx --> 1 MeT_tRNA_pos_37_m6t6A_inact + 1 Up_tRNA_pos_37_t6A_inact + 1 ahcys + 1 amp + 1 b3273_v1_tRNA_4 + 2 h + 1 h2o + 1 mg2 + 1 pi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3273_v1_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in thrV by YggH_mono	1 YggH_mono + 1 amet + 1 b3273_v1_tRNA_4 <==> 1 b3273_v1_tRNA_4_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3273_v1_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in thrV by YggH_mono	1 b3273_v1_tRNA_4_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3273_v1_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3273_v1_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in thrV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3273_v1_tRNA_5 <==> 1 b3273_v1_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3273_v1_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in thrV by TrmA_mono	1 b3273_v1_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3273_v1_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3273_v1_tRNA_55_MODIF_1	modification of position 55 nt (Y) in thrV by TruB_mono	1 TruB_mono + 1 b3273_v1_tRNA_6 <==> 1 b3273_v1_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3273_v1_tRNA_55_MODIF_2	modification of position 55 nt (Y) in thrV by TruB_mono	1 b3273_v1_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 thrV_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3273_v1_tRNA_Mg_BIND	Binding of two Mg2 to b3273_v1_tRNA	1 b3273_v1_RNA + 2 mg2 <==> 1 b3273_v1_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_RNA_10_modif_1	b3275_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 MeT_23S_2445 + 1 amet + 1 b3275_RNA_10 <==> 1 b3275_RNA_10_MeT_23S_2445	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_10_modif_2	b3275_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 b3275_RNA_10_MeT_23S_2445 --> 1 MeT_23S_2445_inact + 1 ahcys + 1 b3275_RNA_11 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_11_a_modif_1	b3275_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 DU_23S_2449 + 1 b3275_RNA_11 + 1 h + 1 nadh <==> 1 b3275_RNA_11_DU_23S_2449_a	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_11_a_modif_2	b3275_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 b3275_RNA_11_DU_23S_2449_a --> 1 DU_23S_2449_inact + 1 b3275_RNA_12 + 1 nad	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_11_b_modif_1	b3275_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 DU_23S_2449 + 1 b3275_RNA_11 + 1 h + 1 nadph <==> 1 b3275_RNA_11_DU_23S_2449_b	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_11_b_modif_2	b3275_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 b3275_RNA_11_DU_23S_2449_b --> 1 DU_23S_2449_inact + 1 b3275_RNA_12 + 1 nadp	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_12_modif_1	b3275_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 YmfC_mono + 1 b3275_RNA_12 <==> 1 b3275_RNA_12_YmfC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_12_modif_2	b3275_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 b3275_RNA_12_YmfC_mono --> 1 YmfC_mono_inact + 1 b3275_RNA_13	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_13_modif_1	b3275_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 MeT_23S_2498 + 1 amet + 1 b3275_RNA_13 <==> 1 b3275_RNA_13_MeT_23S_2498	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_13_modif_2	b3275_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 b3275_RNA_13_MeT_23S_2498 --> 1 MeT_23S_2498_inact + 1 ahcys + 1 b3275_RNA_14 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_14_modif_1	b3275_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 MeT_23S_2503 + 1 amet + 1 b3275_RNA_14 <==> 1 b3275_RNA_14_MeT_23S_2503	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_14_modif_2	b3275_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 b3275_RNA_14_MeT_23S_2503 --> 1 MeT_23S_2503_inact + 1 ahcys + 1 b3275_RNA_15 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_15_modif_1	b3275_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 RluC_mono + 1 b3275_RNA_15 <==> 1 b3275_RNA_15_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_15_modif_2	b3275_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 b3275_RNA_15_RluC_mono --> 1 RluC_mono_inact + 1 b3275_RNA_16	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_16_modif_1	b3275_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 RrmJ_mono + 1 amet + 1 b3275_RNA_16 <==> 1 b3275_RNA_16_RrmJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_16_modif_2	b3275_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 b3275_RNA_16_RrmJ_mono --> 1 RrmJ_mono_inact + 1 ahcys + b3275_RNA_17 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_17_modif_1	b3275_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 RluC_mono + 1 b3275_RNA_17 <==> 1 b3275_RNA_17_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_17_modif_2	b3275_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 b3275_RNA_17_RluC_mono --> 1 RluC_mono_inact + 1 b3275_RNA_18	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_18_modif_1	b3275_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 YjbC_mono + 1 b3275_RNA_18 <==> 1 b3275_RNA_18_YjbC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_18_modif_2	b3275_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 b3275_RNA_18_YjbC_mono --> 1 YjbC_mono_inact + 1 b3275_RNA_19	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_19_modif_1	b3275_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 RluB_mono + 1 b3275_RNA_19 <==> 1 b3275_RNA_19_RluB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_19_modif_2	b3275_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 b3275_RNA_19_RluB_mono --> 1 RluB_mono_inact + 1 b3275_RNA_20	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_1_modif_1	b3275_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 MeT_23S_1835 + 1 amet + 1 b3275_RNA_1 <==> 1 b3275_RNA_1_MeT_23S_1835	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_1_modif_2	b3275_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 b3275_RNA_1_MeT_23S_1835 --> 1 MeT_23S_1835_inact + 1 ahcys + 1 b3275_RNA_2 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_20_modif_1	b3275_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 RrmA_dim + 1 amet + 1 b3275_RNA_20 <==> 1 b3275_RNA_20_RrmA_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_20_modif_2	b3275_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 b3275_RNA_20_RrmA_dim --> 1 RrmA_dim_inact + 1 ahcys + 1 b3275_RNA_21 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_21_modif_1	b3275_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 RluA_mono + 1 b3275_RNA_21 <==> 1 b3275_RNA_21_RluA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_21_modif_2	b3275_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 b3275_RNA_21_RluA_mono --> 1 RluA_mono_inact + 1 b3275_RNA_22	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0

b3275_RNA_22_modif_1	b3275_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 RumB_mono + 1 amet + 1 b3275_RNA_22 <==> 1 b3275_RNA_22_RumB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_22_modif_2	b3275_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 b3275_RNA_22_RumB_mono --> 1 RumB_mono_inact + 1 ahcys + 1 b3275_RNA_23 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_23_modif_1	b3275_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 RluC_mono + 1 b3275_RNA_23 <==> 1 b3275_RNA_23_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_23_modif_2	b3275_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 b3275_RNA_23_RluC_mono --> 1 RluC_mono_inact + 1 rrlD	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_2_modif_1	b3275_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 RluD_mono + 1 b3275_RNA_2 <==> 1 b3275_RNA_2_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_2_modif_2	b3275_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 b3275_RNA_2_RluD_mono --> 1 RluD_mono_inact + 1 b3275_RNA_3	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_3_modif_1	b3275_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 RluD_mono + 1 amet + 1 b3275_RNA_3 <==> 1 b3275_RNA_3_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_3_modif_2	b3275_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 b3275_RNA_3_RluD_mono --> 1 RluD_mono_inact + 1 ahcys + 1 b3275_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_4_modif_1	b3275_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 RluD_mono + 1 b3275_RNA_4 <==> 1 b3275_RNA_4_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_4_modif_2	b3275_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 b3275_RNA_4_RluD_mono --> 1 RluD_mono_inact + 1 b3275_RNA_5	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_5_modif_1	b3275_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 RumA_mono + 1 amet + 1 b3275_RNA_5 <==> 1 b3275_RNA_5_RumA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_5_modif_2	b3275_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 b3275_RNA_5_RumA_mono --> 1 RumA_mono_inact + 1 ahcys + 1 b3275_RNA_6 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_6_modif_1	b3275_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 MeT_23S_1962 + 1 amet + 1 b3275_RNA_6 <==> 1 b3275_RNA_6_MeT_23S_1962	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_6_modif_2	b3275_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 b3275_RNA_6_MeT_23S_1962 --> 1 MeT_23S_1962_inact + 1 ahcys + 1 b3275_RNA_7 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_7_modif_1	b3275_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 MeT_23S_2030 + 1 amet + 1 b3275_RNA_7 <==> 1 b3275_RNA_7_MeT_23S_2030	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_7_modif_2	b3275_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 b3275_RNA_7_MeT_23S_2030 --> 1 MeT_23S_2030_inact + 1 ahcys + 1 b3275_RNA_8 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_8_modif_1	b3275_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 MeT_23S_2069 + 1 amet + 1 b3275_RNA_8 <==> 1 b3275_RNA_8_MeT_23S_2069	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_8_modif_2	b3275_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 b3275_RNA_8_MeT_23S_2069 --> 1 MeT_23S_2069_inact + 1 ahcys + 1 b3275_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_9_modif_1	b3275_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 RlmB_dim + 1 amet + 1 b3275_RNA_9 <==> 1 b3275_RNA_9_RlmB_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_9_modif_2	b3275_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 b3275_RNA_9_RlmB_dim --> 1 RlmB_dim_inact + 1 ahcys + 1 b3275_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_modif_1	b3275_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 MeT_23S_1618 + 1 amet + 1 b3275_RNA <==> 1 b3275_RNA_MeT_23S_1618	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_RNA_modif_2	b3275_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 b3275_RNA_MeT_23S_1618 --> 1 MeT_23S_1618_inact + 1 ahcys + 1 b3275_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3275_v1_RNA_10_modif_1	b3275_v1_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 MeT_23S_2445 + 1 amet + 1 b3275_v1_RNA_10 <==> 1 b3275_v1_RNA_10_MeT_23S_2445	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_10_modif_2	b3275_v1_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 b3275_v1_RNA_10_MeT_23S_2445 --> 1 MeT_23S_2445_inact + 1 ahcys + 1 b3275_v1_RNA_11 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_11_a_modif_1	b3275_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 DU_23S_2449 + 1 b3275_v1_RNA_11 + 1 h + 1 nadh <==> 1 b3275_v1_RNA_11_DU_23S_2449_a	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_11_a_modif_2	b3275_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 b3275_v1_RNA_11_DU_23S_2449_a --> 1 DU_23S_2449_inact + 1 b3275_v1_RNA_12 + 1 nad	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_11_b_modif_1	b3275_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 DU_23S_2449 + 1 b3275_v1_RNA_11 + 1 h + 1 nadph <==> 1 b3275_v1_RNA_11_DU_23S_2449_b	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_11_b_modif_2	b3275_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 b3275_v1_RNA_11_DU_23S_2449_b --> 1 DU_23S_2449_inact + 1 b3275_v1_RNA_12 + 1 nadp	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_12_modif_1	b3275_v1_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 YmfC_mono + 1 b3275_v1_RNA_12 <==> 1 b3275_v1_RNA_12_YmfC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_12_modif_2	b3275_v1_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 b3275_v1_RNA_12_YmfC_mono --> 1 YmfC_mono_inact + 1 b3275_v1_RNA_13	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_13_modif_1	b3275_v1_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 MeT_23S_2498 + 1 amet + 1 b3275_v1_RNA_13 <==> 1 b3275_v1_RNA_13_MeT_23S_2498	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_13_modif_2	b3275_v1_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 b3275_v1_RNA_13_MeT_23S_2498 --> 1 MeT_23S_2498_inact + 1 ahcys + 1 b3275_v1_RNA_14 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_14_modif_1	b3275_v1_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 MeT_23S_2503 + 1 amet + 1 b3275_v1_RNA_14 <==> 1 b3275_v1_RNA_14_MeT_23S_2503	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_14_modif_2	b3275_v1_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 b3275_v1_RNA_14_MeT_23S_2503 --> 1 MeT_23S_2503_inact + 1 ahcys + 1 b3275_v1_RNA_15 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_15_modif_1	b3275_v1_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 RluC_mono + 1 b3275_v1_RNA_15 <==> 1 b3275_v1_RNA_15_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_15_modif_2	b3275_v1_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 b3275_v1_RNA_15_RluC_mono --> 1 RluC_mono_inact + 1 b3275_v1_RNA_16	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_16_modif_1	b3275_v1_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 RrmJ_mono + 1 amet + 1 b3275_v1_RNA_16 <==> 1 b3275_v1_RNA_16_RrmJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_16_modif_2	b3275_v1_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 b3275_v1_RNA_16_RrmJ_mono --> 1 RrmJ_mono_inact + 1 ahcys + 1 b3275_v1_RNA_17 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5

b3275_v1_RNA_17_modif_1	b3275_v1_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 RluC_mono + 1 b3275_v1_RNA_17 <==> 1 b3275_v1_RNA_17_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_17_modif_2	b3275_v1_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 b3275_v1_RNA_17_RluC_mono --> 1 RluC_mono_inact + 1 b3275_v1_RNA_18	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_18_modif_1	b3275_v1_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 YjbC_mono + 1 b3275_v1_RNA_18 <==> 1 b3275_v1_RNA_18_YjbC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_18_modif_2	b3275_v1_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 b3275_v1_RNA_18_YjbC_mono --> 1 YjbC_mono_inact + 1 b3275_v1_RNA_19	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_19_modif_1	b3275_v1_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 RluB_mono + 1 b3275_v1_RNA_19 <==> 1 b3275_v1_RNA_19_RluB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_19_modif_2	b3275_v1_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 b3275_v1_RNA_19_RluB_mono --> 1 RluB_mono_inact + 1 b3275_v1_RNA_20	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_1_modif_1	b3275_v1_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 MeT_23S_1835 + 1 amet + 1 b3275_v1_RNA_1 <==> 1 b3275_v1_RNA_1_MeT_23S_1835	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_1_modif_2	b3275_v1_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 b3275_v1_RNA_1_MeT_23S_1835 --> 1 MeT_23S_1835_inact + 1 ahcys + 1 b3275_v1_RNA_2 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_20_modif_1	b3275_v1_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 RrmA_dim + 1 amet + 1 b3275_v1_RNA_20 <==> 1 b3275_v1_RNA_20_RrmA_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_20_modif_2	b3275_v1_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 b3275_v1_RNA_20_RrmA_dim --> 1 RrmA_dim_inact + 1 ahcys + 1 b3275_v1_RNA_21 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_21_modif_1	b3275_v1_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 RluA_mono + 1 b3275_v1_RNA_21 <==> 1 b3275_v1_RNA_21_RluA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_21_modif_2	b3275_v1_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 b3275_v1_RNA_21_RluA_mono --> 1 RluA_mono_inact + 1 b3275_v1_RNA_22	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_22_modif_1	b3275_v1_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 RumB_mono + 1 amet + 1 b3275_v1_RNA_22 <==> 1 b3275_v1_RNA_22_RumB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_22_modif_2	b3275_v1_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 b3275_v1_RNA_22_RumB_mono --> 1 RumB_mono_inact + 1 ahcys + 1 b3275_v1_RNA_23 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_23_modif_1	b3275_v1_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 RluC_mono + 1 b3275_v1_RNA_23 <==> 1 b3275_v1_RNA_23_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_23_modif_2	b3275_v1_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 b3275_v1_RNA_23_RluC_mono --> 1 RluC_mono_inact + 1 rrlD	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_2_modif_1	b3275_v1_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 RluD_mono + 1 b3275_v1_RNA_2 <==> 1 b3275_v1_RNA_2_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_2_modif_2	b3275_v1_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 b3275_v1_RNA_2_RluD_mono --> 1 RluD_mono_inact + 1 b3275_v1_RNA_3	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_3_modif_1	b3275_v1_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 RluD_mono + 1 amet + 1 b3275_v1_RNA_3 <==> 1 b3275_v1_RNA_3_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_3_modif_2	b3275_v1_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 b3275_v1_RNA_3_RluD_mono --> 1 RluD_mono_inact + 1 ahcys + 1 b3275_v1_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_4_modif_1	b3275_v1_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 RluD_mono + 1 b3275_v1_RNA_4 <==> 1 b3275_v1_RNA_4_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_4_modif_2	b3275_v1_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 b3275_v1_RNA_4_RluD_mono --> 1 RluD_mono_inact + 1 b3275_v1_RNA_5	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_5_modif_1	b3275_v1_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 RumA_mono + 1 amet + 1 b3275_v1_RNA_5 <==> 1 b3275_v1_RNA_5_RumA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_5_modif_2	b3275_v1_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 b3275_v1_RNA_5_RumA_mono --> 1 RumA_mono_inact + 1 ahcy + 1 b3275_v1_RNA_6 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_6_modif_1	b3275_v1_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 MeT_23S_1962 + 1 amet + 1 b3275_v1_RNA_6 <==> 1 b3275_v1_RNA_6_MeT_23S_1962	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_6_modif_2	b3275_v1_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 b3275_v1_RNA_6_MeT_23S_1962 --> 1 MeT_23S_1962_inact + 1 ahcys + 1 b3275_v1_RNA_7 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_7_modif_1	b3275_v1_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 MeT_23S_2030 + 1 amet + 1 b3275_v1_RNA_7 <==> 1 b3275_v1_RNA_7_MeT_23S_2030	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_7_modif_2	b3275_v1_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 b3275_v1_RNA_7_MeT_23S_2030 --> 1 MeT_23S_2030_inact + 1 ahcys + 1 b3275_v1_RNA_8 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_8_modif_1	b3275_v1_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 MeT_23S_2069 + 1 amet + 1 b3275_v1_RNA_8 <==> 1 b3275_v1_RNA_8_MeT_23S_2069	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_8_modif_2	b3275_v1_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 b3275_v1_RNA_8_MeT_23S_2069 --> 1 MeT_23S_2069_inact + 1 ahcys + 1 b3275_v1_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_9_modif_1	b3275_v1_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 RlmB_dim + 1 amet + 1 b3275_v1_RNA_9 <==> 1 b3275_v1_RNA_9_RlmB_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_9_modif_2	b3275_v1_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 b3275_v1_RNA_9_RlmB_dim --> 1 RlmB_dim_inact + 1 ahcys + 1 b3275_v1_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_modif_1	b3275_v1_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 MeT_23S_1618 + 1 amet + 1 b3275_v1_RNA <==> 1 b3275_v1_RNA_MeT_23S_1618	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3275_v1_RNA_modif_2	b3275_v1_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 b3275_v1_RNA_MeT_23S_1618 --> 1 MeT_23S_1618_inact + 1 ahcys + 1 b3275_v1_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3276_tRNA_17_MODIF_1	modification of position 17 nt (D) in alaU by Dus_gen	1 Dus_gen + 1 b3276_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3276_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3276_tRNA_17_MODIF_2	modification of position 17 nt (D) in alaU by Dus_gen	1 b3276_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3276_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3276_tRNA_34_MODIF_1	modification of position 34 nt (cmo5U) in alaU by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 HyL_tRNA_pos_34_ho5U + 1 YecO_mono + 1 YecP_mono + 1 amet + 1 b3276_tRNA_1 + 2 chor <==> 1 b3276_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3276_tRNA_34_MODIF_2	modification of position 34 nt (cmo5U) in alaU by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 b3276_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx --> 1 C10H8O5 + 1 C9H9O4 + 1 HyL_tRNA_pos_34_ho5U_inact + 1 YecO_mono_inact + 1 YecP_mono_inact + 1 ahcys + 1 b3276_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0

b3276_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in alaU by YggH_mono	1 YggH_mono + 1 amet + 1 b3276_tRNA_2 <==> 1 b3276_tRNA_2_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3276_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in alaU by YggH_mono	1 b3276_tRNA_2_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3276_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3276_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in alaU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3276_tRNA_3 <==> 1 b3276_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3276_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in alaU by TrmA_mono	1 b3276_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3276_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3276_tRNA_55_MODIF_1	modification of position 55 nt (Y) in alaU by TruB_mono	1 TruB_mono + 1 b3276_tRNA_4 <==> 1 b3276_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3276_tRNA_55_MODIF_2	modification of position 55 nt (Y) in alaU by TruB_mono	1 b3276_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 alaU_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3276_tRNA_Mg_BIND	Binding of two Mg2 to b3276_tRNA	1 b3276_RNA + 2 mg2 <==> 1 b3276_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3276_v1_tRNA_17_MODIF_1	modification of position 17 nt (D) in alaU by Dus_gen	1 Dus_gen + 1 b3276_v1_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3276_v1_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3276_v1_tRNA_17_MODIF_2	modification of position 17 nt (D) in alaU by Dus_gen	1 b3276_v1_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3276_v1_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3276_v1_tRNA_34_MODIF_1	modification of position 34 nt (cmo5U) in alaU by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 HyL_tRNA_pos_34_ho5U + 1 YecO_mono + 1 YecP_mono + 1 amet + 1 b3276_v1_tRNA_1 + 2 chor <==> 1 b3276_v1_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3276_v1_tRNA_34_MODIF_2	modification of position 34 nt (cmo5U) in alaU by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 b3276_v1_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx --> 1 C10H8O5 + 1 C9H9O4 + 1 HyL_tRNA_pos_34_ho5U_inact + 1 YecO_mono_inact + 1 YecP_mono_inact + 1 ahcys + 1 b3276_v1_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3276_v1_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in alaU by YggH_mono	1 YggH_mono + 1 amet + 1 b3276_v1_tRNA_2 <==> 1 b3276_v1_tRNA_2_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3276_v1_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in alaU by YggH_mono	1 b3276_v1_tRNA_2_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3276_v1_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3276_v1_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in alaU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3276_v1_tRNA_3 <==> 1 b3276_v1_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3276_v1_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in alaU by TrmA_mono	1 b3276_v1_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3276_v1_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3276_v1_tRNA_55_MODIF_1	modification of position 55 nt (Y) in alaU by TruB_mono	1 TruB_mono + 1 b3276_v1_tRNA_4 <==> 1 b3276_v1_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3276_v1_tRNA_55_MODIF_2	modification of position 55 nt (Y) in alaU by TruB_mono	1 b3276_v1_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 alaU_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3276_v1_tRNA_Mg_BIND	Binding of two Mg2 to b3276_v1_tRNA	1 b3276_v1_RNA + 2 mg2 <==> 1 b3276_v1_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_tRNA_20A_MODIF_1	modification of position 20A nt (D) in ileU by Dus_gen	1 Dus_gen + 1 b3277_tRNA_1 + 1 h + 1 nadph <==> 1 b3277_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_20A_MODIF_2	modification of position 20A nt (D) in ileU by Dus_gen	1 b3277_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3277_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_20_MODIF_1	modification of position 20 nt (D) in ileU by Dus_gen	1 Dus_gen + 1 b3277_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3277_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_20_MODIF_2	modification of position 20 nt (D) in ileU by Dus_gen	1 b3277_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3277_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in ileU by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b3277_tRNA_2 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b3277_tRNA_2_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in ileU by Up_tRNA_pos_37_t6A	1 b3277_tRNA_2_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b3277_tRNA_3 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in ileU by YggH_mono	1 YggH_mono + 1 amet + 1 b3277_tRNA_3 <==> 1 b3277_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in ileU by YggH_mono	1 b3277_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3277_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in ileU by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b3277_tRNA_4 <==> 1 b3277_tRNA_4_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in ileU by AcpT_tRNA_pos_47_acp3U	1 b3277_tRNA_4_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b3277_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in ileU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3277_tRNA_5 <==> 1 b3277_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in ileU by TrmA_mono	1 b3277_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3277_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_55_MODIF_1	modification of position 55 nt (Y) in ileU by TruB_mono	1 TruB_mono + 1 b3277_tRNA_6 <==> 1 b3277_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_55_MODIF_2	modification of position 55 nt (Y) in ileU by TruB_mono	1 b3277_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3277_tRNA_7	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_65_MODIF_1	modification of position 65 nt (Y) in ileU by YqcB_mono	1 YqcB_mono + 1 b3277_tRNA_7 <==> 1 b3277_tRNA_7_YqcB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_65_MODIF_2	modification of position 65 nt (Y) in ileU by YqcB_mono	1 b3277_tRNA_7_YqcB_mono_cplx --> 1 YqcB_mono_inact + 1 ileU_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_tRNA_Mg_BIND	Binding of two Mg2 to b3277_tRNA	1 b3277_RNA + 2 mg2 <==> 1 b3277_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3277_v1_tRNA_20A_MODIF_1	modification of position 20A nt (D) in ileU by Dus_gen	1 Dus_gen + 1 b3277_v1_tRNA_1 + 1 h + 1 nadph <==> 1 b3277_v1_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_20A_MODIF_2	modification of position 20A nt (D) in ileU by Dus_gen	1 b3277_v1_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3277_v1_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_20_MODIF_1	modification of position 20 nt (D) in ileU by Dus_gen	1 Dus_gen + 1 b3277_v1_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3277_v1_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_20_MODIF_2	modification of position 20 nt (D) in ileU by Dus_gen	1 b3277_v1_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3277_v1_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in ileU by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b3277_v1_tRNA_2 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b3277_v1_tRNA_2_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in ileU by Up_tRNA_pos_37_t6A	1 b3277_v1_tRNA_2_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b3277_v1_tRNA_3 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in ileU by YggH_mono	1 YggH_mono + 1 amet + 1 b3277_v1_tRNA_3 <==> 1 b3277_v1_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in ileU by YggH_mono	1 b3277_v1_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3277_v1_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in ileU by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b3277_v1_tRNA_4 <==> 1 b3277_v1_tRNA_4_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in ileU by AcpT_tRNA_pos_47_acp3U	1 b3277_v1_tRNA_4_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b3277_v1_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in ileU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3277_v1_tRNA_5 <==> 1 b3277_v1_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in ileU by TrmA_mono	1 b3277_v1_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3277_v1_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_55_MODIF_1	modification of position 55 nt (Y) in ileU by TruB_mono	1 TruB_mono + 1 b3277_v1_tRNA_6 <==> 1 b3277_v1_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_55_MODIF_2	modification of position 55 nt (Y) in ileU by TruB_mono	1 b3277_v1_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3277_v1_tRNA_7	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_65_MODIF_1	modification of position 65 nt (Y) in ileU by YqcB_mono	1 YqcB_mono + 1 b3277_v1_tRNA_7 <==> 1 b3277_v1_tRNA_7_YqcB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3277_v1_tRNA_65_MODIF_2	modification of position 65 nt (Y) in ileU by YqcB_mono	1 b3277_v1_tRNA_7_YqcB_mono_cplx --> 1 YqcB_mono_inact + 1 ileU_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5

b3277_v1_tRNA_Mg_BIND	Binding of two Mg2 to b3277_v1_tRNA	1 b3277_v1_RNA + 2 mg2 <==> 1 b3277_v1_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_RNA_10_modif_1	b3278_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 RsmB_mono + 1 amet + 1 b3278_RNA_10 <==> 1 b3278_RNA_10_RsmB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_10_modif_2	b3278_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 b3278_RNA_10_RsmB_mono --> 1 RsmB_mono_inact + 1 ahcys + 1 h + 1 rrsD	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_1_modif_1	b3278_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 MeT_16S_1402 + 2 amet + 1 b3278_RNA_1 <==> 1 b3278_RNA_1_MeT_16S_1402	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_1_modif_2	b3278_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 b3278_RNA_1_MeT_16S_1402 --> 1 MeT_16S_1402_inact + 2 ahcys + 1 b3278_RNA_2 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_2_modif_1	b3278_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 MeT_16S_1407 + 1 amet + 1 b3278_RNA_2 <==> 1 b3278_RNA_2_MeT_16S_1407	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_2_modif_2	b3278_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 b3278_RNA_2_MeT_16S_1407 --> 1 MeT_16S_1407_inact + 1 ahcys + 1 b3278_RNA_3 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_3_modif_1	b3278_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 YggJ_mono + 1 amet + 1 b3278_RNA_3 <==> 1 b3278_RNA_3_YggJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_3_modif_2	b3278_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 b3278_RNA_3_YggJ_mono --> 1 YggJ_mono_inact + 1 ahcys + 1 b3278_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_4_modif_1	b3278_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 MeT_16S_1516 + 1 amet + 1 b3278_RNA_4 <==> 1 b3278_RNA_4_MeT_16S_1516	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_4_modif_2	b3278_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 b3278_RNA_4_MeT_16S_1516 --> 1 MeT_16S_1516_inact + 1 ahcys + 1 b3278_RNA_5 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_5_modif_1	b3278_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b3278_RNA_5 <==> 1 b3278_RNA_5_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_5_modif_2	b3278_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 b3278_RNA_5_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b3278_RNA_6 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_6_modif_1	b3278_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b3278_RNA_6 <==> 1 b3278_RNA_6_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_6_modif_2	b3278_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 b3278_RNA_6_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b3278_RNA_7 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_7_modif_1	b3278_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 RsuA_mono + 1 b3278_RNA_7 <==> 1 b3278_RNA_7_RsuA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_7_modif_2	b3278_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 b3278_RNA_7_RsuA_mono --> 1 RsuA_mono_inact + 1 b3278_RNA_8	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_8_modif_1	b3278_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 MeT_16S_527 + 1 amet + 1 b3278_RNA_8 <==> 1 b3278_RNA_8_MeT_16S_527	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_8_modif_2	b3278_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 b3278_RNA_8_MeT_16S_527 --> 1 MeT_16S_527_inact + 1 ahcy + 1 b3278_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_9_modif_1	b3278_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 MeT_16S_966 + 1 amet + 1 b3278_RNA_9 <==> 1 b3278_RNA_9_MeT_16S_966	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_9_modif_2	b3278_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 b3278_RNA_9_MeT_16S_966 --> 1 MeT_16S_966_inact + 1 ahcy + 1 b3278_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_modif_1	b3278_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 RsmC_mono + 1 amet + 1 b3278_RNA <==> 1 b3278_RNA_RsmC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_RNA_modif_2	b3278_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 b3278_RNA_RsmC_mono --> 1 RsmC_mono_inact + 1 ahcys + 1 b3278_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
b3278_v1_RNA_10_modif_1	b3278_v1_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 RsmB_mono + 1 amet + 1 b3278_v1_RNA_10 <==> 1 b3278_v1_RNA_10_RsmB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_10_modif_2	b3278_v1_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 b3278_v1_RNA_10_RsmB_mono --> 1 RsmB_mono_inact + 1 ahcys + 1 h + 1 rrsD	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_1_modif_1	b3278_v1_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 MeT_16S_1402 + 2 amet + 1 b3278_v1_RNA_1 <==> 1 b3278_v1_RNA_1_MeT_16S_1402	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_1_modif_2	b3278_v1_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 b3278_v1_RNA_1_MeT_16S_1402 --> 1 MeT_16S_1402_inact + 2 ahcys + 1 b3278_v1_RNA_2 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_2_modif_1	b3278_v1_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 MeT_16S_1407 + 1 amet + 1 b3278_v1_RNA_2 <==> 1 b3278_v1_RNA_2_MeT_16S_1407	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_2_modif_2	b3278_v1_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 b3278_v1_RNA_2_MeT_16S_1407 --> 1 MeT_16S_1407_inact + 1 ahcys + 1 b3278_v1_RNA_3 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_3_modif_1	b3278_v1_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 YggJ_mono + 1 amet + 1 b3278_v1_RNA_3 <==> 1 b3278_v1_RNA_3_YggJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_3_modif_2	b3278_v1_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 b3278_v1_RNA_3_YggJ_mono --> 1 YggJ_mono_inact + 1 ahcys + 1 b3278_v1_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_4_modif_1	b3278_v1_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 MeT_16S_1516 + 1 amet + 1 b3278_v1_RNA_4 <==> 1 b3278_v1_RNA_4_MeT_16S_1516	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_4_modif_2	b3278_v1_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 b3278_v1_RNA_4_MeT_16S_1516 --> 1 MeT_16S_1516_inact + 1 ahcys + 1 b3278_v1_RNA_5 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_5_modif_1	b3278_v1_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b3278_v1_RNA_5 <==> 1 b3278_v1_RNA_5_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_5_modif_2	b3278_v1_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 b3278_v1_RNA_5_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b3278_v1_RNA_6 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_6_modif_1	b3278_v1_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b3278_v1_RNA_6 <==> 1 b3278_v1_RNA_6_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_6_modif_2	b3278_v1_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 b3278_v1_RNA_6_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b3278_v1_RNA_7 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_7_modif_1	b3278_v1_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 RsuA_mono + 1 b3278_v1_RNA_7 <==> 1 b3278_v1_RNA_7_RsuA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5

b3278_v1_RNA_7_modif_2	b3278_v1_RNA modification (16S rRNA): position: 516, Y by RsuA_mon	1 b3278_v1_RNA_7_RsuA_mono --> 1 RsuA_mono_inact + 1 b3278_v1_RNA_8	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_8_modif_1	b3278_v1_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 MeT_16S_527 + 1 amet + 1 b3278_v1_RNA_8 <==> 1 b3278_v1_RNA_8_MeT_16S_527	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_8_modif_2	b3278_v1_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 b3278_v1_RNA_8_MeT_16S_527 --> 1 MeT_16S_527_inact + 1 ahcys + 1 b3278_v1_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_9_modif_1	b3278_v1_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 MeT_16S_966 + 1 amet + 1 b3278_v1_RNA_9 <==> 1 b3278_v1_RNA_9_MeT_16S_966	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_9_modif_2	b3278_v1_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 b3278_v1_RNA_9_MeT_16S_966 --> 1 MeT_16S_966_inact + 1 ahcys + 1 b3278_v1_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_modif_1	b3278_v1_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 RsmC_mono + 1 amet + 1 b3278_v1_RNA <==> 1 b3278_v1_RNA_RsmC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3278_v1_RNA_modif_2	b3278_v1_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 b3278_v1_RNA_RsmC_mono --> 1 RsmC_mono_inact + 1 ahcys + 1 b3278_v1_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
b3280_fold_spon	b3280_m folding: spontanous	1 b3280_m --> 1 YrdB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.07E+02	4.07E+02	0	6.47E+02	647.3271	0	9.41E+01	94.11
b3280_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3280_mRNA --> 1 b3280_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
b3280_mRNA_degr1	Degradation of b3280_mRNA I	1 Orn_dim + 63 atp + 1 b3280_mRNA_2 + 1 degradosome + 63 h2o <==> 63 adp + 1 b3280_mRNA_2_degr + 63 h + 63 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
b3280_mRNA_degr2	Degradation of b3280_mRNA II	1 b3280_mRNA_2_degr + 253 h2o --> 1 Orn_dim_inact + 70 amp + 50 cmp + 1 degradosome_inact + 75 gmp + 253 h + 59 ump	irreversible	mRNA degradation	0.00E+00	3.08E-01	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
b3280_maturation1	Polypeptide b3280 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3280_aa <==> 1 b3280_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.07E+02	4.07E+02	0	6.47E+02	647.3271	0	9.41E+01	94.11
b3280_maturation2	b3280 formation	1 b3280_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3280_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.07E+02	4.07E+02	0	6.47E+02	647.3271	0	9.41E+01	94.11
b3281_fold_spon	b3281_m folding: spontanous	1 b3281_m --> 1 AroE_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.08E+03	1.08E+03	0	1.84E+03	1843.607	0	7.33E+01	73.312
b3281_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3281_mRNA --> 1 b3281_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
b3281_mRNA_degr1	Degradation of b3281_mRNA I	1 Orn_dim + 204 atp + 1 b3281_mRNA_2 + 1 degradosome + 204 h2o <==> 204 adp + 1 b3281_mRNA_2_degr + 204 h + 204 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
b3281_mRNA_degr2	Degradation of b3281_mRNA II	1 b3281_mRNA_2_degr + 818 h2o --> 1 Orn_dim_inact + 188 amp + 183 cmp + 1 degradosome_inact + 218 gmp + 818 h + 230 ump	irreversible	mRNA degradation	0.00E+00	1.22E-01	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
b3281_maturation1	Polypeptide b3281 peptide deformylase complex	1 Def_mono + 1 b3281_aa <==> 1 b3281_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.08E+03	1.08E+03	0	1.84E+03	1843.607	0	7.33E+01	73.312
b3281_maturation2	b3281 formation	1 b3281_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3281_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.08E+03	1.08E+03	0	1.84E+03	1843.607	0	7.33E+01	73.312
b3282_fold_spon	b3282_m folding: spontanous	1 b3282_m --> 1 YrdC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.82E+02	7.82E+02	0	1.31E+03	1310.16	0	9.31E+01	93.082
b3282_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3282_mRNA --> 1 b3282_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
b3282_mRNA_degr1	Degradation of b3282_mRNA I	1 Orn_dim + 143 atp + 1 b3282_mRNA_2 + 1 degradosome + 143 h2o <==> 143 adp + 1 b3282_mRNA_2_degr + 143 h + 143 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
b3282_mRNA_degr2	Degradation of b3282_mRNA II	1 b3282_mRNA_2_degr + 572 h2o --> 1 Orn_dim_inact + 126 amp + 140 cmp + 1 degradosome_inact + 159 gmp + 572 h + 148 ump	irreversible	mRNA degradation	0.00E+00	3.99E-01	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
b3282_maturation1	Polypeptide b3282 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3282_aa <==> 1 b3282_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.82E+02	7.82E+02	0	1.31E+03	1310.16	0	9.31E+01	93.082
b3282_maturation2	b3282 formation	1 b3282_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3282_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.82E+02	7.82E+02	0	1.31E+03	1310.16	0	9.31E+01	93.082
b3283_fold_spon	b3283_m folding: spontanous	1 b3283_m --> 1 YrdD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.10E+02	7.10E+02	0	1.19E+03	1190.554	0	8.41E+01	84.12
b3283_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3283_mRNA --> 1 b3283_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
b3283_mRNA_degr1	Degradation of b3283_mRNA I	1 Orn_dim + 135 atp + 1 b3283_mRNA_2 + 1 degradosome + 135 h2o <==> 135 adp + 1 b3283_mRNA_2_degr + 135 h + 135 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
b3283_mRNA_degr2	Degradation of b3283_mRNA II	1 b3283_mRNA_2_degr + 542 h2o --> 1 Orn_dim_inact + 137 amp + 1 atp + 134 cmp + 1 degradosome_inact + 136 gmp + 542 h + 135 ump	irreversible	mRNA degradation	0.00E+00	3.26E-01	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
b3283_maturation1	Polypeptide b3283 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3283_aa <==> 1 b3283_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.10E+02	7.10E+02	0	1.19E+03	1190.554	0	8.41E+01	84.12
b3283_maturation2	b3283 formation	1 b3283_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3283_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.10E+02	7.10E+02	0	1.19E+03	1190.554	0	8.41E+01	84.12
b3287_fold_spon	b3287_m folding: spontanous	1 b3287_m_Fe --> 1 Def_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.25E+02	9.25E+02	0	1.55E+03	1550.424	0	1.11E+02	111.456
b3287_ion_BIND	Binding of ions to b3287	1 b3287_m + 1 fe2 <==> 1 b3287_m_Fe	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	9.25E+02	9.25E+02	0	1.55E+03	1550.424	0	1.11E+02	111.456
b3287_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3287_mRNA --> 1 b3287_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.07E+01	9.07E+01	0	1.60E+02	160.1693	0	2.84E-01	0.284
b3287_mRNA_degr1	Degradation of b3287_mRNA I	1 Orn_dim + 127 atp + 1 b3287_mRNA_2 + 1 degradosome + 127 h2o <==> 127 adp + 1 b3287_mRNA_2_degr + 127 h + 127 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.07E+01	9.07E+01	0	1.60E+02	160.1693	0	2.84E-01	0.284
b3287_mRNA_degr2	Degradation of b3287_mRNA II	1 b3287_mRNA_2_degr + 509 h2o --> 1 Orn_dim_inact + 148 amp + 1 atp + 105 cmp + 1 degradosome_inact + 131 gmp + 509 h + 125 ump	irreversible	mRNA degradation	0.00E+00	2.84E-01	0	9.07E+01	9.07E+01	0	1.60E+02	160.1693	0	2.84E-01	0.284
b3287_maturation1	Polypeptide b3287 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3287_aa <==> 1 b3287_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	9.25E+02	9.25E+02	0	1.55E+03	1550.424	0	1.11E+02	111.456
b3287_maturation2	b3287 formation	1 b3287_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3287_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	9.25E+02	9.25E+02	0	1.55E+03	1550.424	0	1.11E+02	111.456
b3288_fold_spon	b3288_m folding: spontanous	1 b3288_m --> 1 Fmt_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.71E+03	1.71E+03	0	2.96E+03	2962.967	0	8.50E+01	85.032
b3288_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3288_mRNA --> 1 b3288_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.07E+01	9.07E+01	0	1.60E+02	160.1693	0	2.84E-01	0.284
b3288_mRNA_degr1	Degradation of b3288_mRNA I	1 Orn_dim + 237 atp + 1 b3288_mRNA_2 + 1 degradosome + 237 h2o <==> 237 adp + 1 b3288_mRNA_2_degr + 237 h + 237 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.07E+01	9.07E+01	0	1.60E+02	160.1693	0	2.84E-01	0.284
b3288_mRNA_degr2	Degradation of b3288_mRNA II	1 b3288_mRNA_2_degr + 947 h2o --> 1 Orn_dim_inact + 229 amp + 245 cmp + 1 degradosome_inact + 256 gmp + 947 h + 218 ump	irreversible	mRNA degradation	0.00E+00	3.37E-01	0	9.07E+01	9.07E+01	0	1.60E+02	160.1693	0	2.84E-01	0.284
b3288_maturation1	Polypeptide b3288 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3288_aa <==> 1 b3288_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.71E+03	1.71E+03	0	2.96E+03	2962.967	0	8.50E+01	85.032
b3288_maturation2	b3288 formation	1 b3288_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3288_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.71E+03	1.71E+03	0	2.96E+03	2962.967	0	8.50E+01	85.032
b3289_DNA_act_bind	b3289_DNA binding of activator	1 b3289_DNA_neu --> 1 b3289_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.01E+02	1.01E+02	0	1.78E+02	177.8536	0	3.17E-01	0.317
b3289_fold_spon	b3289_m folding: spontanous	1 b3289_m --> 1 RsmB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.52E+03	4517.09	0	7.87E+01	78.675

b3289_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3289_mRNA --> 1 b3289_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.01E+02	1.01E+02	0	1.78E+02	177.8536	0	3.17E-01	0.317
b3289_mRNA_degr1	Degradation of b3289_mRNA I	1 Orn_dim + 322 atp + 1 b3289_mRNA_2 + 1 degradosome + 322 h2o <==> 322 adp + 1 b3289_mRNA_2_degr + 322 h + 322 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.01E+02	1.01E+02	0	1.78E+02	177.8536	0	3.17E-01	0.317
b3289_mRNA_degr2	Degradation of b3289_mRNA II	1 b3289_mRNA_2_degr + 1289 h2o --> 1 Orn_dim_inact + 332 amp + 1 atp + 317 cmp + 1 degradosome_inact + 324 gmp + 1289 h + 316 ump	irreversible	mRNA degradation	0.00E+00	3.17E-01	0	1.01E+02	1.01E+02	0	1.78E+02	177.8536	0	3.17E-01	0.317
b3289_maturation1	Polypeptide b3289 peptide deformylase complex	1 Def_mono + 1 b3289_aa <==> 1 b3289_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.59E+03	2.59E+03	0	4.52E+03	4517.09	0	7.87E+01	78.675
b3289_maturation2	b3289 formation	1 b3289_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3289_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.52E+03	4517.09	0	7.87E+01	78.675
b3294_fold_spon	b3294_m folding: spontanous	1 b3294_m --> 1 RplQ_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3294_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3294_mRNA --> 1 b3294_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3294_mRNA_degr1	Degradation of b3294_mRNA I	1 Orn_dim + 96 atp + 1 b3294_mRNA_2 + 1 degradosome + 96 h2o <==> 96 adp + 1 b3294_mRNA_2_degr + 96 h + 96 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3294_mRNA_degr2	Degradation of b3294_mRNA II	1 b3294_mRNA_2_degr + 383 h2o --> 1 Orn_dim_inact + 90 amp + 99 cmp + 1 degradosome_inact + 107 gmp + 383 h + 88 ump	irreversible	mRNA degradation	0.00E+00	4.73E-01	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3294_maturation1	Polypeptide b3294 peptide deformylase complex	1 Def_mono + 1 b3294_aa <==> 1 b3294_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3294_maturation2	b3294 formation	1 b3294_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3294_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3295_fold_GroEL/ES_1	b3295_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3295_m + 1 transGroES_hepta --> 7 adp + 1 b3295_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.65E+02	9.65E+02	0	1.30E+03	1301.275	0	2.05E+02	204.836
b3295_fold_GroEL/ES_2	b3295_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3295_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 RpoA_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.65E+02	9.65E+02	0	1.30E+03	1301.275	0	2.05E+02	204.836
b3295_fold_GroEL/ES_3	b3295_m folding: GroEL/ES mediated; release of native protein	1 RpoA_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 RpoA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.65E+02	9.65E+02	0	1.30E+03	1301.275	0	2.05E+02	204.836
b3295_fold_KJE_1	b3295_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3295_m <==> 1 b3295_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	9.65E+02	9.65E+02	0	1.30E+03	1301.275	0	2.05E+02	204.836
b3295_fold_KJE_2	b3295_m folding: KJE mediated	1 GrpE_dim + 1 b3295_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 RpoA_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.65E+02	9.65E+02	0	1.30E+03	1301.275	0	2.05E+02	204.836
b3295_fold_KJE_3	b3295_m folding: KJE mediated	1 RpoA_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 RpoA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.65E+02	9.65E+02	0	1.30E+03	1301.275	0	2.05E+02	204.836
b3295_fold_spon	b3295_m folding: spontanous	1 b3295_m --> 1 RpoA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.65E+02	9.65E+02	0	1.30E+03	1301.275	0	2.05E+02	204.836
b3295_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3295_mRNA --> 1 b3295_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3295_mRNA_degr1	Degradation of b3295_mRNA I	1 Orn_dim + 247 atp + 1 b3295_mRNA_2 + 1 degradosome + 247 h2o <==> 247 adp + 1 b3295_mRNA_2_degr + 247 h + 247 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3295_mRNA_degr2	Degradation of b3295_mRNA II	1 b3295_mRNA_2_degr + 989 h2o --> 1 Orn_dim_inact + 244 amp + 246 cmp + 1 degradosome_inact + 271 gmp + 989 h + 229 ump	irreversible	mRNA degradation	0.00E+00	6.62E-01	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3295_maturation1	Polypeptide b3295 peptide deformylase complex	1 Def_mono + 1 b3295_aa <==> 1 b3295_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	9.65E+02	9.65E+02	0	1.30E+03	1301.275	0	2.05E+02	204.836
b3295_maturation2	b3295 formation	1 b3295_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3295_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	9.65E+02	9.65E+02	0	1.30E+03	1301.275	0	2.05E+02	204.836
b3296_fold_spon	b3296_m folding: spontanous	1 b3296_m --> 1 RpsD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3296_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3296_mRNA --> 1 b3296_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3296_mRNA_degr1	Degradation of b3296_mRNA I	1 Orn_dim + 155 atp + 1 b3296_mRNA_2 + 1 degradosome + 155 h2o <==> 155 adp + 1 b3296_mRNA_2_degr + 155 h + 155 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3296_mRNA_degr2	Degradation of b3296_mRNA II	1 b3296_mRNA_2_degr + 620 h2o --> 1 Orn_dim_inact + 158 amp + 139 cmp + 1 degradosome_inact + 176 gmp + 620 h + 148 ump	irreversible	mRNA degradation	0.00E+00	6.62E-01	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3296_maturation1	Polypeptide b3296 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3296_aa <==> 1 b3296_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3296_maturation2	b3296 formation	1 b3296_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3296_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3297_fold_spon	b3297_m folding: spontanous	1 b3297_m --> 1 RpsK_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3297_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3297_mRNA --> 1 b3297_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3297_mRNA_degr1	Degradation of b3297_mRNA I	1 Orn_dim + 97 atp + 1 b3297_mRNA_2 + 1 degradosome + 97 h2o <==> 97 adp + 1 b3297_mRNA_2_degr + 97 h + 97 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3297_mRNA_degr2	Degradation of b3297_mRNA II	1 b3297_mRNA_2_degr + 389 h2o --> 1 Orn_dim_inact + 95 amp + 102 cmp + 1 degradosome_inact + 99 gmp + 389 h + 94 ump	irreversible	mRNA degradation	0.00E+00	4.02E-01	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3297_maturation1	Polypeptide b3297 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3297_aa <==> 1 b3297_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3297_maturation2	b3297 formation	1 b3297_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3297_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3298_fold_spon	b3298_m folding: spontanous	1 b3298_m --> 1 RpsM_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3298_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3298_mRNA --> 1 b3298_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3298_mRNA_degr1	Degradation of b3298_mRNA I	1 Orn_dim + 89 atp + 1 b3298_mRNA_2 + 1 degradosome + 89 h2o <==> 89 adp + 1 b3298_mRNA_2_degr + 89 h + 89 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3298_mRNA_degr2	Degradation of b3298_mRNA II	1 b3298_mRNA_2_degr + 356 h2o --> 1 Orn_dim_inact + 88 amp + 89 cmp + 1 degradosome_inact + 95 gmp + 1 gtp + 356 h + 84 ump	irreversible	mRNA degradation	0.00E+00	1.11E+00	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
b3298_maturation1	Polypeptide b3298 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3298_aa <==> 1 b3298_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3298_maturation2	b3298 formation	1 b3298_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3298_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3299_fold_spon	b3299_m folding: spontanous	1 b3299_m --> 1 RpmJ_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3299_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3299_mRNA --> 1 b3299_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3299_mRNA_degr1	Degradation of b3299_mRNA I	1 Orn_dim + 29 atp + 1 b3299_mRNA_2 + 1 degradosome + 29 h2o <==> 29 adp + 1 b3299_mRNA_2_degr + 29 h + 29 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3299_mRNA_degr2	Degradation of b3299_mRNA II	1 b3299_mRNA_2_degr + 116 h2o --> 1 Orn_dim_inact + 33 amp + 25 cmp + 1 degradosome_inact + 31 gmp + 116 h + 28 ump	irreversible	mRNA degradation	0.00E+00	5.99E-01	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3299_maturation1	Polypeptide b3299 peptide deformylase complex	1 Def_mono + 1 b3299_aa <==> 1 b3299_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3299_maturation2	b3299 formation	1 b3299_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3299_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3300_fold_spon	b3300_m folding: spontanous	1 b3300_m --> 1 SecY_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.26E+02	8.26E+02	0	1.32E+03	1315.489	0	1.90E+02	189.956
b3300_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3300_mRNA --> 1 b3300_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146

b3300_mRNA_degr1	Degradation of b3300_mRNA I	1 Orn_dim + 333 atp + 1 b3300_mRNA_2 + 1 degradosome + 333 h2o <==> 333 adp + 1 b3300_mRNA_2_degr + 333 h + 333 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3300_mRNA_degr2	Degradation of b3300_mRNA II	1 b3300_mRNA_2_degr + 1331 h2o --> 1 Orn_dim_inact + 286 amp 312 cmp + 1 degradosome_inact + 350 gmp + 1331 h + 384 ump	irreversible	mRNA degradation	0.00E+00	1.46E-01	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3300_maturation1	Polypeptide b3300 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3300_aa <==> 1 b3300_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	8.26E+02	8.26E+02	0	1.32E+03	1315.489	0	1.90E+02	189.956
b3300_maturation2	b3300 formation	1 b3300_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3300_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	8.26E+02	8.26E+02	0	1.32E+03	1315.489	0	1.90E+02	189.956
b3301_fold_spon	b3301_m folding: spontanous	1 b3301_m --> 1 RplO_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3301_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3301_mRNA --> 1 b3301_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3301_mRNA_degr1	Degradation of b3301_mRNA I	1 Orn_dim + 108 atp + 1 b3301_mRNA_2 + 1 degradosome + 108 h2o <==> 108 adp + 1 b3301_mRNA_2_degr + 108 h + 108 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3301_mRNA_degr2	Degradation of b3301_mRNA II	1 b3301_mRNA_2_degr + 434 h2o --> 1 Orn_dim_inact + 97 amp + 102 cmp + 1 degradosome_inact + 131 gmp + 434 h + 105 ump	irreversible	mRNA degradation	0.00E+00	3.37E-01	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3301_maturation1	Polypeptide b3301 peptide deformylase complex	1 Def_mono + 1 b3301_aa <==> 1 b3301_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3301_maturation2	b3301 formation	1 b3301_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3301_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3302_fold_spon	b3302_m folding: spontanous	1 b3302_m --> 1 RpmD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3302_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3302_mRNA --> 1 b3302_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3302_mRNA_degr1	Degradation of b3302_mRNA I	1 Orn_dim + 45 atp + 1 b3302_mRNA_2 + 1 degradosome + 45 h2o <==> 45 adp + 1 b3302_mRNA_2_degr + 45 h + 45 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3302_mRNA_degr2	Degradation of b3302_mRNA II	1 b3302_mRNA_2_degr + 179 h2o --> 1 Orn_dim_inact + 46 amp + 43 cmp + 1 degradosome_inact + 47 gmp + 179 h + 44 ump	irreversible	mRNA degradation	0.00E+00	2.90E-01	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3302_maturation1	Polypeptide b3302 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3302_aa <==> 1 b3302_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3302_maturation2	b3302 formation	1 b3302_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3302_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3303_fold_spon	b3303_m folding: spontanous	1 b3303_m --> 1 RpsE_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3303_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3303_mRNA --> 1 b3303_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3303_mRNA_degr1	Degradation of b3303_mRNA I	1 Orn_dim + 126 atp + 1 b3303_mRNA_2 + 1 degradosome + 126 h2o <==> 126 adp + 1 b3303_mRNA_2_degr + 126 h + 126 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3303_mRNA_degr2	Degradation of b3303_mRNA II	1 b3303_mRNA_2_degr + 503 h2o --> 1 Orn_dim_inact + 130 amp + 117 cmp + 1 degradosome_inact + 136 gmp + 503 h + 121 ump	irreversible	mRNA degradation	0.00E+00	4.49E-01	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3303_maturation1	Polypeptide b3303 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3303_aa <==> 1 b3303_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3303_maturation2	b3303 formation	1 b3303_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3303_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3304_fold_spon	b3304_m folding: spontanous	1 b3304_m --> 1 RplR_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3304_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3304_mRNA --> 1 b3304_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3304_mRNA_degr1	Degradation of b3304_mRNA I	1 Orn_dim + 88 atp + 1 b3304_mRNA_2 + 1 degradosome + 88 h2o <==> 88 adp + 1 b3304_mRNA_2_degr + 88 h + 88 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3304_mRNA_degr2	Degradation of b3304_mRNA II	1 b3304_mRNA_2_degr + 353 h2o --> 1 Orn_dim_inact + 85 amp + 95 cmp + 1 degradosome_inact + 95 gmp + 353 h + 79 ump	irreversible	mRNA degradation	0.00E+00	1.20E+00	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3304_maturation1	Polypeptide b3304 peptide deformylase complex	1 Def_mono + 1 b3304_aa <==> 1 b3304_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3304_maturation2	b3304 formation	1 b3304_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3304_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3305_fold_spon	b3305_m folding: spontanous	1 b3305_m --> 1 RplF_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3305_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3305_mRNA --> 1 b3305_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3305_mRNA_degr1	Degradation of b3305_mRNA I	1 Orn_dim + 133 atp + 1 b3305_mRNA_2 + 1 degradosome + 133 h2o <==> 133 adp + 1 b3305_mRNA_2_degr + 133 h + 133 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3305_mRNA_degr2	Degradation of b3305_mRNA II	1 b3305_mRNA_2_degr + 533 h2o --> 1 Orn_dim_inact + 125 amp + 126 cmp + 1 degradosome_inact + 152 gmp + 533 h + 131 ump	irreversible	mRNA degradation	0.00E+00	7.92E-01	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3305_maturation1	Polypeptide b3305 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3305_aa <==> 1 b3305_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3305_maturation2	b3305 formation	1 b3305_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3305_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3306_fold_spon	b3306_m folding: spontanous	1 b3306_m --> 1 RpsH_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3306_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3306_mRNA --> 1 b3306_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3306_mRNA_degr1	Degradation of b3306_mRNA I	1 Orn_dim + 98 atp + 1 b3306_mRNA_2 + 1 degradosome + 98 h2o <==> 98 adp + 1 b3306_mRNA_2_degr + 98 h + 98 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3306_mRNA_degr2	Degradation of b3306_mRNA II	1 b3306_mRNA_2_degr + 392 h2o --> 1 Orn_dim_inact + 102 amp + 90 cmp + 1 degradosome_inact + 107 gmp + 392 h + 94 ump	irreversible	mRNA degradation	0.00E+00	3.95E+00	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3306_maturation1	Polypeptide b3306 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3306_aa <==> 1 b3306_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3306_maturation2	b3306 formation	1 b3306_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3306_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3307_fold_spon	b3307_m folding: spontanous	1 b3307_m --> 1 RpsN_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3307_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3307_mRNA --> 1 b3307_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3307_mRNA_degr1	Degradation of b3307_mRNA I	1 Orn_dim + 76 atp + 1 b3307_mRNA_2 + 1 degradosome + 76 h2o <==> 76 adp + 1 b3307_mRNA_2_degr + 76 h + 76 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3307_mRNA_degr2	Degradation of b3307_mRNA II	1 b3307_mRNA_2_degr + 305 h2o --> 1 Orn_dim_inact + 77 amp + 77 cmp + 1 degradosome_inact + 84 gmp + 305 h + 68 ump	irreversible	mRNA degradation	0.00E+00	2.15E+00	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3307_maturation1	Polypeptide b3307 peptide deformylase complex	1 Def_mono + 1 b3307_aa <==> 1 b3307_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3307_maturation2	b3307 formation	1 b3307_def_cplx + 2 h2o --> 1 Def_mono_inact + 1 b3307_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3308_fold_spon	b3308_m folding: spontanous	1 b3308_m --> 1 RplE_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3308_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3308_mRNA --> 1 b3308_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3308_mRNA_degr1	Degradation of b3308_mRNA I	1 Orn_dim + 135 atp + 1 b3308_mRNA_2 + 1 degradosome + 135 h2o <==> 135 adp + 1 b3308_mRNA_2_degr + 135 h + 135 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146

b3308_mRNA_degr2	Degradation of b3308_mRNA II	1 b3308_mRNA_2_degr + 539 h2o --> 1 Orn_dim_inact + 141 amp + 137 cmp + 1 degradosome_inact + 132 gmp + 539 h + 130 ump	irreversible	mRNA degradation	0.00E+00	1.35E+00	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3308_maturation1	Polypeptide b3308 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3308_aa <==> 1 b3308_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3308_maturation2	b3308 formation	1 b3308_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3308_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3309_fold_spon	b3309_m folding: spontanous	1 b3309_m --> 1 RplX_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3309_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3309_mRNA --> 1 b3309_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3309_mRNA_degr1	Degradation of b3309_mRNA I	1 Orn_dim + 78 atp + 1 b3309_mRNA_2 + 1 degradosome + 78 h2o <==> 78 adp + 1 b3309_mRNA_2_degr + 78 h + 78 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3309_mRNA_degr2	Degradation of b3309_mRNA II	1 b3309_mRNA_2_degr + 314 h2o --> 1 Orn_dim_inact + 98 amp + 66 cmp + 1 degradosome_inact + 79 gmp + 314 h + 72 ump	irreversible	mRNA degradation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3309_maturation1	Polypeptide b3309 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3309_aa <==> 1 b3309_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3309_maturation2	b3309 formation	1 b3309_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3309_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3310_fold_spon	b3310_m folding: spontanous	1 b3310_m --> 1 RplN_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3310_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3310_mRNA --> 1 b3310_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3310_mRNA_degr1	Degradation of b3310_mRNA I	1 Orn_dim + 93 atp + 1 b3310_mRNA_2 + 1 degradosome + 93 h2o <==> 93 adp + 1 b3310_mRNA_2_degr + 93 h + 93 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3310_mRNA_degr2	Degradation of b3310_mRNA II	1 b3310_mRNA_2_degr + 371 h2o --> 1 Orn_dim_inact + 92 amp + 1 atp + 87 cmp + 1 degradosome_inact + 103 gmp + 371 h + 89 ump	irreversible	mRNA degradation	0.00E+00	7.56E-01	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
b3310_maturation1	Polypeptide b3310 peptide deformylase complex	1 Def_mono + 1 b3310_aa <==> 1 b3310_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3310_maturation2	b3310 formation	1 b3310_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3310_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3311_fold_spon	b3311_m folding: spontanous	1 b3311_m --> 1 RpsQ_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3311_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3311_mRNA --> 1 b3311_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3311_mRNA_degr1	Degradation of b3311_mRNA I	1 Orn_dim + 63 atp + 1 b3311_mRNA_2 + 1 degradosome + 63 h2o <==> 63 adp + 1 b3311_mRNA_2_degr + 63 h + 63 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3311_mRNA_degr2	Degradation of b3311_mRNA II	1 b3311_mRNA_2_degr + 253 h2o --> 1 Orn_dim_inact + 72 amp + 57 cmp + 1 degradosome_inact + 64 gmp + 253 h + 61 ump	irreversible	mRNA degradation	0.00E+00	5.67E-01	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3311_maturation1	Polypeptide b3311 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3311_aa <==> 1 b3311_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3311_maturation2	b3311 formation	1 b3311_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3311_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3312_fold_spon	b3312_m folding: spontanous	1 b3312_m --> 1 RpmC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3312_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3312_mRNA --> 1 b3312_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3312_mRNA_degr1	Degradation of b3312_mRNA I	1 Orn_dim + 47 atp + 1 b3312_mRNA_2 + 1 degradosome + 47 h2o <==> 47 adp + 1 b3312_mRNA_2_degr + 47 h + 47 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3312_mRNA_degr2	Degradation of b3312_mRNA II	1 b3312_mRNA_2_degr + 190 h2o --> 1 Orn_dim_inact + 51 amp + 44 cmp + 1 degradosome_inact + 60 gmp + 190 h + 36 ump	irreversible	mRNA degradation	0.00E+00	1.61E+00	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3312_maturation1	Polypeptide b3312 peptide deformylase complex	1 Def_mono + 1 b3312_aa <==> 1 b3312_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3312_maturation2	b3312 formation	1 b3312_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3312_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3313_fold_spon	b3313_m folding: spontanous	1 b3313_m --> 1 RplP_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3313_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3313_mRNA --> 1 b3313_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3313_mRNA_degr1	Degradation of b3313_mRNA I	1 Orn_dim + 102 atp + 1 b3313_mRNA_2 + 1 degradosome + 102 h2o <==> 102 adp + 1 b3313_mRNA_2_degr + 102 h + 102 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3313_mRNA_degr2	Degradation of b3313_mRNA II	1 b3313_mRNA_2_degr + 410 h2o --> 1 Orn_dim_inact + 107 amp + 92 cmp + 1 degradosome_inact + 121 gmp + 410 h + 91 ump	irreversible	mRNA degradation	0.00E+00	2.84E-01	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3313_maturation1	Polypeptide b3313 peptide deformylase complex	1 Def_mono + 1 b3313_aa <==> 1 b3313_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3313_maturation2	b3313 formation	1 b3313_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3313_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3314_fold_spon	b3314_m folding: spontanous	1 b3314_m --> 1 RpsC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3314_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3314_mRNA --> 1 b3314_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3314_mRNA_degr1	Degradation of b3314_mRNA I	1 Orn_dim + 175 atp + 1 b3314_mRNA_2 + 1 degradosome + 175 h2o <==> 175 adp + 1 b3314_mRNA_2_degr + 175 h + 175 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3314_mRNA_degr2	Degradation of b3314_mRNA II	1 b3314_mRNA_2_degr + 701 h2o --> 1 Orn_dim_inact + 189 amp + 171 cmp + 1 degradosome_inact + 187 gmp + 701 h + 155 ump	irreversible	mRNA degradation	0.00E+00	1.72E-01	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3314_maturation1	Polypeptide b3314 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3314_aa <==> 1 b3314_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3314_maturation2	b3314 formation	1 b3314_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3314_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3315_fold_spon	b3315_m folding: spontanous	1 b3315_m --> 1 RplV_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3315_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3315_mRNA --> 1 b3315_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3315_mRNA_degr1	Degradation of b3315_mRNA I	1 Orn_dim + 83 atp + 1 b3315_mRNA_2 + 1 degradosome + 83 h2o <==> 83 adp + 1 b3315_mRNA_2_degr + 83 h + 83 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3315_mRNA_degr2	Degradation of b3315_mRNA II	1 b3315_mRNA_2_degr + 332 h2o --> 1 Orn_dim_inact + 88 amp + 82 cmp + 1 degradosome_inact + 84 gmp + 332 h + 79 ump	irreversible	mRNA degradation	0.00E+00	2.29E-01	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3315_maturation1	Polypeptide b3315 peptide deformylase complex	1 Def_mono + 1 b3315_aa <==> 1 b3315_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3315_maturation2	b3315 formation	1 b3315_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3315_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3316_fold_spon	b3316_m folding: spontanous	1 b3316_m --> 1 RpsS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3316_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3316_mRNA --> 1 b3316_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3316_mRNA_degr1	Degradation of b3316_mRNA I	1 Orn_dim + 69 atp + 1 b3316_mRNA_2 + 1 degradosome + 69 h2o <==> 69 adp + 1 b3316_mRNA_2_degr + 69 h + 69 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3316_mRNA_degr2	Degradation of b3316_mRNA II	1 b3316_mRNA_2_degr + 278 h2o --> 1 Orn_dim_inact + 77 amp + 67 cmp + 1 degradosome_inact + 69 gmp + 278 h + 66 ump	irreversible	mRNA degradation	0.00E+00	1.39E+00	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3316_maturation1	Polypeptide b3316 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3316_aa <==> 1 b3316_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3316_maturation2	b3316 formation	1 b3316_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3316_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3317_fold_spon	b3317_m folding: spontanous	1 b3317_m --> 1 RplB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72

b3317_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3317_mRNA --> 1 b3317_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3317_mRNA_degr1	Degradation of b3317_mRNA I	1 Orn_dim + 205 atp + 1 b3317_mRNA_2 + 1 degradosome + 205 h2o <==> 205 adp + 1 b3317_mRNA_2_degr + 205 h + 205 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3317_mRNA_degr2	Degradation of b3317_mRNA II	1 b3317_mRNA_2_degr + 821 h2o --> 1 Orn_dim_inact + 203 amp + 209 cmp + 1 degradosome_inact + 224 gmp + 821 h + 186 ump	irreversible	mRNA degradation	0.00E+00	5.53E-01	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3317_maturation1	Polypeptide b3317 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3317_aa <==> 1 b3317_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3317_maturation2	b3317 formation	1 b3317_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3317_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3318_fold_spon	b3318_m folding: spontanous	1 b3318_m --> 1 RplW_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3318_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3318_mRNA --> 1 b3318_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3318_mRNA_degr1	Degradation of b3318_mRNA I	1 Orn_dim + 74 atp + 1 b3318_mRNA_2 + 1 degradosome + 74 h2o <==> 74 adp + 1 b3318_mRNA_2_degr + 74 h + 74 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3318_mRNA_degr2	Degradation of b3318_mRNA II	1 b3318_mRNA_2_degr + 298 h2o --> 1 Orn_dim_inact + 92 amp + 66 cmp + 1 degradosome_inact + 79 gmp + 298 h + 62 ump	irreversible	mRNA degradation	0.00E+00	1.09E+00	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3318_maturation1	Polypeptide b3318 peptide deformylase complex	1 Def_mono + 1 b3318_aa <==> 1 b3318_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3318_maturation2	b3318 formation	1 b3318_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3318_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3319_fold_spon	b3319_m folding: spontanous	1 b3319_m --> 1 RplD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3319_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3319_mRNA --> 1 b3319_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3319_mRNA_degr1	Degradation of b3319_mRNA I	1 Orn_dim + 151 atp + 1 b3319_mRNA_2 + 1 degradosome + 151 h2o <==> 151 adp + 1 b3319_mRNA_2_degr + 151 h + 151 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3319_mRNA_degr2	Degradation of b3319_mRNA II	1 b3319_mRNA_2_degr + 605 h2o --> 1 Orn_dim_inact + 145 amp + 146 cmp + 1 degradosome_inact + 175 gmp + 605 h + 140 ump	irreversible	mRNA degradation	0.00E+00	2.69E-01	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3319_maturation1	Polypeptide b3319 peptide deformylase complex	1 Def_mono + 1 b3319_aa <==> 1 b3319_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3319_maturation2	b3319 formation	1 b3319_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3319_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3320_fold_spon	b3320_m folding: spontanous	1 b3320_m --> 1 RplC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3320_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3320_mRNA --> 1 b3320_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3320_mRNA_degr1	Degradation of b3320_mRNA I	1 Orn_dim + 157 atp + 1 b3320_mRNA_2 + 1 degradosome + 157 h2o <==> 157 adp + 1 b3320_mRNA_2_degr + 157 h + 157 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3320_mRNA_degr2	Degradation of b3320_mRNA II	1 b3320_mRNA_2_degr + 629 h2o --> 1 Orn_dim_inact + 162 amp + 148 cmp + 1 degradosome_inact + 176 gmp + 629 h + 144 ump	irreversible	mRNA degradation	0.00E+00	6.22E-01	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3320_maturation1	Polypeptide b3320 peptide deformylase complex	1 Def_mono + 1 b3320_aa <==> 1 b3320_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3320_maturation2	b3320 formation	1 b3320_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3320_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3321_fold_spon	b3321_m folding: spontanous	1 b3321_m --> 1 RpsJ_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3321_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3321_mRNA --> 1 b3321_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3321_mRNA_degr1	Degradation of b3321_mRNA I	1 Orn_dim + 78 atp + 1 b3321_mRNA_2 + 1 degradosome + 78 h2o <==> 78 adp + 1 b3321_mRNA_2_degr + 78 h + 78 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3321_mRNA_degr2	Degradation of b3321_mRNA II	1 b3321_mRNA_2_degr + 311 h2o --> 1 Orn_dim_inact + 73 amp + 1 atp + 90 cmp + 1 degradosome_inact + 83 gmp + 311 h + 65 ump	irreversible	mRNA degradation	0.00E+00	1.21E+00	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
b3321_maturation1	Polypeptide b3321 peptide deformylase complex	1 Def_mono + 1 b3321_aa <==> 1 b3321_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3321_maturation2	b3321 formation	1 b3321_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3321_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3339_fold_KJE_1	b3339_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3339_m <==> 1 b3339_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.13E+03	2.13E+03	0	2.80E+03	2800.46	0	1.27E+03	1268.634
b3339_fold_KJE_2	b3339_m folding: KJE mediated	1 GrpE_dim + 1 b3339_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 TufA_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.13E+03	2.13E+03	0	2.80E+03	2800.46	0	1.27E+03	1268.634
b3339_fold_KJE_3	b3339_m folding: KJE mediated	1 TufA_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 TufA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.13E+03	2.13E+03	0	2.80E+03	2800.46	0	1.27E+03	1268.634
b3339_fold_spon	b3339_m folding: spontanous	1 b3339_m --> 1 TufA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.13E+03	2.13E+03	0	2.80E+03	2800.46	0	1.27E+03	1268.634
b3339_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3339_mRNA --> 1 b3339_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.93E+01	2.93E+01	0	5.17E+01	51.7244	0	5.67E-01	0.567
b3339_mRNA_degr1	Degradation of b3339_mRNA I	1 Orn_dim + 296 atp + 1 b3339_mRNA_2 + 1 degradosome + 296 h2o <==> 296 adp + 1 b3339_mRNA_2_degr + 296 h + 296 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.82E+01	3.82E+01	0	6.74E+01	67.35913	0	7.58E-01	0.758
b3339_mRNA_degr2	Degradation of b3339_mRNA II	1 b3339_mRNA_2_degr + 1184 h2o --> 1 Orn_dim_inact + 286 amp 306 cmp + 1 degradosome_inact + 325 gmp + 1184 h + 268 ump	irreversible	mRNA degradation	0.00E+00	1.77E+00	0	3.82E+01	3.82E+01	0	6.74E+01	67.35913	0	7.58E-01	0.758
b3339_maturation1	Polypeptide b3339 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3339_aa <==> 1 b3339_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.13E+03	2.13E+03	0	2.80E+03	2800.46	0	1.27E+03	1268.634
b3339_maturation2	b3339 formation	1 b3339_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3339_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.13E+03	2.13E+03	0	2.80E+03	2800.46	0	1.27E+03	1268.634
b3339_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3339_v1_mRNA --> 1 b3339_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.82E+01	3.82E+01	0	6.74E+01	67.35913	0	7.58E-01	0.758
b3340_fold_GroEL/ES_1	b3340_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3340_m + 1 transGroES_hepta --> 7 adp + 1 b3340_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.04E+03	2.04E+03	0	3.14E+03	3140.993	0	5.11E+02	510.778
b3340_fold_GroEL/ES_2	b3340_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3340_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 FusA_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.04E+03	2.04E+03	0	3.14E+03	3140.993	0	5.11E+02	510.778
b3340_fold_GroEL/ES_3	b3340_m folding: GroEL/ES mediated; release of native protein	1 FusA_GroEL.(7)ADP.transGroES --> 1 FusA_mono + 1 GroEL.(7)ADP.transGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.04E+03	2.04E+03	0	3.14E+03	3140.993	0	5.11E+02	510.778
b3340_fold_KJE_1	b3340_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3340_m <==> 1 b3340_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.04E+03	2.04E+03	0	3.14E+03	3140.993	0	5.11E+02	510.778
b3340_fold_KJE_2	b3340_m folding: KJE mediated	1 GrpE_dim + 1 b3340_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 FusA_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.04E+03	2.04E+03	0	3.14E+03	3140.993	0	5.11E+02	510.778
b3340_fold_KJE_3	b3340_m folding: KJE mediated	1 FusA_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 FusA_mono + 1 GrpE_dim_inact	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.04E+03	2.04E+03	0	3.14E+03	3140.993	0	5.11E+02	510.778
b3340_fold_spon	b3340_m folding: spontanous	1 b3340_m --> 1 FusA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.04E+03	2.04E+03	0	3.14E+03	3140.993	0	5.11E+02	510.778
b3340_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3340_mRNA --> 1 b3340_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.93E+01	2.93E+01	0	5.17E+01	51.7244	0	5.67E-01	0.567
b3340_mRNA_degr1	Degradation of b3340_mRNA I	1 Orn_dim + 528 atp + 1 b3340_mRNA_2 + 1 degradosome + 528 h2o <==> 528 adp + 1 b3340_mRNA_2_degr + 528 h + 528 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.82E+01	3.82E+01	0	6.74E+01	67.35913	0	7.58E-01	0.758

b3340_mRNA_degr2	Degradation of b3340_mRNA II	1 b3340_mRNA_2_degr + 2114 h2o --> 1 Orn_dim_inact + 551 amp 515 cmp + 1 degradosome_inact + 560 gmp + 2114 h + 489 ump	irreversible	mRNA degradation	0.00E+00	7.58E-01	0	3.82E+01	3.82E+01	0	6.74E+01	67.35913	0	7.58E-01	0.758
b3340_maturation1	Polypeptide b3340 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3340_aa <==> 1 b3340_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.04E+03	2.04E+03	0	3.14E+03	3140.993	0	5.11E+02	510.778
b3340_maturation2	b3340 formation	1 b3340_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3340_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.04E+03	2.04E+03	0	3.14E+03	3140.993	0	5.11E+02	510.778
b3340_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3340_v1_mRNA --> 1 b3340_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.82E+01	3.82E+01	0	6.74E+01	67.35913	0	7.58E-01	0.758
b3341_fold_spon	b3341_m folding: spontanous	1 b3341_m --> 1 RpsG_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3341_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3341_mRNA --> 1 b3341_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.93E+01	2.93E+01	0	5.17E+01	51.7244	0	5.67E-01	0.567
b3341_mRNA_degr1	Degradation of b3341_mRNA I	1 Orn_dim + 135 atp + 1 b3341_mRNA_2 + 1 degradosome + 135 h2o <==> 135 adp + 1 b3341_mRNA_2_degr + 135 h + 135 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.93E+01	2.93E+01	0	5.17E+01	51.7244	0	5.67E-01	0.567
b3341_mRNA_degr2	Degradation of b3341_mRNA II	1 b3341_mRNA_2_degr + 539 h2o --> 1 Orn_dim_inact + 132 amp + 129 cmp + 1 degradosome_inact + 142 gmp + 539 h + 137 ump	irreversible	mRNA degradation	0.00E+00	5.67E-01	0	2.93E+01	2.93E+01	0	5.17E+01	51.7244	0	5.67E-01	0.567
b3341_maturation1	Polypeptide b3341 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3341_aa <==> 1 b3341_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3341_maturation2	b3341 formation	1 b3341_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3341_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3342_fold_spon	b3342_m folding: spontanous	1 b3342_m --> 1 RpsL_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3342_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3342_mRNA --> 1 b3342_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.93E+01	2.93E+01	0	5.17E+01	51.7244	0	5.67E-01	0.567
b3342_mRNA_degr1	Degradation of b3342_mRNA I	1 Orn_dim + 93 atp + 1 b3342_mRNA_2 + 1 degradosome + 93 h2o <==> 93 adp + 1 b3342_mRNA_2_degr + 93 h + 93 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.93E+01	2.93E+01	0	5.17E+01	51.7244	0	5.67E-01	0.567
b3342_mRNA_degr2	Degradation of b3342_mRNA II	1 b3342_mRNA_2_degr + 374 h2o --> 1 Orn_dim_inact + 90 amp + 1 atp + 101 cmp + 1 degradosome_inact + 99 gmp + 374 h + 84 ump	irreversible	mRNA degradation	0.00E+00	6.73E-01	0	2.93E+01	2.93E+01	0	5.17E+01	51.7244	0	5.67E-01	0.567
b3342_maturation1	Polypeptide b3342 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3342_aa <==> 1 b3342_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3342_maturation2	b3342 formation	1 b3342_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3342_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3343_fold_spon	b3343_m folding: spontanous	1 b3343_m --> 1 YheL_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.45E+02	4.45E+02	0	7.29E+02	729.0767	0	6.71E+01	67.074
b3343_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3343_mRNA --> 1 b3343_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
b3343_mRNA_degr1	Degradation of b3343_mRNA I	1 Orn_dim + 72 atp + 1 b3343_mRNA_2 + 1 degradosome + 72 h2o <==> 72 adp + 1 b3343_mRNA_2_degr + 72 h + 72 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
b3343_mRNA_degr2	Degradation of b3343_mRNA II	1 b3343_mRNA_2_degr + 287 h2o --> 1 Orn_dim_inact + 67 amp + 77 cmp + 1 degradosome_inact + 68 gmp + 287 h + 76 ump	irreversible	mRNA degradation	0.00E+00	2.99E-01	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
b3343_maturation1	Polypeptide b3343 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3343_aa <==> 1 b3343_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.45E+02	4.45E+02	0	7.29E+02	729.0767	0	6.71E+01	67.074
b3343_maturation2	b3343 formation	1 b3343_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3343_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.45E+02	4.45E+02	0	7.29E+02	729.0767	0	6.71E+01	67.074
b3344_fold_spon	b3344_m folding: spontanous	1 b3344_m --> 1 YheM_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.45E+02	4.45E+02	0	7.29E+02	729.0767	0	6.71E+01	67.074
b3344_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3344_mRNA --> 1 b3344_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
b3344_mRNA_degr1	Degradation of b3344_mRNA I	1 Orn_dim + 89 atp + 1 b3344_mRNA_2 + 1 degradosome + 89 h2o <==> 89 adp + 1 b3344_mRNA_2_degr + 89 h + 89 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
b3344_mRNA_degr2	Degradation of b3344_mRNA II	1 b3344_mRNA_2_degr + 358 h2o --> 1 Orn_dim_inact + 73 amp + 87 cmp + 1 degradosome_inact + 94 gmp + 358 h + 105 ump	irreversible	mRNA degradation	0.00E+00	1.40E-01	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
b3344_maturation1	Polypeptide b3344 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3344_aa <==> 1 b3344_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.45E+02	4.45E+02	0	7.29E+02	729.0767	0	6.71E+01	67.074
b3344_maturation2	b3344 formation	1 b3344_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3344_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.45E+02	4.45E+02	0	7.29E+02	729.0767	0	6.71E+01	67.074
b3345_fold_spon	b3345_m folding: spontanous	1 b3345_m --> 1 YheN_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.45E+02	4.45E+02	0	7.29E+02	729.0767	0	6.71E+01	67.074
b3345_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3345_mRNA --> 1 b3345_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
b3345_mRNA_degr1	Degradation of b3345_mRNA I	1 Orn_dim + 96 atp + 1 b3345_mRNA_2 + 1 degradosome + 96 h2o <==> 96 adp + 1 b3345_mRNA_2_degr + 96 h + 96 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
b3345_mRNA_degr2	Degradation of b3345_mRNA II	1 b3345_mRNA_2_degr + 385 h2o --> 1 Orn_dim_inact + 82 amp + 91 cmp + 1 degradosome_inact + 123 gmp + 385 h + 90 ump	irreversible	mRNA degradation	0.00E+00	1.12E-01	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
b3345_maturation1	Polypeptide b3345 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3345_aa <==> 1 b3345_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.45E+02	4.45E+02	0	7.29E+02	729.0767	0	6.71E+01	67.074
b3345_maturation2	b3345 formation	1 b3345_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3345_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.45E+02	4.45E+02	0	7.29E+02	729.0767	0	6.71E+01	67.074
b3346_fold_spon	b3346_m folding: spontanous	1 b3346_m --> 1 YheO_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.12E+03	1.12E+03	0	1.92E+03	1917.235	0	8.32E+01	83.188
b3346_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3346_mRNA --> 1 b3346_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
b3346_mRNA_degr1	Degradation of b3346_mRNA I	1 Orn_dim + 180 atp + 1 b3346_mRNA_2 + 1 degradosome + 180 h2o <==> 180 adp + 1 b3346_mRNA_2_degr + 180 h + 180 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
b3346_mRNA_degr2	Degradation of b3346_mRNA II	1 b3346_mRNA_2_degr + 722 h2o --> 1 Orn_dim_inact + 187 amp + 1 atp + 174 cmp + 1 degradosome_inact + 168 gmp + 722 h + 193 ump	irreversible	mRNA degradation	0.00E+00	3.17E-01	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
b3346_maturation1	Polypeptide b3346 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3346_aa <==> 1 b3346_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.12E+03	1.12E+03	0	1.92E+03	1917.235	0	8.32E+01	83.188
b3346_maturation2	b3346 formation	1 b3346_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3346_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.12E+03	1.12E+03	0	1.92E+03	1917.235	0	8.32E+01	83.188
b3384_fold_KJE_1	b3384_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3384_m <==> 1 b3384_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.59E+03	2.59E+03	0	4.49E+03	4488.955	0	1.20E+02	120.251
b3384_fold_KJE_2	b3384_m folding: KJE mediated	1 GrpE_dim + 1 b3384_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 TrpS_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.49E+03	4488.955	0	1.20E+02	120.251
b3384_fold_KJE_3	b3384_m folding: KJE mediated	1 TrpS_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 TrpS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.49E+03	4488.955	0	1.20E+02	120.251
b3384_fold_spon	b3384_m folding: spontanous	1 b3384_m --> 1 TrpS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.49E+03	4488.955	0	1.20E+02	120.251
b3384_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3384_mRNA --> 1 b3384_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.36E+01	5.36E+01	0	9.46E+01	94.59664	0	1.89E-01	0.189
b3384_mRNA_degr1	Degradation of b3384_mRNA I	1 Orn_dim + 249 atp + 1 b3384_mRNA_2 + 1 degradosome + 249 h2o <==> 249 adp + 1 b3384_mRNA_2_degr + 249 h + 249 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.30E+02	1.30E+02	0	2.30E+02	230.1208	0	1.89E-01	0.189
b3384_mRNA_degr2	Degradation of b3384_mRNA II	1 b3384_mRNA_2_degr + 996 h2o --> 1 Orn_dim_inact + 251 amp + 244 cmp + 1 degradosome_inact + 277 gmp + 996 h + 225 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	1.30E+02	1.30E+02	0	2.30E+02	230.1208	0	1.89E-01	0.189
b3384_maturation1	Polypeptide b3384 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3384_aa <==> 1 b3384_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.59E+03	2.59E+03	0	4.49E+03	4488.955	0	1.20E+02	120.251

b3384_maturation2	b3384 formation	1 b3384_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3384_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.49E+03	4488.955	0	1.20E+02	120.251
b3384_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3384_v1_mRNA --> 1 b3384_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
b3384_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3384_v2_mRNA --> 1 b3384_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
b3384_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3384_v3_mRNA --> 1 b3384_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.71E+01	2.71E+01	0	4.78E+01	47.81984	0	1.74E-01	0.174
b3384_v4_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3384_v4_mRNA --> 1 b3384_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3384_v5_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3384_v5_mRNA --> 1 b3384_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3384_v6_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3384_v6_mRNA --> 1 b3384_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	2.30E+02	230.1208	0	1.89E-01	0.189
b3385_fold_spon	b3385_m folding: spontanous	1 b3385_m --> 1 Gph_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.33E+02	8.33E+02	0	1.41E+03	1407.233	0	8.55E+01	85.526
b3385_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3385_mRNA --> 1 b3385_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.36E+01	5.36E+01	0	9.46E+01	94.59664	0	1.89E-01	0.189
b3385_mRNA_degr1	Degradation of b3385_mRNA I	1 Orn_dim + 187 atp + 1 b3385_mRNA_2 + 1 degradosome + 187 h2o <==> 187 adp + 1 b3385_mRNA_2_degr + 187 h + 187 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.36E+01	5.36E+01	0	9.46E+01	94.59664	0	1.89E-01	0.189
b3385_mRNA_degr2	Degradation of b3385_mRNA II	1 b3385_mRNA_2_degr + 750 h2o --> 1 Orn_dim_inact + 173 amp + 183 cmp + 1 degradosome_inact + 217 gmp + 750 h + 178 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	5.36E+01	5.36E+01	0	9.46E+01	94.59664	0	1.89E-01	0.189
b3385_maturation1	Polypeptide b3385 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3385_aa <==> 1 b3385_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	8.33E+02	8.33E+02	0	1.41E+03	1407.233	0	8.55E+01	85.526
b3385_maturation2	b3385 formation	1 b3385_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3385_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	8.33E+02	8.33E+02	0	1.41E+03	1407.233	0	8.55E+01	85.526
b3385_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3385_v1_mRNA --> 1 b3385_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
b3385_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3385_v2_mRNA --> 1 b3385_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
b3385_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3385_v3_mRNA --> 1 b3385_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.71E+01	2.71E+01	0	4.78E+01	47.81984	0	1.74E-01	0.174
b3385_v4_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3385_v4_mRNA --> 1 b3385_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3385_v5_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3385_v5_mRNA --> 1 b3385_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3386_fold_spon	b3386_m folding: spontanous	1 b3386_m --> 1 Rpe_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.20E+02	8.20E+02	0	1.35E+03	1353.646	0	1.26E+02	126.347
b3386_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3386_mRNA --> 1 b3386_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.36E+01	5.36E+01	0	9.46E+01	94.59664	0	1.89E-01	0.189
b3386_mRNA_degr1	Degradation of b3386_mRNA I	1 Orn_dim + 169 atp + 1 b3386_mRNA_2 + 1 degradosome + 169 h2o <==> 169 adp + 1 b3386_mRNA_2_degr + 169 h + 169 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.36E+01	5.36E+01	0	9.46E+01	94.59664	0	1.89E-01	0.189
b3386_mRNA_degr2	Degradation of b3386_mRNA II	1 b3386_mRNA_2_degr + 677 h2o --> 1 Orn_dim_inact + 161 amp + 1 atp + 169 cmp + 1 degradosome_inact + 177 gmp + 677 h + 170 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	5.36E+01	5.36E+01	0	9.46E+01	94.59664	0	1.89E-01	0.189
b3386_maturation1	Polypeptide b3386 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3386_aa <==> 1 b3386_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	8.20E+02	8.20E+02	0	1.35E+03	1353.646	0	1.26E+02	126.347
b3386_maturation2	b3386 formation	1 b3386_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3386_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	8.20E+02	8.20E+02	0	1.35E+03	1353.646	0	1.26E+02	126.347
b3386_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3386_v1_mRNA --> 1 b3386_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
b3386_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3386_v2_mRNA --> 1 b3386_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
b3386_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3386_v3_mRNA --> 1 b3386_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.71E+01	2.71E+01	0	4.78E+01	47.81984	0	1.74E-01	0.174
b3386_v4_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3386_v4_mRNA --> 1 b3386_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3386_v5_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3386_v5_mRNA --> 1 b3386_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3387_fold_spon	b3387_m folding: spontanous	1 b3387_m --> 1 Dam_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.06E+02	7.06E+02	0	1.19E+03	1193.139	0	7.25E+01	72.544
b3387_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3387_mRNA --> 1 b3387_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
b3387_mRNA_degr1	Degradation of b3387_mRNA I	1 Orn_dim + 209 atp + 1 b3387_mRNA_2 + 1 degradosome + 209 h2o <==> 209 adp + 1 b3387_mRNA_2_degr + 209 h + 209 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
b3387_mRNA_degr2	Degradation of b3387_mRNA II	1 b3387_mRNA_2_degr + 836 h2o --> 1 Orn_dim_inact + 207 amp + 1 atp + 204 cmp + 1 degradosome_inact + 211 gmp + 836 h + 214 ump	irreversible	mRNA degradation	0.00E+00	1.74E-01	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
b3387_maturation1	Polypeptide b3387 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3387_aa <==> 1 b3387_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.06E+02	7.06E+02	0	1.19E+03	1193.139	0	7.25E+01	72.544
b3387_maturation2	b3387 formation	1 b3387_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3387_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.06E+02	7.06E+02	0	1.19E+03	1193.139	0	7.25E+01	72.544
b3387_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3387_v1_mRNA --> 1 b3387_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
b3387_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3387_v2_mRNA --> 1 b3387_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.71E+01	2.71E+01	0	4.78E+01	47.81984	0	1.74E-01	0.174
b3387_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3387_v3_mRNA --> 1 b3387_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3387_v4_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3387_v4_mRNA --> 1 b3387_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3388_fold_spon	b3388_m folding: spontanous	1 b3388_m --> 1 DamX_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.48E+02	7.48E+02	0	1.27E+03	1266.246	0	7.51E+01	75.1
b3388_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3388_mRNA --> 1 b3388_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.71E+01	2.71E+01	0	4.78E+01	47.81984	0	1.74E-01	0.174
b3388_mRNA_degr1	Degradation of b3388_mRNA I	1 Orn_dim + 321 atp + 1 b3388_mRNA_2 + 1 degradosome + 321 h2o <==> 321 adp + 1 b3388_mRNA_2_degr + 321 h + 321 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.71E+01	2.71E+01	0	4.78E+01	47.81984	0	1.74E-01	0.174
b3388_mRNA_degr2	Degradation of b3388_mRNA II	1 b3388_mRNA_2_degr + 1286 h2o --> 1 Orn_dim_inact + 351 amp 1 atp + 353 cmp + 1 degradosome_inact + 349 gmp + 1286 h + 233 ump	irreversible	mRNA degradation	0.00E+00	2.00E-01	0	2.71E+01	2.71E+01	0	4.78E+01	47.81984	0	1.74E-01	0.174
b3388_maturation1	Polypeptide b3388 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3388_aa <==> 1 b3388_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.48E+02	7.48E+02	0	1.27E+03	1266.246	0	7.51E+01	75.1
b3388_maturation2	b3388 formation	1 b3388_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3388_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.48E+02	7.48E+02	0	1.27E+03	1266.246	0	7.51E+01	75.1
b3388_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3388_v1_mRNA --> 1 b3388_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3388_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3388_v2_mRNA --> 1 b3388_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3389_fold_spon	b3389_m folding: spontanous	1 b3389_m --> 1 AroB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.99E+02	4.99E+02	0	8.23E+02	822.7952	0	7.80E+01	77.994
b3389_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3389_mRNA --> 1 b3389_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3389_mRNA_degr1	Degradation of b3389_mRNA I	1 Orn_dim + 272 atp + 1 b3389_mRNA_2 + 1 degradosome + 272 h2o <==> 272 adp + 1 b3389_mRNA_2_degr + 272 h + 272 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104

b3389_mRNA_degr2	Degradation of b3389_mRNA II	1 b3389_mRNA_2_degr + 1088 h2o --> 1 Orn_dim_inact + 223 amp 265 cmp + 1 degradosome_inact + 325 gmp + 1088 h + 276 ump	irreversible	mRNA degradation	0.00E+00	3.17E-01	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3389_maturation1	Polypeptide b3389 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3389_aa <==> 1 b3389_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.99E+02	4.99E+02	0	8.23E+02	822.7952	0	7.80E+01	77.994
b3389_maturation2	b3389 formation	1 b3389_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3389_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.99E+02	4.99E+02	0	8.23E+02	822.7952	0	7.80E+01	77.994
b3389_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3389_v1_mRNA --> 1 b3389_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3390_fold_GroEL/ES_1	b3390_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3390_m + 1 transGroES_hepta --> 7 adp + 1 b3390_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.77E+02	2.77E+02	0	4.31E+02	431.2072	0	7.65E+01	76.54
b3390_fold_GroEL/ES_2	b3390_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3390_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 AroK_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.77E+02	2.77E+02	0	4.31E+02	431.2072	0	7.65E+01	76.54
b3390_fold_GroEL/ES_3	b3390_m folding: GroEL/ES mediated; release of native protein	1 AroK_GroEL.(7)ADP.transGroES --> 1 AroK_mono + 1 GroEL.(7)ADP.transGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.77E+02	2.77E+02	0	4.31E+02	431.2072	0	7.65E+01	76.54
b3390_fold_KJE_1	b3390_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3390_m <==> 1 b3390_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.77E+02	2.77E+02	0	4.31E+02	431.2072	0	7.65E+01	76.54
b3390_fold_KJE_2	b3390_m folding: KJE mediated	1 GrpE_dim + 1 b3390_m_DnaKJ_complex + 1 h2o --> 1 AroK_DnaK_GrpE_complex + 1 DnaJ_dim_inact + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.77E+02	2.77E+02	0	4.31E+02	431.2072	0	7.65E+01	76.54
b3390_fold_KJE_3	b3390_m folding: KJE mediated	1 AroK_DnaK_GrpE_complex + 1 atp --> 1 AroK_mono + 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.77E+02	2.77E+02	0	4.31E+02	431.2072	0	7.65E+01	76.54
b3390_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3390_mRNA --> 1 b3390_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3390_mRNA_degr1	Degradation of b3390_mRNA I	1 Orn_dim + 130 atp + 1 b3390_mRNA_2 + 1 degradosome + 130 h2o <==> 130 adp + 1 b3390_mRNA_2_degr + 130 h + 130 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3390_mRNA_degr2	Degradation of b3390_mRNA II	1 b3390_mRNA_2_degr + 521 h2o --> 1 Orn_dim_inact + 146 amp + 1 atp + 115 cmp + 1 degradosome_inact + 142 gmp + 521 h + 118 ump	irreversible	mRNA degradation	0.00E+00	1.04E-01	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3390_maturation1	Polypeptide b3390 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3390_aa <==> 1 b3390_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.77E+02	2.77E+02	0	4.31E+02	431.2072	0	7.65E+01	76.54
b3390_maturation2	b3390 formation	1 b3390_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3390_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.77E+02	2.77E+02	0	4.31E+02	431.2072	0	7.65E+01	76.54
b3390_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3390_v1_mRNA --> 1 b3390_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
b3406_fold_spon	b3406_m folding: spontanous	1 b3406_m --> 1 GreB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.69E+03	2.69E+03	0	4.69E+03	4687.216	0	7.52E+01	75.1905
b3406_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3406_mRNA --> 1 b3406_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.90E+02	2.90E+02	0	5.13E+02	512.5418	0	9.45E-02	0.0945
b3406_mRNA_degr1	Degradation of b3406_mRNA I	1 Orn_dim + 119 atp + 1 b3406_mRNA_2 + 1 degradosome + 119 h2o <==> 119 adp + 1 b3406_mRNA_2_degr + 119 h + 119 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.90E+02	2.90E+02	0	5.13E+02	512.5418	0	9.45E-02	0.0945
b3406_mRNA_degr2	Degradation of b3406_mRNA II	1 b3406_mRNA_2_degr + 476 h2o --> 1 Orn_dim_inact + 132 amp + 1 atp + 110 cmp + 1 degradosome_inact + 128 gmp + 476 h + 106 ump	irreversible	mRNA degradation	0.00E+00	9.45E-02	0	2.90E+02	2.90E+02	0	5.13E+02	512.5418	0	9.45E-02	0.0945
b3406_maturation1	Polypeptide b3406 peptide deformylas complex	1 Def_mono + 1 b3406_aa <==> 1 b3406_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.69E+03	2.69E+03	0	4.69E+03	4687.216	0	7.52E+01	75.1905
b3406_maturation2	b3406 formation	1 b3406_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3406_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.69E+03	2.69E+03	0	4.69E+03	4687.216	0	7.52E+01	75.1905
b3461_fold_spon	b3461_m folding: spontanous	1 b3461_m --> 1 RpoH_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.45E+03	2.45E+03	0	4.25E+03	4251.581	0	9.93E+01	99.344
b3461_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3461_mRNA --> 1 b3461_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
b3461_mRNA_degr1	Degradation of b3461_mRNA I	1 Orn_dim + 213 atp + 1 b3461_mRNA_2 + 1 degradosome + 213 h2o <==> 213 adp + 1 b3461_mRNA_2_degr + 213 h + 213 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
b3461_mRNA_degr2	Degradation of b3461_mRNA II	1 b3461_mRNA_2_degr + 854 h2o --> 1 Orn_dim_inact + 211 amp + 1 atp + 217 cmp + 1 degradosome_inact + 246 gmp + 854 h + 180 ump	irreversible	mRNA degradation	0.00E+00	2.99E-01	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
b3461_maturation1	Polypeptide b3461 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3461_aa <==> 1 b3461_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.45E+03	2.45E+03	0	4.25E+03	4251.581	0	9.93E+01	99.344
b3461_maturation2	b3461 formation	1 b3461_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3461_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.45E+03	2.45E+03	0	4.25E+03	4251.581	0	9.93E+01	99.344
b3461_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3461_v1_mRNA --> 1 b3461_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
b3461_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3461_v2_mRNA --> 1 b3461_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
b3461_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3461_v3_mRNA --> 1 b3461_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
b3461_v4_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3461_v4_mRNA --> 1 b3461_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
b3461_v5_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3461_v5_mRNA --> 1 b3461_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
b3470_fold_spon	b3470_m folding: spontanous	1 b3470_m --> 1 YhhP_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.99E+03	1.99E+03	0	3.45E+03	3448.746	0	8.36E+01	83.6
b3470_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3470_mRNA --> 1 b3470_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+02	4.77E+02	0	8.41E+02	841.4865	0	2.00E-01	0.2
b3470_mRNA_degr1	Degradation of b3470_mRNA I	1 Orn_dim + 61 atp + 1 b3470_mRNA_2 + 1 degradosome + 61 h2o <==> 61 adp + 1 b3470_mRNA_2_degr + 61 h + 61 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.77E+02	4.77E+02	0	8.41E+02	841.4865	0	2.00E-01	0.2
b3470_mRNA_degr2	Degradation of b3470_mRNA II	1 b3470_mRNA_2_degr + 245 h2o --> 1 Orn_dim_inact + 52 amp + 1 atp + 67 cmp + 1 degradosome_inact + 65 gmp + 245 h + 61 ump	irreversible	mRNA degradation	0.00E+00	2.00E-01	0	4.77E+02	4.77E+02	0	8.41E+02	841.4865	0	2.00E-01	0.2
b3470_maturation1	Polypeptide b3470 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3470_aa <==> 1 b3470_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.99E+03	1.99E+03	0	3.45E+03	3448.746	0	8.36E+01	83.6
b3470_maturation2	b3470 formation	1 b3470_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3470_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.99E+03	1.99E+03	0	3.45E+03	3448.746	0	8.36E+01	83.6
b3545_tRNA_20_MODIF_1	modification of position 20 nt (D) in proK by Dus_gen	1 Dus_gen + 1 b3545_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3545_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
b3545_tRNA_20_MODIF_2	modification of position 20 nt (D) in proK by Dus_gen	1 b3545_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3545_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
b3545_tRNA_32_MODIF_1	modification of position 32 nt (Um) in proK by MeT_tRNA_pos_32_Um	1 MeT_tRNA_pos_32_Um + 1 amet + 1 b3545_tRNA_1 <==> 1 b3545_tRNA_1_MeT_tRNA_pos_32_Um_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
b3545_tRNA_32_MODIF_2	modification of position 32 nt (Um) in proK by MeT_tRNA_pos_32_Um	1 b3545_tRNA_1_MeT_tRNA_pos_32_Um_cplx --> 1 MeT_tRNA_pos_32_Um_inact + 1 ahcys + 1 b3545_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
b3545_tRNA_37_MODIF_1	modification of position 37 nt (m1G) in proK by TrmD_dim	1 TrmD_dim + 1 amet + 1 b3545_tRNA_2 <==> 1 b3545_tRNA_2_TrmD_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
b3545_tRNA_37_MODIF_2	modification of position 37 nt (m1G) in proK by TrmD_dim	1 b3545_tRNA_2_TrmD_dim_cplx --> 1 TrmD_dim_inact + 1 ahcys + 1 b3545_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
b3545_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in proK by YggH_mono	1 YggH_mono + 1 amet + 1 b3545_tRNA_3 <==> 1 b3545_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
b3545_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in proK by YggH_mono	1 b3545_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3545_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
b3545_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in proK by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3545_tRNA_4 <==> 1 b3545_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13

b3545_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in proK by TrmA_mono	1 b3545_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3545_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
b3545_tRNA_55_MODIF_1	modification of position 55 nt (Y) in proK by TruB_mono	1 TruB_mono + 1 b3545_tRNA_5 <==> 1 b3545_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
b3545_tRNA_55_MODIF_2	modification of position 55 nt (Y) in proK by TruB_mono	1 b3545_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3545_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
b3545_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in proK by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b3545_tRNA_6 + 1 mg2 + 1 trdrd <==> 1 b3545_tRNA_6_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
b3545_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in proK by ThiI_mono	1 b3545_tRNA_6_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 proK_tRNA + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
b3545_tRNA_Mg_BIND	Binding of two Mg2 to b3545_tRNA	1 b3545_RNA + 2 mg2 <==> 1 b3545_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
b3559_fold_spon	b3559_m folding: spontanous	1 b3559_m --> 1 GlyS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.52E+02	7.52E+02	0	1.28E+03	1275.12	0	7.15E+01	71.519
b3559_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3559_mRNA --> 1 b3559_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.02E+01	4.02E+01	0	7.10E+01	71.00705	0	2.07E-01	0.207
b3559_mRNA_degr1	Degradation of b3559_mRNA I	1 Orn_dim + 517 atp + 1 b3559_mRNA_2 + 1 degradosome + 517 h2o <==> 517 adp + 1 b3559_mRNA_2_degr + 517 h + 517 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.02E+01	4.02E+01	0	7.10E+01	71.00705	0	2.07E-01	0.207
b3559_mRNA_degr2	Degradation of b3559_mRNA II	1 b3559_mRNA_2_degr + 2069 h2o --> 1 Orn_dim_inact + 472 amp 533 cmp + 1 degradosome_inact + 614 gmp + 2069 h + 451 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	4.02E+01	4.02E+01	0	7.10E+01	71.00705	0	2.07E-01	0.207
b3559_maturation1	Polypeptide b3559 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3559_aa <==> 1 b3559_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.52E+02	7.52E+02	0	1.28E+03	1275.12	0	7.15E+01	71.519
b3559_maturation2	b3559 formation	1 b3559_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3559_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.52E+02	7.52E+02	0	1.28E+03	1275.12	0	7.15E+01	71.519
b3560_fold_spon	b3560_m folding: spontanous	1 b3560_m --> 1 GlyQ_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	7.52E+02	7.52E+02	0	1.28E+03	1275.12	0	7.15E+01	71.519
b3560_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3560_mRNA --> 1 b3560_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.02E+01	4.02E+01	0	7.10E+01	71.00705	0	2.07E-01	0.207
b3560_mRNA_degr1	Degradation of b3560_mRNA I	1 Orn_dim + 228 atp + 1 b3560_mRNA_2 + 1 degradosome + 228 h2o <==> 228 adp + 1 b3560_mRNA_2_degr + 228 h + 228 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.02E+01	4.02E+01	0	7.10E+01	71.00705	0	2.07E-01	0.207
b3560_mRNA_degr2	Degradation of b3560_mRNA II	1 b3560_mRNA_2_degr + 911 h2o --> 1 Orn_dim_inact + 209 amp + 1 atp + 259 cmp + 1 degradosome_inact + 253 gmp + 911 h + 190 ump	irreversible	mRNA degradation	0.00E+00	2.34E-01	0	4.02E+01	4.02E+01	0	7.10E+01	71.00705	0	2.07E-01	0.207
b3560_maturation1	Polypeptide b3560 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3560_aa <==> 1 b3560_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	7.52E+02	7.52E+02	0	1.28E+03	1275.12	0	7.15E+01	71.519
b3560_maturation2	b3560 formation	1 b3560_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3560_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	7.52E+02	7.52E+02	0	1.28E+03	1275.12	0	7.15E+01	71.519
b3590_fold_spon	b3590_m folding: spontanous	1 b3590_m --> 1 SelB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
b3590_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3590_mRNA --> 1 b3590_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.70E+01	3.70E+01	0	1.37E+01	13.7	0	1.86E-01	0.186
b3590_mRNA_degr1	Degradation of b3590_mRNA I	1 Orn_dim + 460 atp + 1 b3590_mRNA_2 + 1 degradosome + 460 h2o <==> 460 adp + 1 b3590_mRNA_2_degr + 460 h + 460 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.70E+01	3.70E+01	0	1.37E+01	13.7	0	1.86E-01	0.186
b3590_mRNA_degr2	Degradation of b3590_mRNA II	1 b3590_mRNA_2_degr + 1840 h2o --> 1 Orn_dim_inact + 414 amp 484 cmp + 1 degradosome_inact + 555 gmp + 1840 h + 388 ump	irreversible	mRNA degradation	0.00E+00	1.86E-01	0	3.70E+01	3.70E+01	0	1.37E+01	13.7	0	1.86E-01	0.186
b3590_maturation1	Polypeptide b3590 peptide deformylase complex	1 Def_mono + 1 b3590_aa <==> 1 b3590_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
b3590_maturation2	b3590 formation	1 b3590_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3590_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
b3591_fold_spon	b3591_m folding: spontanous	1 b3591_m --> 1 SelA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.09E+03	1.09E+03	0	4.62E+02	462.24	0	9.74E+01	97.362
b3591_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3591_mRNA --> 1 b3591_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.70E+01	3.70E+01	0	1.37E+01	13.7	0	1.86E-01	0.186
b3591_mRNA_degr1	Degradation of b3591_mRNA I	1 Orn_dim + 348 atp + 1 b3591_mRNA_2 + 1 degradosome + 348 h2o <==> 348 adp + 1 b3591_mRNA_2_degr + 348 h + 348 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.70E+01	3.70E+01	0	1.37E+01	13.7	0	1.86E-01	0.186
b3591_mRNA_degr2	Degradation of b3591_mRNA II	1 b3591_mRNA_2_degr + 1391 h2o --> 1 Orn_dim_inact + 299 amp 1 atp + 351 cmp + 1 degradosome_inact + 429 gmp + 1391 h + 312 ump	irreversible	mRNA degradation	0.00E+00	2.99E-01	0	3.70E+01	3.70E+01	0	1.37E+01	13.7	0	1.86E-01	0.186
b3591_maturation1	Polypeptide b3591 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3591_aa <==> 1 b3591_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.09E+03	1.09E+03	0	4.62E+02	462.24	0	9.74E+01	97.362
b3591_maturation2	b3591 formation	1 b3591_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3591_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.09E+03	1.09E+03	0	4.62E+02	462.24	0	9.74E+01	97.362
b3635_fold_spon	b3635_m folding: spontanous	1 b3635_m --> 1 MutM_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.42E+03	1.42E+03	0	1.33E+03	1331.55	0	9.12E+01	91.23
b3635_mRNA_degr1	Degradation of b3635_mRNA I	1 Orn_dim + 202 atp + 1 b3635_mRNA_2 + 1 degradosome + 202 h2o <==> 202 adp + 1 b3635_mRNA_2_degr + 202 h + 202 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	1.92E-01	0.192
b3635_mRNA_degr2	Degradation of b3635_mRNA II	1 b3635_mRNA_2_degr + 809 h2o --> 1 Orn_dim_inact + 186 amp + 1 atp + 184 cmp + 1 degradosome_inact + 252 gmp + 809 h + 187 ump	irreversible	mRNA degradation	0.00E+00	1.92E-01	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	1.92E-01	0.192
b3635_maturation1	Polypeptide b3635 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3635_aa <==> 1 b3635_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.42E+03	1.42E+03	0	1.33E+03	1331.55	0	9.12E+01	91.23
b3635_maturation2	b3635 formation	1 b3635_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3635_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.42E+03	1.42E+03	0	1.33E+03	1331.55	0	9.12E+01	91.23
b3635_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3635_v1_mRNA --> 1 b3635_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	1.92E-01	0.192
b3635_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3635_v3_mRNA --> 1 b3635_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.30E+01	6.30E+01	0	7.71E+01	77.08692	0	1.04E-01	0.104
b3636_fold_spon	b3636_m folding: spontanous	1 b3636_m --> 1 RpmG_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3636_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3636_mRNA --> 1 b3636_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.41E-01	0.641
b3636_mRNA_degr1	Degradation of b3636_mRNA I	1 Orn_dim + 42 atp + 1 b3636_mRNA_2 + 1 degradosome + 42 h2o <==> 42 adp + 1 b3636_mRNA_2_degr + 42 h + 42 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.41E-01	0.641
b3636_mRNA_degr2	Degradation of b3636_mRNA II	1 b3636_mRNA_2_degr + 167 h2o --> 1 Orn_dim_inact + 61 amp + 34 cmp + 1 degradosome_inact + 34 gmp + 167 h + 39 ump	irreversible	mRNA degradation	0.00E+00	6.41E-01	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.41E-01	0.641
b3636_maturation1	Polypeptide b3636 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3636_aa <==> 1 b3636_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3636_maturation2	b3636 formation	1 b3636_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3636_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3636_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3636_v1_mRNA --> 1 b3636_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	1.04E-01	0.104
b3636_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3636_v2_mRNA --> 1 b3636_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	1.92E-01	0.192
b3636_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3636_v3_mRNA --> 1 b3636_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.30E+01	6.30E+01	0	7.71E+01	77.08692	0	1.04E-01	0.104
b3637_fold_spon	b3637_m folding: spontanous	1 b3637_m --> 1 RpmB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3637_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3637_mRNA --> 1 b3637_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.41E-01	0.641
b3637_mRNA_degr1	Degradation of b3637_mRNA I	1 Orn_dim + 59 atp + 1 b3637_mRNA_2 + 1 degradosome + 59 h2o <==> 59 adp + 1 b3637_mRNA_2_degr + 59 h + 59 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.41E-01	0.641

b3637_mRNA_degr2	Degradation of b3637_mRNA II	1 b3637_mRNA_2_degr + 236 h2o --> 1 Orn_dim_inact + 56 amp + 1 atp + 65 cmp + 1 degradosome_inact + 61 gmp + 236 h + 54 ump	irreversible	mRNA degradation	0.00E+00	1.18E+00	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.41E-01	0.641
b3637_maturation1	Polypeptide b3637 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3637_aa <==> 1 b3637_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3637_maturation2	b3637 formation	1 b3637_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3637_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3637_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3637_v1_mRNA --> 1 b3637_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	1.04E-01	0.104
b3637_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3637_v2_mRNA --> 1 b3637_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	1.92E-01	0.192
b3637_v3_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3637_v3_mRNA --> 1 b3637_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.30E+01	6.30E+01	0	7.71E+01	77.08692	0	1.04E-01	0.104
b3638_fold_spon	b3638_m folding: spontanous	1 b3638_m --> 1 YicR_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	1.14E+03	1142.96	0	6.69E+01	66.872
b3638_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3638_mRNA --> 1 b3638_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	1.04E-01	0.104
b3638_mRNA_degr1	Degradation of b3638_mRNA I	1 Orn_dim + 167 atp + 1 b3638_mRNA_2 + 1 degradosome + 167 h2o <==> 167 adp + 1 b3638_mRNA_2_degr + 167 h + 167 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	1.04E-01	0.104
b3638_mRNA_degr2	Degradation of b3638_mRNA II	1 b3638_mRNA_2_degr + 668 h2o --> 1 Orn_dim_inact + 173 amp + 143 cmp + 1 degradosome_inact + 177 gmp + 1 gtp + 668 h + 175 ump	irreversible	mRNA degradation	0.00E+00	1.04E-01	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	1.04E-01	0.104
b3638_maturation1	Polypeptide b3638 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3638_aa <==> 1 b3638_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	1.14E+03	1142.96	0	6.69E+01	66.872
b3638_maturation2	b3638 formation	1 b3638_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3638_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	1.14E+03	1142.96	0	6.69E+01	66.872
b3638_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3638_v1_mRNA --> 1 b3638_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.30E+01	6.30E+01	0	7.71E+01	77.08692	0	1.04E-01	0.104
b3649_fold_spon	b3649_m folding: spontanous	1 b3649_m_Mg --> 1 RpoZ_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.99E+02	1.99E+02	0	2.85E+02	285.2405	0	8.80E+01	87.96
b3649_ion_BIND	Binding of ions to b3649	1 b3649_m + 1 mg2 <==> 1 b3649_m_Mg	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	1.99E+02	1.99E+02	0	2.85E+02	285.2405	0	8.80E+01	87.96
b3649_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3649_mRNA --> 1 b3649_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
b3649_mRNA_degr1	Degradation of b3649_mRNA I	1 Orn_dim + 69 atp + 1 b3649_mRNA_2 + 1 degradosome + 69 h2o <==> 69 adp + 1 b3649_mRNA_2_degr + 69 h + 69 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
b3649_mRNA_degr2	Degradation of b3649_mRNA II	1 b3649_mRNA_2_degr + 275 h2o --> 1 Orn_dim_inact + 76 amp + 1 atp + 68 cmp + 1 degradosome_inact + 79 gmp + 275 h + 52 ump	irreversible	mRNA degradation	0.00E+00	2.63E-01	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
b3649_maturation1	Polypeptide b3649 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3649_aa <==> 1 b3649_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.99E+02	1.99E+02	0	2.85E+02	285.2405	0	8.80E+01	87.96
b3649_maturation2	b3649 formation	1 b3649_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3649_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.99E+02	1.99E+02	0	2.85E+02	285.2405	0	8.80E+01	87.96
b3650_fold_GroEL/ES_1	b3650_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3650_m + 1 transGroES_hepta --> 7 adp + 1 b3650_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.02E+03	1.02E+03	0	1.73E+03	1728.892	0	1.11E+02	111.192
b3650_fold_GroEL/ES_2	b3650_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3650_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 SpoT_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.02E+03	1.02E+03	0	1.73E+03	1728.892	0	1.11E+02	111.192
b3650_fold_GroEL/ES_3	b3650_m folding: GroEL/ES mediated; release of native protein	1 SpoT_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 SpoT_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.02E+03	1.02E+03	0	1.73E+03	1728.892	0	1.11E+02	111.192
b3650_fold_KJE_1	b3650_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3650_m <==> 1 b3650_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	1.02E+03	1.02E+03	0	1.73E+03	1728.892	0	1.11E+02	111.192
b3650_fold_KJE_2	b3650_m folding: KJE mediated	1 GrpE_dim + 1 b3650_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 SpoT_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.02E+03	1.02E+03	0	1.73E+03	1728.892	0	1.11E+02	111.192
b3650_fold_KJE_3	b3650_m folding: KJE mediated	1 SpoT_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 SpoT_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.02E+03	1.02E+03	0	1.73E+03	1728.892	0	1.11E+02	111.192
b3650_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3650_mRNA --> 1 b3650_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
b3650_mRNA_degr1	Degradation of b3650_mRNA I	1 Orn_dim + 527 atp + 1 b3650_mRNA_2 + 1 degradosome + 527 h2o <==> 527 adp + 1 b3650_mRNA_2_degr + 527 h + 527 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
b3650_mRNA_degr2	Degradation of b3650_mRNA II	1 b3650_mRNA_2_degr + 2108 h2o --> 1 Orn_dim_inact + 523 amp 566 cmp + 1 degradosome_inact + 567 gmp + 2108 h + 453 ump	irreversible	mRNA degradation	0.00E+00	3.17E-01	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
b3650_maturation1	Polypeptide b3650 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3650_aa <==> 1 b3650_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.02E+03	1.02E+03	0	1.73E+03	1728.892	0	1.11E+02	111.192
b3650_maturation2	b3650 formation	1 b3650_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3650_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.02E+03	1.02E+03	0	1.73E+03	1728.892	0	1.11E+02	111.192
b3651_fold_GroEL/ES_1	b3651_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3651_m + 1 transGroES_hepta --> 7 adp + 1 b3651_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.66E+02	3.66E+02	0	5.90E+02	589.5253	0	7.66E+01	76.596
b3651_fold_GroEL/ES_2	b3651_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3651_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 TrmH_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.66E+02	3.66E+02	0	5.90E+02	589.5253	0	7.66E+01	76.596
b3651_fold_GroEL/ES_3	b3651_m folding: GroEL/ES mediated; release of native protein	1 TrmH_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 TrmH_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.66E+02	3.66E+02	0	5.90E+02	589.5253	0	7.66E+01	76.596
b3651_fold_KJE_1	b3651_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3651_m <==> 1 b3651_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	3.66E+02	3.66E+02	0	5.90E+02	589.5253	0	7.66E+01	76.596
b3651_fold_KJE_2	b3651_m folding: KJE mediated	1 GrpE_dim + 1 b3651_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 TrmH_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.66E+02	3.66E+02	0	5.90E+02	589.5253	0	7.66E+01	76.596
b3651_fold_KJE_3	b3651_m folding: KJE mediated	1 TrmH_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 TrmH_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.66E+02	3.66E+02	0	5.90E+02	589.5253	0	7.66E+01	76.596
b3651_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3651_mRNA --> 1 b3651_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
b3651_mRNA_degr1	Degradation of b3651_mRNA I	1 Orn_dim + 172 atp + 1 b3651_mRNA_2 + 1 degradosome + 172 h2o <==> 172 adp + 1 b3651_mRNA_2_degr + 172 h + 172 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
b3651_mRNA_degr2	Degradation of b3651_mRNA II	1 b3651_mRNA_2_degr + 689 h2o --> 1 Orn_dim_inact + 165 amp + 192 cmp + 1 degradosome_inact + 190 gmp + 689 h + 143 ump	irreversible	mRNA degradation	0.00E+00	2.45E-01	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
b3651_maturation1	Polypeptide b3651 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3651_aa <==> 1 b3651_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.66E+02	3.66E+02	0	5.90E+02	589.5253	0	7.66E+01	76.596
b3651_maturation2	b3651 formation	1 b3651_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3651_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.66E+02	3.66E+02	0	5.90E+02	589.5253	0	7.66E+01	76.596
b3652_fold_spon	b3652_m folding: spontanous	1 b3652_m --> 1 RecG_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.63E+02	9.63E+02	0	1.65E+03	1650.324	0	7.21E+01	72.08
b3652_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3652_mRNA --> 1 b3652_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
b3652_mRNA_degr1	Degradation of b3652_mRNA I	1 Orn_dim + 520 atp + 1 b3652_mRNA_2 + 1 degradosome + 520 h2o <==> 520 adp + 1 b3652_mRNA_2_degr + 520 h + 520 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192

b3652_mRNA_degr2	Degradation of b3652_mRNA II	1 b3652_mRNA_2_degr + 2081 h2o --> 1 Orn_dim_inact + 481 amp 587 cmp + 1 degradosome_inact + 604 gmp + 2081 h + 410 ump	irreversible	mRNA degradation	0.00E+00	1.92E-01	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
b3652_maturation1	Polypeptide b3652 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3652_aa <==> 1 b3652_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	9.63E+02	9.63E+02	0	1.65E+03	1650.324	0	7.21E+01	72.08
b3652_maturation2	b3652 formation	1 b3652_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3652_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	9.63E+02	9.63E+02	0	1.65E+03	1650.324	0	7.21E+01	72.08
b3658_tRNA_20_MODIF_1	modification of position 20 nt (D) in selC by Dus_gen	1 Dus_gen + 1 b3658_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3658_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
b3658_tRNA_20_MODIF_2	modification of position 20 nt (D) in selC by Dus_gen	1 b3658_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3658_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
b3658_tRNA_37_MODIF_1	modification of position 37 nt (i6A) in selC by MiaA_dim	1 MiaA_dim + 1 b3658_tRNA_1 + 1 dmpp <==> 1 b3658_tRNA_1_MiaA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
b3658_tRNA_37_MODIF_2	modification of position 37 nt (i6A) in selC by MiaA_dim	1 b3658_tRNA_1_MiaA_dim_cplx --> 1 MiaA_dim_inact + 1 b3658_tRNA_2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
b3658_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in selC by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3658_tRNA_2 <==> 1 b3658_tRNA_2_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
b3658_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in selC by TrmA_mono	1 b3658_tRNA_2_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3658_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
b3658_tRNA_55_MODIF_1	modification of position 55 nt (Y) in selC by TruB_mono	1 TruB_mono + 1 b3658_tRNA_3 <==> 1 b3658_tRNA_3_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
b3658_tRNA_55_MODIF_2	modification of position 55 nt (Y) in selC by TruB_mono	1 b3658_tRNA_3_TruB_mono_cplx --> 1 TruB_mono_inact + 1 selC_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
b3658_tRNA_Mg_BIND	Binding of two Mg2 to b3658_tRNA	1 b3658_RNA + 2 mg2 <==> 1 b3658_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
b3703_fold_spon	b3703_m folding: spontanous	1 b3703_m --> 1 RpmH_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3703_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3703_mRNA --> 1 b3703_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
b3703_mRNA_degr1	Degradation of b3703_mRNA I	1 Orn_dim + 35 atp + 1 b3703_mRNA_2 + 1 degradosome + 35 h2o <==> 35 adp + 1 b3703_mRNA_2_degr + 35 h + 35 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
b3703_mRNA_degr2	Degradation of b3703_mRNA II	1 b3703_mRNA_2_degr + 140 h2o --> 1 Orn_dim_inact + 29 amp + 1 atp + 39 cmp + 1 degradosome_inact + 34 gmp + 140 h + 38 ump	irreversible	mRNA degradation	0.00E+00	5.99E-01	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
b3703_maturation1	Polypeptide b3703 peptide deformylase complex	1 Def_mono + 1 b3703_aa <==> 1 b3703_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3703_maturation2	b3703 formation	1 b3703_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3703_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3703_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3703_v1_mRNA --> 1 b3703_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
b3703_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3703_v2_mRNA --> 1 b3703_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
b3704_fold_spon	b3704_m folding: spontanous	1 b3704_m --> 1 RnpA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.81E+02	2.81E+02	0	5.93E+01	59.25644	0	1.08E+01	10.8499
b3704_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3704_mRNA --> 1 b3704_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
b3704_mRNA_degr1	Degradation of b3704_mRNA I	1 Orn_dim + 90 atp + 1 b3704_mRNA_2 + 1 degradosome + 90 h2o <==> 90 adp + 1 b3704_mRNA_2_degr + 90 h + 90 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
b3704_mRNA_degr2	Degradation of b3704_mRNA II	1 b3704_mRNA_2_degr + 359 h2o --> 1 Orn_dim_inact + 78 amp + 106 cmp + 1 degradosome_inact + 95 gmp + 359 h + 81 ump	irreversible	mRNA degradation	0.00E+00	3.26E-01	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
b3704_maturation1	Polypeptide b3704 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3704_aa <==> 1 b3704_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.81E+02	2.81E+02	0	5.93E+01	59.25644	0	1.08E+01	10.8499
b3704_maturation2	b3704 formation	1 b3704_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3704_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.81E+02	2.81E+02	0	5.93E+01	59.25644	0	1.08E+01	10.8499
b3704_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3704_v1_mRNA --> 1 b3704_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
b3704_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3704_v2_mRNA --> 1 b3704_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
b3706_fold_spon	b3706_m folding: spontanous	1 b3706_m --> 1 TrmE_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.35E+03	2.35E+03	0	4.09E+03	4085.188	0	8.69E+01	86.918
b3706_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3706_mRNA --> 1 b3706_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.54E+02	154.0426	0	2.63E-01	0.263
b3706_mRNA_degr1	Degradation of b3706_mRNA I	1 Orn_dim + 341 atp + 1 b3706_mRNA_2 + 1 degradosome + 341 h2o <==> 341 adp + 1 b3706_mRNA_2_degr + 341 h + 341 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.73E+01	8.73E+01	0	1.54E+02	154.0426	0	2.63E-01	0.263
b3706_mRNA_degr2	Degradation of b3706_mRNA II	1 b3706_mRNA_2_degr + 1364 h2o --> 1 Orn_dim_inact + 307 amp 1 atp + 366 cmp + 1 degradosome_inact + 403 gmp + 1364 h + 288 ump	irreversible	mRNA degradation	0.00E+00	2.63E-01	0	8.73E+01	8.73E+01	0	1.54E+02	154.0426	0	2.63E-01	0.263
b3706_maturation1	Polypeptide b3706 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3706_aa <==> 1 b3706_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.35E+03	2.35E+03	0	4.09E+03	4085.188	0	8.69E+01	86.918
b3706_maturation2	b3706 formation	1 b3706_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3706_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.35E+03	2.35E+03	0	4.09E+03	4085.188	0	8.69E+01	86.918
b3740_fold_spon	b3740_m folding: spontanous	1 b3740_m --> 1 GidB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.68E+02	6.68E+02	0	1.11E+03	1109.296	0	9.44E+01	94.404
b3740_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3740_mRNA --> 1 b3740_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.48E+01	84.78135	0	2.07E-01	0.207
b3740_mRNA_degr1	Degradation of b3740_mRNA I	1 Orn_dim + 156 atp + 1 b3740_mRNA_2 + 1 degradosome + 156 h2o <==> 156 adp + 1 b3740_mRNA_2_degr + 156 h + 156 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.48E+01	84.78135	0	2.07E-01	0.207
b3740_mRNA_degr2	Degradation of b3740_mRNA II	1 b3740_mRNA_2_degr + 623 h2o --> 1 Orn_dim_inact + 160 amp + 149 cmp + 1 degradosome_inact + 155 gmp + 623 h + 160 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	4.80E+01	4.80E+01	0	8.48E+01	84.78135	0	2.07E-01	0.207
b3740_maturation1	Polypeptide b3740 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3740_aa <==> 1 b3740_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.68E+02	6.68E+02	0	1.11E+03	1109.296	0	9.44E+01	94.404
b3740_maturation2	b3740 formation	1 b3740_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3740_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.68E+02	6.68E+02	0	1.11E+03	1109.296	0	9.44E+01	94.404
b3741_fold_GroEL/ES_1	b3741_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3741_m + 1 transGroES_hepta --> 7 adp + 1 b3741_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.84E+03	1.84E+03	0	3.20E+03	3202.77	0	7.35E+01	73.519
b3741_fold_GroEL/ES_2	b3741_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3741_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 GidA_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.84E+03	1.84E+03	0	3.20E+03	3202.77	0	7.35E+01	73.519
b3741_fold_GroEL/ES_3	b3741_m folding: GroEL/ES mediated; release of native protein	1 GidA_GroEL.(7)ADP.transGroES --> 1 GidA_mono + 1 GroEL.(7)ADP.transGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.84E+03	1.84E+03	0	3.20E+03	3202.77	0	7.35E+01	73.519
b3741_fold_KJE_1	b3741_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3741_m <==> 1 b3741_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	1.84E+03	1.84E+03	0	3.20E+03	3202.77	0	7.35E+01	73.519
b3741_fold_KJE_2	b3741_m folding: KJE mediated	1 GrpE_dim + 1 b3741_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 GidA_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.84E+03	1.84E+03	0	3.20E+03	3202.77	0	7.35E+01	73.519
b3741_fold_KJE_3	b3741_m folding: KJE mediated	1 GidA_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GidA_mono + 1 GrpE_dim_inact	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.84E+03	1.84E+03	0	3.20E+03	3202.77	0	7.35E+01	73.519
b3741_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3741_mRNA --> 1 b3741_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.48E+01	84.78135	0	2.07E-01	0.207
b3741_mRNA_degr1	Degradation of b3741_mRNA I	1 Orn_dim + 472 atp + 1 b3741_mRNA_2 + 1 degradosome + 472 h2o <==> 472 adp + 1 b3741_mRNA_2_degr + 472 h + 472 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.48E+01	84.78135	0	2.07E-01	0.207

b3741_mRNA_degr2	Degradation of b3741_mRNA II	1 b3741_mRNA_2_degr + 1889 h2o --> 1 Orn_dim_inact + 437 amp + 1 atp + 497 cmp + 1 degradosome_inact + 531 gmp + 1889 h + 424 ump	irreversible	mRNA degradation	0.00E+00	2.15E-01	0	4.80E+01	4.80E+01	0	8.48E+01	84.78135	0	2.07E-01	0.207
b3741_maturation1	Polypeptide b3741 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3741_aa <==> 1 b3741_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.84E+03	1.84E+03	0	3.20E+03	3202.77	0	7.35E+01	73.519
b3741_maturation2	b3741 formation	1 b3741_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3741_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.84E+03	1.84E+03	0	3.20E+03	3202.77	0	7.35E+01	73.519
b3756_RNA_10_modif_1	b3756_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 RsmB_mono + 1 amet + 1 b3756_RNA_10 <==> 1 b3756_RNA_10_RsmB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_10_modif_2	b3756_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 b3756_RNA_10_RsmB_mono --> 1 RsmB_mono_inact + 1 ahcys + 1 h + 1 rrsC	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_1_modif_1	b3756_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 MeT_16S_1402 + 2 amet + 1 b3756_RNA_1 <==> 1 b3756_RNA_1_MeT_16S_1402	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_1_modif_2	b3756_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 b3756_RNA_1_MeT_16S_1402 --> 1 MeT_16S_1402_inact + 2 ahcys + 1 b3756_RNA_2 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_2_modif_1	b3756_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 MeT_16S_1407 + 1 amet + 1 b3756_RNA_2 <==> 1 b3756_RNA_2_MeT_16S_1407	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_2_modif_2	b3756_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 b3756_RNA_2_MeT_16S_1407 --> 1 MeT_16S_1407_inact + 1 ahcys + 1 b3756_RNA_3 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_3_modif_1	b3756_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 YggJ_mono + 1 amet + 1 b3756_RNA_3 <==> 1 b3756_RNA_3_YggJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_3_modif_2	b3756_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 b3756_RNA_3_YggJ_mono --> 1 YggJ_mono_inact + 1 ahcys + 1 b3756_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_4_modif_1	b3756_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 MeT_16S_1516 + 1 amet + 1 b3756_RNA_4 <==> 1 b3756_RNA_4_MeT_16S_1516	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_4_modif_2	b3756_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 b3756_RNA_4_MeT_16S_1516 --> 1 MeT_16S_1516_inact + 1 ahcys + 1 b3756_RNA_5 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_5_modif_1	b3756_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b3756_RNA_5 <==> 1 b3756_RNA_5_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_5_modif_2	b3756_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 b3756_RNA_5_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b3756_RNA_6 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_6_modif_1	b3756_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b3756_RNA_6 <==> 1 b3756_RNA_6_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_6_modif_2	b3756_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 b3756_RNA_6_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b3756_RNA_7 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_7_modif_1	b3756_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 RsuA_mono + 1 b3756_RNA_7 <==> 1 b3756_RNA_7_RsuA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_7_modif_2	b3756_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 b3756_RNA_7_RsuA_mono --> 1 RsuA_mono_inact + 1 b3756_RNA_8	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_8_modif_1	b3756_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 MeT_16S_527 + 1 amet + 1 b3756_RNA_8 <==> 1 b3756_RNA_8_MeT_16S_527	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_8_modif_2	b3756_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 b3756_RNA_8_MeT_16S_527 --> 1 MeT_16S_527_inact + 1 ahcy + 1 b3756_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_9_modif_1	b3756_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 MeT_16S_966 + 1 amet + 1 b3756_RNA_9 <==> 1 b3756_RNA_9_MeT_16S_966	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_9_modif_2	b3756_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 b3756_RNA_9_MeT_16S_966 --> 1 MeT_16S_966_inact + 1 ahcy + 1 b3756_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_modif_1	b3756_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 RsmC_mono + 1 amet + 1 b3756_RNA <==> 1 b3756_RNA_RsmC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_RNA_modif_2	b3756_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 b3756_RNA_RsmC_mono --> 1 RsmC_mono_inact + 1 ahcys + 1 b3756_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3756_v1_RNA_10_modif_1	b3756_v1_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 RsmB_mono + 1 amet + 1 b3756_v1_RNA_10 <==> 1 b3756_v1_RNA_10_RsmB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_10_modif_2	b3756_v1_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 b3756_v1_RNA_10_RsmB_mono --> 1 RsmB_mono_inact + 1 ahcys + 1 h + 1 rrsC	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_1_modif_1	b3756_v1_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 MeT_16S_1402 + 2 amet + 1 b3756_v1_RNA_1 <==> 1 b3756_v1_RNA_1_MeT_16S_1402	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_1_modif_2	b3756_v1_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 b3756_v1_RNA_1_MeT_16S_1402 --> 1 MeT_16S_1402_inact + 2 ahcys + 1 b3756_v1_RNA_2 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_2_modif_1	b3756_v1_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 MeT_16S_1407 + 1 amet + 1 b3756_v1_RNA_2 <==> 1 b3756_v1_RNA_2_MeT_16S_1407	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_2_modif_2	b3756_v1_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 b3756_v1_RNA_2_MeT_16S_1407 --> 1 MeT_16S_1407_inact + 1 ahcys + 1 b3756_v1_RNA_3 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_3_modif_1	b3756_v1_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 YggJ_mono + 1 amet + 1 b3756_v1_RNA_3 <==> 1 b3756_v1_RNA_3_YggJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_3_modif_2	b3756_v1_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 b3756_v1_RNA_3_YggJ_mono --> 1 YggJ_mono_inact + 1 ahcys + 1 b3756_v1_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_4_modif_1	b3756_v1_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 MeT_16S_1516 + 1 amet + 1 b3756_v1_RNA_4 <==> 1 b3756_v1_RNA_4_MeT_16S_1516	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_4_modif_2	b3756_v1_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 b3756_v1_RNA_4_MeT_16S_1516 --> 1 MeT_16S_1516_inact + 1 ahcys + 1 b3756_v1_RNA_5 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_5_modif_1	b3756_v1_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b3756_v1_RNA_5 <==> 1 b3756_v1_RNA_5_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_5_modif_2	b3756_v1_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 b3756_v1_RNA_5_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b3756_v1_RNA_6 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_6_modif_1	b3756_v1_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b3756_v1_RNA_6 <==> 1 b3756_v1_RNA_6_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2

b3756_v1_RNA_6_modif_2	b3756_v1_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 b3756_v1_RNA_6_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b3756_v1_RNA_7 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_7_modif_1	b3756_v1_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 RsuA_mono + 1 b3756_v1_RNA_7 <==> 1 b3756_v1_RNA_7_RsuA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_7_modif_2	b3756_v1_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 b3756_v1_RNA_7_RsuA_mono --> 1 RsuA_mono_inact + 1 b3756_v1_RNA_8	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_8_modif_1	b3756_v1_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 MeT_16S_527 + 1 amet + 1 b3756_v1_RNA_8 <==> 1 b3756_v1_RNA_8_MeT_16S_527	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_8_modif_2	b3756_v1_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 b3756_v1_RNA_8_MeT_16S_527 --> 1 MeT_16S_527_inact + 1 ahcys + 1 b3756_v1_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_9_modif_1	b3756_v1_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 MeT_16S_966 + 1 amet + 1 b3756_v1_RNA_9 <==> 1 b3756_v1_RNA_9_MeT_16S_966	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_9_modif_2	b3756_v1_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 b3756_v1_RNA_9_MeT_16S_966 --> 1 MeT_16S_966_inact + 1 ahcys + 1 b3756_v1_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_modif_1	b3756_v1_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 RsmC_mono + 1 amet + 1 b3756_v1_RNA <==> 1 b3756_v1_RNA_RsmC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3756_v1_RNA_modif_2	b3756_v1_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 b3756_v1_RNA_RsmC_mono --> 1 RsmC_mono_inact + 1 ahcys + 1 b3756_v1_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_tRNA_13_MODIF_1	modification of position 13 nt (Y) in gltU by TruD_mono	1 TruD_mono + 1 b3757_tRNA_Mg2 <==> 1 b3757_tRNA_Mg2_TruD_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_13_MODIF_2	modification of position 13 nt (Y) in gltU by TruD_mono	1 b3757_tRNA_Mg2_TruD_mono_cplx --> 1 TruD_mono_inact + 1 b3757_tRNA_1	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_34_MODIF_1	modification of position 34 nt (mmm5s2U) in gltU by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 IscS_dim_S-SH + 1 TrmC_mono + 1 TrmE_dim + 1 TrmU_mono + 1 YccK_mono + 1 YheLMN_cplx + 1 YhhP_mono + 1 amet + 1 atp + 1 b3757_tRNA_1 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o + 1 mg2 + 1 trdrd <==> 1 b3757_tRNA_1_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_34_MODIF_2	modification of position 34 nt (mmm5s2U) in gltU by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 b3757_tRNA_1_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 IscS_dim_S-H + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 TrmU_mono_inact + 1 YccK_mono_inact + 1 YheLMN_cplx_inact + 1 YhhP_mono_inact + 1 ahcys + 1 amp + 1 b3757_tRNA_2 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 4 h + 1 mg2 + 1 pi + 1 ppi + 1 thf + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_34_MODIF_3	replacement of sulfur with selenium: b3757_tRNA_2	1 YbbB_dim + 1 b3757_tRNA_2 + 1 h2o + 1 selnp <==> 1 b3757_tRNA_2_YbbB_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_34_MODIF_4	replacement of sulfur with selenium: b3757_tRNA_2	1 b3757_tRNA_2_YbbB_dim_cplx --> 1 YbbB_dim_inact + 1 b3757_tRNA_2_Se + 1 h + 1 h2s + 1 pi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in gltU by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b3757_tRNA_2 <==> 1 b3757_tRNA_2_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_37_MODIF_1_Se	modification of position 37 nt (m2A) in gltU by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b3757_tRNA_2_Se <==> 1 b3757_tRNA_2_Se_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in gltU by MeT_tRNA_pos_37_m2A	1 b3757_tRNA_2_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b3757_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_37_MODIF_2_Se	modification of position 37 nt (m2A) in gltU by MeT_tRNA_pos_37_m2A	1 b3757_tRNA_2_Se_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b3757_tRNA_3_Se + h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in gltU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3757_tRNA_3 <==> 1 b3757_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_54_MODIF_1_Se	modification of position 54 nt (m5U) in gltU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3757_tRNA_3_Se <==> 1 b3757_tRNA_3_Se_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in gltU by TrmA_mono	1 b3757_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3757_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_54_MODIF_2_Se	modification of position 54 nt (m5U) in gltU by TrmA_mono	1 b3757_tRNA_3_Se_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3757_tRNA_4_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_55_MODIF_1	modification of position 55 nt (Y) in gltU by TruB_mono	1 TruB_mono + 1 b3757_tRNA_4 <==> 1 b3757_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_55_MODIF_1_Se	modification of position 55 nt (Y) in gltU by TruB_mono	1 TruB_mono + 1 b3757_tRNA_4_Se <==> 1 b3757_tRNA_4_Se_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_55_MODIF_2	modification of position 55 nt (Y) in gltU by TruB_mono	1 b3757_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 gltU_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_55_MODIF_2_Se	modification of position 55 nt (Y) in gltU by TruB_mono	1 b3757_tRNA_4_Se_TruB_mono_cplx --> 1 TruB_mono_inact + 1 gltU_tRNA_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_tRNA_Mg_BIND	Binding of two Mg2 to b3757_tRNA	1 b3757_RNA + 2 mg2 <==> 1 b3757_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3757_v1_tRNA_13_MODIF_1	modification of position 13 nt (Y) in gltU by TruD_mono	1 TruD_mono + 1 b3757_v1_tRNA_Mg2 <==> 1 b3757_v1_tRNA_Mg2_TruD_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_13_MODIF_2	modification of position 13 nt (Y) in gltU by TruD_mono	1 b3757_v1_tRNA_Mg2_TruD_mono_cplx --> 1 TruD_mono_inact + 1 b3757_v1_tRNA_1	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_34_MODIF_1	modification of position 34 nt (mmm5s2U) in gltU by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 IscS_dim_S-SH + 1 TrmC_mono + 1 TrmE_dim + 1 TrmU_mono + 1 YccK_mono + 1 YheLMN_cplx + 1 YhhP_mono + 1 amet + 1 atp + 1 b3757_v1_tRNA_1 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o + 1 mg2 + 1 trdrd <==> 1 b3757_v1_tRNA_1_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_34_MODIF_2	modification of position 34 nt (mmm5s2U) in gltU by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 b3757_v1_tRNA_1_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 IscS_dim_S-H + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 TrmU_mono_inact + 1 YccK_mono_inact + 1 YheLMN_cplx_inact + 1 YhhP_mono_inact + 1 ahcys + 1 amp + 1 b3757_v1_tRNA_2 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 4 h + 1 mg2 + 1 pi + 1 ppi + 1 thf + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_34_MODIF_3	replacement of sulfur with selenium: b3757_tRNA_2	1 YbbB_dim + 1 b3757_v1_tRNA_2 + 1 h2o + 1 selnp <==> 1 b3757_v1_tRNA_2_YbbB_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_34_MODIF_4	replacement of sulfur with selenium: b3757_tRNA_2	1 b3757_v1_tRNA_2_YbbB_dim_cplx --> 1 YbbB_dim_inact + 1 b3757_v1_tRNA_2_Se + 1 h + 1 h2s + 1 pi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in gltU by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b3757_v1_tRNA_2 <==> 1 b3757_v1_tRNA_2_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_37_MODIF_1_Se	modification of position 37 nt (m2A) in gltU by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b3757_v1_tRNA_2_Se <==> 1 b3757_v1_tRNA_2_Se_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in gltU by MeT_tRNA_pos_37_m2A	1 b3757_v1_tRNA_2_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b3757_v1_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_37_MODIF_2_Se	modification of position 37 nt (m2A) in gltU by MeT_tRNA_pos_37_m2A	1 b3757_v1_tRNA_2_Se_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b3757_v1_tRNA_3_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2

b3757_v1_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in gltU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3757_v1_tRNA_3 <==> 1 b3757_v1_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_54_MODIF_1_Se	modification of position 54 nt (m5U) in gltU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3757_v1_tRNA_3_Se <==> 1 b3757_v1_tRNA_3_Se_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in gltU by TrmA_mono	1 b3757_v1_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3757_v1_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_54_MODIF_2_Se	modification of position 54 nt (m5U) in gltU by TrmA_mono	1 b3757_v1_tRNA_3_Se_TrmA_mono_cplx --> 1 TrmA_mono_inact 1 ahcys + 1 b3757_v1_tRNA_4_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_55_MODIF_1	modification of position 55 nt (Y) in gltU by TruB_mono	1 TruB_mono + 1 b3757_v1_tRNA_4 <==> 1 b3757_v1_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_55_MODIF_1_Se	modification of position 55 nt (Y) in gltU by TruB_mono	1 TruB_mono + 1 b3757_v1_tRNA_4_Se <==> 1 b3757_v1_tRNA_4_Se_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_55_MODIF_2	modification of position 55 nt (Y) in gltU by TruB_mono	1 b3757_v1_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 gltU_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_55_MODIF_2_Se	modification of position 55 nt (Y) in gltU by TruB_mono	1 b3757_v1_tRNA_4_Se_TruB_mono_cplx --> 1 TruB_mono_inact + 1 gltU_tRNA_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3757_v1_tRNA_Mg_BIND	Binding of two Mg2 to b3757_v1_tRNA	1 b3757_v1_RNA + 2 mg2 <==> 1 b3757_v1_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_RNA_10_modif_1	b3758_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 MeT_23S_2445 + 1 amet + 1 b3758_RNA_10 <==> 1 b3758_RNA_10_MeT_23S_2445	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_10_modif_2	b3758_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 b3758_RNA_10_MeT_23S_2445 --> 1 MeT_23S_2445_inact + 1 ahcys + 1 b3758_RNA_11 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_11_a_modif_1	b3758_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 DU_23S_2449 + 1 b3758_RNA_11 + 1 h + 1 nadh <==> 1 b3758_RNA_11_DU_23S_2449_a	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_11_a_modif_2	b3758_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 b3758_RNA_11_DU_23S_2449_a --> 1 DU_23S_2449_inact + 1 b3758_RNA_12 + 1 nad	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_11_b_modif_1	b3758_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 DU_23S_2449 + 1 b3758_RNA_11 + 1 h + 1 nadph <==> 1 b3758_RNA_11_DU_23S_2449_b	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_11_b_modif_2	b3758_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 b3758_RNA_11_DU_23S_2449_b --> 1 DU_23S_2449_inact + 1 b3758_RNA_12 + 1 nadp	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_12_modif_1	b3758_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 YmfC_mono + 1 b3758_RNA_12 <==> 1 b3758_RNA_12_YmfC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_12_modif_2	b3758_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 b3758_RNA_12_YmfC_mono --> 1 YmfC_mono_inact + 1 b3758_RNA_13	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_13_modif_1	b3758_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 MeT_23S_2498 + 1 amet + 1 b3758_RNA_13 <==> 1 b3758_RNA_13_MeT_23S_2498	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_13_modif_2	b3758_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 b3758_RNA_13_MeT_23S_2498 --> 1 MeT_23S_2498_inact + 1 ahcys + 1 b3758_RNA_14 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_14_modif_1	b3758_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 MeT_23S_2503 + 1 amet + 1 b3758_RNA_14 <==> 1 b3758_RNA_14_MeT_23S_2503	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_14_modif_2	b3758_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 b3758_RNA_14_MeT_23S_2503 --> 1 MeT_23S_2503_inact + 1 ahcys + 1 b3758_RNA_15 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_15_modif_1	b3758_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 RluC_mono + 1 b3758_RNA_15 <==> 1 b3758_RNA_15_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_15_modif_2	b3758_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 b3758_RNA_15_RluC_mono --> 1 RluC_mono_inact + 1 b3758_RNA_16	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_16_modif_1	b3758_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 RrmJ_mono + 1 amet + 1 b3758_RNA_16 <==> 1 b3758_RNA_16_RrmJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_16_modif_2	b3758_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 b3758_RNA_16_RrmJ_mono --> 1 RrmJ_mono_inact + 1 ahcys + b3758_RNA_17 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_17_modif_1	b3758_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 RluC_mono + 1 b3758_RNA_17 <==> 1 b3758_RNA_17_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_17_modif_2	b3758_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 b3758_RNA_17_RluC_mono --> 1 RluC_mono_inact + 1 b3758_RNA_18	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_18_modif_1	b3758_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 YjbC_mono + 1 b3758_RNA_18 <==> 1 b3758_RNA_18_YjbC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_18_modif_2	b3758_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 b3758_RNA_18_YjbC_mono --> 1 YjbC_mono_inact + 1 b3758_RNA_19	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_19_modif_1	b3758_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 RluB_mono + 1 b3758_RNA_19 <==> 1 b3758_RNA_19_RluB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_19_modif_2	b3758_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 b3758_RNA_19_RluB_mono --> 1 RluB_mono_inact + 1 b3758_RNA_20	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_1_modif_1	b3758_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 MeT_23S_1835 + 1 amet + 1 b3758_RNA_1 <==> 1 b3758_RNA_1_MeT_23S_1835	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_1_modif_2	b3758_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 b3758_RNA_1_MeT_23S_1835 --> 1 MeT_23S_1835_inact + 1 ahcys + 1 b3758_RNA_2 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_20_modif_1	b3758_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 RrmA_dim + 1 amet + 1 b3758_RNA_20 <==> 1 b3758_RNA_20_RrmA_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_20_modif_2	b3758_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 b3758_RNA_20_RrmA_dim --> 1 RrmA_dim_inact + 1 ahcys + 1 b3758_RNA_21 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_21_modif_1	b3758_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 RluA_mono + 1 b3758_RNA_21 <==> 1 b3758_RNA_21_RluA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_21_modif_2	b3758_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 b3758_RNA_21_RluA_mono --> 1 RluA_mono_inact + 1 b3758_RNA_22	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_22_modif_1	b3758_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 RumB_mono + 1 amet + 1 b3758_RNA_22 <==> 1 b3758_RNA_22_RumB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_22_modif_2	b3758_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 b3758_RNA_22_RumB_mono --> 1 RumB_mono_inact + 1 ahcys + 1 b3758_RNA_23 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_23_modif_1	b3758_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 RluC_mono + 1 b3758_RNA_23 <==> 1 b3758_RNA_23_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_23_modif_2	b3758_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 b3758_RNA_23_RluC_mono --> 1 RluC_mono_inact + 1 rrlC	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0

b3758_RNA_2_modif_1	b3758_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 RluD_mono + 1 b3758_RNA_2 <==> 1 b3758_RNA_2_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_2_modif_2	b3758_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 b3758_RNA_2_RluD_mono --> 1 RluD_mono_inact + 1 b3758_RNA_3	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_3_modif_1	b3758_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 RluD_mono + 1 amet + 1 b3758_RNA_3 <==> 1 b3758_RNA_3_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_3_modif_2	b3758_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 b3758_RNA_3_RluD_mono --> 1 RluD_mono_inact + 1 ahcys + 1 b3758_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_4_modif_1	b3758_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 RluD_mono + 1 b3758_RNA_4 <==> 1 b3758_RNA_4_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_4_modif_2	b3758_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 b3758_RNA_4_RluD_mono --> 1 RluD_mono_inact + 1 b3758_RNA_5	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_5_modif_1	b3758_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 RumA_mono + 1 amet + 1 b3758_RNA_5 <==> 1 b3758_RNA_5_RumA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_5_modif_2	b3758_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 b3758_RNA_5_RumA_mono --> 1 RumA_mono_inact + 1 ahcys + 1 b3758_RNA_6 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_6_modif_1	b3758_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 MeT_23S_1962 + 1 amet + 1 b3758_RNA_6 <==> 1 b3758_RNA_6_MeT_23S_1962	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_6_modif_2	b3758_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 b3758_RNA_6_MeT_23S_1962 --> 1 MeT_23S_1962_inact + 1 ahcys + 1 b3758_RNA_7 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_7_modif_1	b3758_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 MeT_23S_2030 + 1 amet + 1 b3758_RNA_7 <==> 1 b3758_RNA_7_MeT_23S_2030	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_7_modif_2	b3758_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 b3758_RNA_7_MeT_23S_2030 --> 1 MeT_23S_2030_inact + 1 ahcys + 1 b3758_RNA_8 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_8_modif_1	b3758_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 MeT_23S_2069 + 1 amet + 1 b3758_RNA_8 <==> 1 b3758_RNA_8_MeT_23S_2069	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_8_modif_2	b3758_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 b3758_RNA_8_MeT_23S_2069 --> 1 MeT_23S_2069_inact + 1 ahcys + 1 b3758_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_9_modif_1	b3758_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 RlmB_dim + 1 amet + 1 b3758_RNA_9 <==> 1 b3758_RNA_9_RlmB_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_9_modif_2	b3758_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 b3758_RNA_9_RlmB_dim --> 1 RlmB_dim_inact + 1 ahcys + 1 b3758_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_modif_1	b3758_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 MeT_23S_1618 + 1 amet + 1 b3758_RNA <==> 1 b3758_RNA_MeT_23S_1618	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_RNA_modif_2	b3758_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 b3758_RNA_MeT_23S_1618 --> 1 MeT_23S_1618_inact + 1 ahcy + 1 b3758_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
b3758_v1_RNA_10_modif_1	b3758_v1_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 MeT_23S_2445 + 1 amet + 1 b3758_v1_RNA_10 <==> 1 b3758_v1_RNA_10_MeT_23S_2445	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_10_modif_2	b3758_v1_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 b3758_v1_RNA_10_MeT_23S_2445 --> 1 MeT_23S_2445_inact + 1 ahcys + 1 b3758_v1_RNA_11 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_11_a_modif_1	b3758_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 DU_23S_2449 + 1 b3758_v1_RNA_11 + 1 h + 1 nadh <==> 1 b3758_v1_RNA_11_DU_23S_2449_a	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_11_a_modif_2	b3758_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 b3758_v1_RNA_11_DU_23S_2449_a --> 1 DU_23S_2449_inact + 1 b3758_v1_RNA_12 + 1 nad	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_11_b_modif_1	b3758_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 DU_23S_2449 + 1 b3758_v1_RNA_11 + 1 h + 1 nadph <==> 1 b3758_v1_RNA_11_DU_23S_2449_b	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_11_b_modif_2	b3758_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 b3758_v1_RNA_11_DU_23S_2449_b --> 1 DU_23S_2449_inact + 1 b3758_v1_RNA_12 + 1 nadp	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_12_modif_1	b3758_v1_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 YmfC_mono + 1 b3758_v1_RNA_12 <==> 1 b3758_v1_RNA_12_YmfC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_12_modif_2	b3758_v1_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 b3758_v1_RNA_12_YmfC_mono --> 1 YmfC_mono_inact + 1 b3758_v1_RNA_13	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_13_modif_1	b3758_v1_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 MeT_23S_2498 + 1 amet + 1 b3758_v1_RNA_13 <==> 1 b3758_v1_RNA_13_MeT_23S_2498	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_13_modif_2	b3758_v1_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 b3758_v1_RNA_13_MeT_23S_2498 --> 1 MeT_23S_2498_inact + 1 ahcys + 1 b3758_v1_RNA_14 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_14_modif_1	b3758_v1_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 MeT_23S_2503 + 1 amet + 1 b3758_v1_RNA_14 <==> 1 b3758_v1_RNA_14_MeT_23S_2503	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_14_modif_2	b3758_v1_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 b3758_v1_RNA_14_MeT_23S_2503 --> 1 MeT_23S_2503_inact + 1 ahcys + 1 b3758_v1_RNA_15 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_15_modif_1	b3758_v1_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 RluC_mono + 1 b3758_v1_RNA_15 <==> 1 b3758_v1_RNA_15_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_15_modif_2	b3758_v1_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 b3758_v1_RNA_15_RluC_mono --> 1 RluC_mono_inact + 1 b3758_v1_RNA_16	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_16_modif_1	b3758_v1_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 RrmJ_mono + 1 amet + 1 b3758_v1_RNA_16 <==> 1 b3758_v1_RNA_16_RrmJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_16_modif_2	b3758_v1_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 b3758_v1_RNA_16_RrmJ_mono --> 1 RrmJ_mono_inact + 1 ahcys + 1 b3758_v1_RNA_17 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_17_modif_1	b3758_v1_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 RluC_mono + 1 b3758_v1_RNA_17 <==> 1 b3758_v1_RNA_17_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_17_modif_2	b3758_v1_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 b3758_v1_RNA_17_RluC_mono --> 1 RluC_mono_inact + 1 b3758_v1_RNA_18	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_18_modif_1	b3758_v1_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 YjbC_mono + 1 b3758_v1_RNA_18 <==> 1 b3758_v1_RNA_18_YjbC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_18_modif_2	b3758_v1_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 b3758_v1_RNA_18_YjbC_mono --> 1 YjbC_mono_inact + 1 b3758_v1_RNA_19	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2

b3758_v1_RNA_19_modif_1	b3758_v1_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 RluB_mono + 1 b3758_v1_RNA_19 <==> 1 b3758_v1_RNA_19_RluB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_19_modif_2	b3758_v1_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 b3758_v1_RNA_19_RluB_mono --> 1 RluB_mono_inact + 1 b3758_v1_RNA_20	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_1_modif_1	b3758_v1_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 MeT_23S_1835 + 1 amet + 1 b3758_v1_RNA_1 <==> 1 b3758_v1_RNA_1_MeT_23S_1835	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_1_modif_2	b3758_v1_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 b3758_v1_RNA_1_MeT_23S_1835 --> 1 MeT_23S_1835_inact + 1 ahcys + 1 b3758_v1_RNA_2 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_20_modif_1	b3758_v1_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 RrmA_dim + 1 amet + 1 b3758_v1_RNA_20 <==> 1 b3758_v1_RNA_20_RrmA_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_20_modif_2	b3758_v1_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 b3758_v1_RNA_20_RrmA_dim --> 1 RrmA_dim_inact + 1 ahcys + 1 b3758_v1_RNA_21 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_21_modif_1	b3758_v1_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 RluA_mono + 1 b3758_v1_RNA_21 <==> 1 b3758_v1_RNA_21_RluA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_21_modif_2	b3758_v1_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 b3758_v1_RNA_21_RluA_mono --> 1 RluA_mono_inact + 1 b3758_v1_RNA_22	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_22_modif_1	b3758_v1_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 RumB_mono + 1 amet + 1 b3758_v1_RNA_22 <==> 1 b3758_v1_RNA_22_RumB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_22_modif_2	b3758_v1_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 b3758_v1_RNA_22_RumB_mono --> 1 RumB_mono_inact + 1 ahcys + 1 b3758_v1_RNA_23 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_23_modif_1	b3758_v1_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 RluC_mono + 1 b3758_v1_RNA_23 <==> 1 b3758_v1_RNA_23_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_23_modif_2	b3758_v1_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 b3758_v1_RNA_23_RluC_mono --> 1 RluC_mono_inact + 1 rrlC	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_2_modif_1	b3758_v1_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 RluD_mono + 1 b3758_v1_RNA_2 <==> 1 b3758_v1_RNA_2_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_2_modif_2	b3758_v1_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 b3758_v1_RNA_2_RluD_mono --> 1 RluD_mono_inact + 1 b3758_v1_RNA_3	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_3_modif_1	b3758_v1_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 RluD_mono + 1 amet + 1 b3758_v1_RNA_3 <==> 1 b3758_v1_RNA_3_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_3_modif_2	b3758_v1_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 b3758_v1_RNA_3_RluD_mono --> 1 RluD_mono_inact + 1 ahcys + 1 b3758_v1_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_4_modif_1	b3758_v1_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 RluD_mono + 1 b3758_v1_RNA_4 <==> 1 b3758_v1_RNA_4_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_4_modif_2	b3758_v1_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 b3758_v1_RNA_4_RluD_mono --> 1 RluD_mono_inact + 1 b3758_v1_RNA_5	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_5_modif_1	b3758_v1_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 RumA_mono + 1 amet + 1 b3758_v1_RNA_5 <==> 1 b3758_v1_RNA_5_RumA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_5_modif_2	b3758_v1_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 b3758_v1_RNA_5_RumA_mono --> 1 RumA_mono_inact + 1 ahcy + 1 b3758_v1_RNA_6 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_6_modif_1	b3758_v1_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 MeT_23S_1962 + 1 amet + 1 b3758_v1_RNA_6 <==> 1 b3758_v1_RNA_6_MeT_23S_1962	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_6_modif_2	b3758_v1_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 b3758_v1_RNA_6_MeT_23S_1962 --> 1 MeT_23S_1962_inact + 1 ahcys + 1 b3758_v1_RNA_7 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_7_modif_1	b3758_v1_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 MeT_23S_2030 + 1 amet + 1 b3758_v1_RNA_7 <==> 1 b3758_v1_RNA_7_MeT_23S_2030	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_7_modif_2	b3758_v1_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 b3758_v1_RNA_7_MeT_23S_2030 --> 1 MeT_23S_2030_inact + 1 ahcys + 1 b3758_v1_RNA_8 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_8_modif_1	b3758_v1_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 MeT_23S_2069 + 1 amet + 1 b3758_v1_RNA_8 <==> 1 b3758_v1_RNA_8_MeT_23S_2069	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_8_modif_2	b3758_v1_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 b3758_v1_RNA_8_MeT_23S_2069 --> 1 MeT_23S_2069_inact + 1 ahcys + 1 b3758_v1_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_9_modif_1	b3758_v1_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 RlmB_dim + 1 amet + 1 b3758_v1_RNA_9 <==> 1 b3758_v1_RNA_9_RlmB_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_9_modif_2	b3758_v1_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 b3758_v1_RNA_9_RlmB_dim --> 1 RlmB_dim_inact + 1 ahcys + 1 b3758_v1_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_modif_1	b3758_v1_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 MeT_23S_1618 + 1 amet + 1 b3758_v1_RNA <==> 1 b3758_v1_RNA_MeT_23S_1618	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3758_v1_RNA_modif_2	b3758_v1_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 b3758_v1_RNA_MeT_23S_1618 --> 1 MeT_23S_1618_inact + 1 ahcys + 1 b3758_v1_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
b3760_DNA_act_bind	b3760_DNA binding of activator	1 b3760_DNA_neu --> 1 b3760_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_16_MODIF_1	modification of position 16 nt (D) in aspT by Dus_gen	1 Dus_gen + 1 b3760_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3760_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_16_MODIF_2	modification of position 16 nt (D) in aspT by Dus_gen	1 b3760_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3760_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_20A_MODIF_1	modification of position 20A nt (D) in aspT by Dus_gen	1 Dus_gen + 1 b3760_tRNA_2 + 1 h + 1 nadph <==> 1 b3760_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_20A_MODIF_2	modification of position 20A nt (D) in aspT by Dus_gen	1 b3760_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3760_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_20_MODIF_1	modification of position 20 nt (D) in aspT by Dus_gen	1 Dus_gen + 1 b3760_tRNA_1 + 1 h + 1 nadph <==> 1 b3760_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_20_MODIF_2	modification of position 20 nt (D) in aspT by Dus_gen	1 b3760_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3760_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_34_MODIF_1	modification of position 34 nt (Q) in aspT by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 EoR_tRNA_pos34_Q + 1 QueA_mono + 1 Tgt_hexa + 1 adocbl + 1 amet + 1 b3760_tRNA_3 + 1 h + 1 nadh + 1 pre_Q1 <==> 1 b3760_tRNA_3_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_34_MODIF_2	modification of position 34 nt (Q) in aspT by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 b3760_tRNA_3_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx > 1 EoR_tRNA_pos34_Q_inact + 1 QueA_mono_inact + 1 Tgt_hexa_inact + 1 ade + 1 adocbl + 1 b3760_tRNA_4 + 1 gua + 2 h 1 h2o + 1 met-L + 1 nad	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in aspT by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b3760_tRNA_4 <==> 1 b3760_tRNA_4_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1

b3760_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in aspT by MeT_tRNA_pos_37_m2A	1 b3760_tRNA_4_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b3760_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in aspT by YggH_mono	1 YggH_mono + 1 amet + 1 b3760_tRNA_5 <==> 1 b3760_tRNA_5_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in aspT by YggH_mono	1 b3760_tRNA_5_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3760_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in aspT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3760_tRNA_6 <==> 1 b3760_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in aspT by TrmA_mono	1 b3760_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3760_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_55_MODIF_1	modification of position 55 nt (Y) in aspT by TruB_mono	1 TruB_mono + 1 b3760_tRNA_7 <==> 1 b3760_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_55_MODIF_2	modification of position 55 nt (Y) in aspT by TruB_mono	1 b3760_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3760_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_65_MODIF_1	modification of position 65 nt (Y) in aspT by YqcB_mono	1 YqcB_mono + 1 b3760_tRNA_8 <==> 1 b3760_tRNA_8_YqcB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_65_MODIF_2	modification of position 65 nt (Y) in aspT by YqcB_mono	1 b3760_tRNA_8_YqcB_mono_cplx --> 1 YqcB_mono_inact + 1 b3760_tRNA_9	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in aspT by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b3760_tRNA_9 + 1 mg2 + 1 trdrd <==> 1 b3760_tRNA_9_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in aspT by ThiI_mono	1 b3760_tRNA_9_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 aspT_tRNA + 1 h + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_tRNA_Mg_BIND	Binding of two Mg2 to b3760_tRNA	1 b3760_RNA + 2 mg2 <==> 1 b3760_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_trimming	Cutting of stable b3760_RNA	1 b3760_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b3760_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3760_trimming_cplx	Cutting complex formation of stable b3760_RNA (, b3760)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 b3760_RNA_pre <==> 1 b3760_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_DNA_act_bind	b3761_DNA binding of activator	1 b3761_DNA_neu --> 1 b3761_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_16_MODIF_1	modification of position 16 nt (D) in trpT by Dus_gen	1 Dus_gen + 1 b3761_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3761_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_16_MODIF_2	modification of position 16 nt (D) in trpT by Dus_gen	1 b3761_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3761_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_17_MODIF_1	modification of position 17 nt (D) in trpT by Dus_gen	1 Dus_gen + 1 b3761_tRNA_1 + 1 h + 1 nadph <==> 1 b3761_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_17_MODIF_2	modification of position 17 nt (D) in trpT by Dus_gen	1 b3761_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3761_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_20_MODIF_1	modification of position 20 nt (D) in trpT by Dus_gen	1 Dus_gen + 1 b3761_tRNA_2 + 1 h + 1 nadph <==> 1 b3761_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_20_MODIF_2	modification of position 20 nt (D) in trpT by Dus_gen	1 b3761_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3761_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_32_MODIF_1	modification of position 32 nt (Cm) in trpT by MeT_tRNA_pos_32_Cm	1 MeT_tRNA_pos_32_Cm + 1 amet + 1 b3761_tRNA_3 <==> 1 b3761_tRNA_3_MeT_tRNA_pos_32_Cm_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_32_MODIF_2	modification of position 32 nt (Cm) in trpT by MeT_tRNA_pos_32_Cm	1 b3761_tRNA_3_MeT_tRNA_pos_32_Cm_cplx --> 1 MeT_tRNA_pos_32_Cm_inact + 1 ahcys + 1 b3761_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_37_MODIF_1	modification of position 37 nt (ms2i6A) in trpT by MiaA_dim-MiaB_mono	1 IscS_dim_S-SH + 1 MiaA_dim + 1 MiaB_mono + 2 amet + 1 b3761_tRNA_4 + 1 dmpp + 1 fldrd <==> 1 b3761_tRNA_4_MiaA_dim-MiaB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_37_MODIF_2	modification of position 37 nt (ms2i6A) in trpT by MiaA_dim-MiaB_mono	1 b3761_tRNA_4_MiaA_dim-MiaB_mono_cplx --> 1 IscS_dim_S-H + 1 MiaA_dim_inact + 1 MiaB_mono_inact + 1 ahcys + 1 b3761_tRNA_5 + 1 dad-5 + 1 fldox + 2 h + 1 met-L + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in trpT by YggH_mono	1 YggH_mono + 1 amet + 1 b3761_tRNA_5 <==> 1 b3761_tRNA_5_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in trpT by YggH_mono	1 b3761_tRNA_5_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3761_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in trpT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3761_tRNA_6 <==> 1 b3761_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in trpT by TrmA_mono	1 b3761_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3761_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_55_MODIF_1	modification of position 55 nt (Y) in trpT by TruB_mono	1 TruB_mono + 1 b3761_tRNA_7 <==> 1 b3761_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_55_MODIF_2	modification of position 55 nt (Y) in trpT by TruB_mono	1 b3761_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3761_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in trpT by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b3761_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b3761_tRNA_8_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in trpT by ThiI_mono	1 b3761_tRNA_8_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 trdox + 1 trpT_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_tRNA_Mg_BIND	Binding of two Mg2 to b3761_tRNA	1 b3761_RNA + 2 mg2 <==> 1 b3761_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_trimming	Cutting of stable b3761_RNA	1 b3761_RNA_cut_cplx + 1 h2o --> 1 RNase_E_tetra_inact + 1 RNase_Gen_inact + 1 RNase_P_cplx_inact + 1 b3761_RNA + 1 h + ppi	irreversible	RNA Processing	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3761_trimming_cplx	Cutting complex formation of stable b3761_RNA (, b3761)	1 RNase_E_tetra + 1 RNase_Gen + 1 RNase_P_cplx + 1 b3761_RNA_pre <==> 1 b3761_RNA_cut_cplx	reversible	RNA Processing	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
b3780_fold_GroEL/ES_1	b3780_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3780_m + 1 transGroES_hepta --> 7 adp + 1 b3780_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b3780_fold_GroEL/ES_2	b3780_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3780_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 RhlB_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b3780_fold_GroEL/ES_3	b3780_m folding: GroEL/ES mediated; release of native protein	1 RhlB_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 RhlB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b3780_fold_KJE_1	b3780_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3780_m <==> 1 b3780_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b3780_fold_KJE_2	b3780_m folding: KJE mediated	1 GrpE_dim + 1 b3780_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 RhlB_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b3780_fold_KJE_3	b3780_m folding: KJE mediated	1 RhlB_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 RhlB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b3780_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3780_mRNA --> 1 b3780_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.34E+01	9.34E+01	0	1.59E+02	159.0788	0	3.26E-01	0.326
b3780_mRNA_degr1	Degradation of b3780_mRNA I	1 Orn_dim + 316 atp + 1 b3780_mRNA_2 + 1 degradosome + 316 h2o <==> 316 adp + 1 b3780_mRNA_2_degr + 316 h + 316 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.34E+01	9.34E+01	0	1.59E+02	159.0788	0	3.26E-01	0.326
b3780_mRNA_degr2	Degradation of b3780_mRNA II	1 b3780_mRNA_2_degr + 1265 h2o --> 1 Orn_dim_inact + 305 amp + 1 atp + 329 cmp + 1 degradosome_inact + 336 gmp + 1265 h + 295 ump	irreversible	mRNA degradation	0.00E+00	3.26E-01	0	9.34E+01	9.34E+01	0	1.59E+02	159.0788	0	3.26E-01	0.326
b3780_maturation1	Polypeptide b3780 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3780_aa <==> 1 b3780_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b3780_maturation2	b3780 formation	1 b3780_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3780_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.40E+02	4.40E+02	0	4.77E+02	477.4116	0	5.76E+01	57.629
b3782_fold_spon	b3782_m folding: spontanous	1 b3782_m --> 1 RhoL_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.72E+02	1.72E+02	0	2.38E+02	238.0054	0	8.50E+01	85.007

b3782_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3782_mRNA --> 1 b3782_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
b3782_mRNA_degr1	Degradation of b3782_mRNA I	1 Orn_dim + 25 atp + 1 b3782_mRNA_2 + 1 degradosome + 25 h2o <==> 25 adp + 1 b3782_mRNA_2_degr + 25 h + 25 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
b3782_mRNA_degr2	Degradation of b3782_mRNA II	1 b3782_mRNA_2_degr + 101 h2o --> 1 Orn_dim_inact + 23 amp + 1 atp + 25 cmp + 1 degradosome_inact + 25 gmp + 101 h + 28 ump	irreversible	mRNA degradation	0.00E+00	2.38E-01	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
b3782_maturation1	Polypeptide b3782 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3782_aa <==> 1 b3782_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.72E+02	1.72E+02	0	2.38E+02	238.0054	0	8.50E+01	85.007
b3782_maturation2	b3782 formation	1 b3782_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3782_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.72E+02	1.72E+02	0	2.38E+02	238.0054	0	8.50E+01	85.007
b3782_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3782_v1_mRNA --> 1 b3782_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
b3783_fold_GroEL/ES_1	b3783_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3783_m + 1 transGroES_hepta --> 7 adp + 1 b3783_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.20E+03	2.20E+03	0	3.79E+03	3794.53	0	1.23E+02	122.568
b3783_fold_GroEL/ES_2	b3783_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3783_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 Rho_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.20E+03	2.20E+03	0	3.79E+03	3794.53	0	1.23E+02	122.568
b3783_fold_GroEL/ES_3	b3783_m folding: GroEL/ES mediated; release of native protein	1 Rho_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 Rho_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.20E+03	2.20E+03	0	3.79E+03	3794.53	0	1.23E+02	122.568
b3783_fold_KJE_1	b3783_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3783_m <==> 1 b3783_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.20E+03	2.20E+03	0	3.79E+03	3794.53	0	1.23E+02	122.568
b3783_fold_KJE_2	b3783_m folding: KJE mediated	1 GrpE_dim + 1 b3783_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 Rho_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.20E+03	2.20E+03	0	3.79E+03	3794.53	0	1.23E+02	122.568
b3783_fold_KJE_3	b3783_m folding: KJE mediated	1 Rho_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + GrpE_dim_inact + 1 Rho_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.20E+03	2.20E+03	0	3.79E+03	3794.53	0	1.23E+02	122.568
b3783_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3783_mRNA --> 1 b3783_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
b3783_mRNA_degr1	Degradation of b3783_mRNA I	1 Orn_dim + 315 atp + 1 b3783_mRNA_2 + 1 degradosome + 315 h2o <==> 315 adp + 1 b3783_mRNA_2_degr + 315 h + 315 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
b3783_mRNA_degr2	Degradation of b3783_mRNA II	1 b3783_mRNA_2_degr + 1259 h2o --> 1 Orn_dim_inact + 328 amp + 319 cmp + 1 degradosome_inact + 315 gmp + 1259 h + 298 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
b3783_maturation1	Polypeptide b3783 peptide deformylase complex	1 Def_mono + 1 b3783_aa <==> 1 b3783_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.20E+03	2.20E+03	0	3.79E+03	3794.53	0	1.23E+02	122.568
b3783_maturation2	b3783 formation	1 b3783_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3783_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.20E+03	2.20E+03	0	3.79E+03	3794.53	0	1.23E+02	122.568
b3783_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3783_v1_mRNA --> 1 b3783_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
b3796_tRNA_17_MODIF_1	modification of position 17 nt (D) in argX by Dus_gen	1 Dus_gen + 1 b3796_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3796_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3796_tRNA_17_MODIF_2	modification of position 17 nt (D) in argX by Dus_gen	1 b3796_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3796_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3796_tRNA_20A_MODIF_1	modification of position 20A nt (D) in argX by Dus_gen	1 Dus_gen + 1 b3796_tRNA_1 + 1 h + 1 nadph <==> 1 b3796_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3796_tRNA_20A_MODIF_2	modification of position 20A nt (D) in argX by Dus_gen	1 b3796_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3796_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3796_tRNA_32_MODIF_1	modification of position 32 nt (s2C) in argX by YdaO_mono	1 IscS_dim_S-SH + 1 YdaO_mono + 1 atp + 1 b3796_tRNA_2 + 1 mg2 + 1 trdrd <==> 1 b3796_tRNA_2_YdaO_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3796_tRNA_32_MODIF_2	modification of position 32 nt (s2C) in argX by YdaO_mono	1 b3796_tRNA_2_YdaO_mono_cplx --> 1 IscS_dim_S-H + 1 YdaO_mono_inact + 1 amp + 1 b3796_tRNA_3 + 1 h + 1 mg2 + 1 pp + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3796_tRNA_37_MODIF_1	modification of position 37 nt (m1G) in argX by TrmD_dim	1 TrmD_dim + 1 amet + 1 b3796_tRNA_3 <==> 1 b3796_tRNA_3_TrmD_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3796_tRNA_37_MODIF_2	modification of position 37 nt (m1G) in argX by TrmD_dim	1 b3796_tRNA_3_TrmD_dim_cplx --> 1 TrmD_dim_inact + 1 ahcys + 1 b3796_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3796_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in argX by YggH_mono	1 YggH_mono + 1 amet + 1 b3796_tRNA_4 <==> 1 b3796_tRNA_4_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3796_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in argX by YggH_mono	1 b3796_tRNA_4_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3796_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3796_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in argX by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3796_tRNA_5 <==> 1 b3796_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3796_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in argX by TrmA_mono	1 b3796_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3796_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3796_tRNA_55_MODIF_1	modification of position 55 nt (Y) in argX by TruB_mono	1 TruB_mono + 1 b3796_tRNA_6 <==> 1 b3796_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3796_tRNA_55_MODIF_2	modification of position 55 nt (Y) in argX by TruB_mono	1 b3796_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 argX_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3796_tRNA_Mg_BIND	Binding of two Mg2 to b3796_tRNA	1 b3796_RNA + 2 mg2 <==> 1 b3796_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_16_MODIF_1	modification of position 16 nt (D) in hisR by Dus_gen	1 Dus_gen + 1 b3797_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3797_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_16_MODIF_2	modification of position 16 nt (D) in hisR by Dus_gen	1 b3797_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3797_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_17_MODIF_1	modification of position 17 nt (D) in hisR by Dus_gen	1 Dus_gen + 1 b3797_tRNA_1 + 1 h + 1 nadph <==> 1 b3797_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_17_MODIF_2	modification of position 17 nt (D) in hisR by Dus_gen	1 b3797_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3797_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_20_MODIF_1	modification of position 20 nt (D) in hisR by Dus_gen	1 Dus_gen + 1 b3797_tRNA_2 + 1 h + 1 nadph <==> 1 b3797_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_20_MODIF_2	modification of position 20 nt (D) in hisR by Dus_gen	1 b3797_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3797_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_34_MODIF_1	modification of position 34 nt (Q) in hisR by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 EoR_tRNA_pos34_Q + 1 QueA_mono + 1 Tgt_hexa + 1 adocbl + 1 amet + 1 b3797_tRNA_3 + 1 h + 1 nadh + 1 pre_Q1 <==> 1 b3797_tRNA_3_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_34_MODIF_2	modification of position 34 nt (Q) in hisR by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 b3797_tRNA_3_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx > 1 EoR_tRNA_pos34_Q_inact + 1 QueA_mono_inact + 1 Tgt_hexa_inact + 1 ade + 1 adocbl + 1 b3797_tRNA_4 + 1 gua + 2 h + 1 h2o + 1 met-L + 1 nad	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in hisR by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b3797_tRNA_4 <==> 1 b3797_tRNA_4_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in hisR by MeT_tRNA_pos_37_m2A	1 b3797_tRNA_4_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b3797_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_38_MODIF_1	modification of position 38 nt (Y) in hisR by TruA_dim	1 TruA_dim + 1 b3797_tRNA_5 <==> 1 b3797_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_38_MODIF_2	modification of position 38 nt (Y) in hisR by TruA_dim	1 b3797_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b3797_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_39_MODIF_1	modification of position 39 nt (Y) in hisR by TruA_dim	1 TruA_dim + 1 b3797_tRNA_6 <==> 1 b3797_tRNA_6_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_39_MODIF_2	modification of position 39 nt (Y) in hisR by TruA_dim	1 b3797_tRNA_6_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b3797_tRNA_7	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in hisR by YggH_mono	1 YggH_mono + 1 amet + 1 b3797_tRNA_7 <==> 1 b3797_tRNA_7_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in hisR by YggH_mono	1 b3797_tRNA_7_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3797_tRNA_8 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9

b3797_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in hisR by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3797_tRNA_8 <==> 1 b3797_tRNA_8_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in hisR by TrmA_mono	1 b3797_tRNA_8_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3797_tRNA_9 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_55_MODIF_1	modification of position 55 nt (Y) in hisR by TruB_mono	1 TruB_mono + 1 b3797_tRNA_9 <==> 1 b3797_tRNA_9_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_55_MODIF_2	modification of position 55 nt (Y) in hisR by TruB_mono	1 b3797_tRNA_9_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3797_tRNA_10	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in hisR by Thil_mono	1 IscS_dim_S-SH + 1 Thil_mono + 1 atp + 1 b3797_tRNA_10 + 1 mg2 + 1 trdrd <==> 1 b3797_tRNA_10_Thil_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in hisR by Thil_mono	1 b3797_tRNA_10_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 h + 1 hisR_tRNA + 1 mg2 + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3797_tRNA_Mg_BIND	Binding of two Mg2 to b3797_tRNA	1 b3797_RNA + 2 mg2 <==> 1 b3797_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_16_MODIF_1	modification of position 16 nt (D) in leuT by Dus_gen	1 Dus_gen + 1 b3798_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3798_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_16_MODIF_2	modification of position 16 nt (D) in leuT by Dus_gen	1 b3798_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3798_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_17_MODIF_1	modification of position 17 nt (D) in leuT by Dus_gen	1 Dus_gen + 1 b3798_tRNA_1 + 1 h + 1 nadph <==> 1 b3798_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_17_MODIF_2	modification of position 17 nt (D) in leuT by Dus_gen	1 b3798_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3798_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in leuT by TrmH_dim	1 TrmH_dim + 1 amet + 1 b3798_tRNA_2 <==> 1 b3798_tRNA_2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in leuT by TrmH_dim	1 b3798_tRNA_2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b3798_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_20_MODIF_1	modification of position 20 nt (D) in leuT by Dus_gen	1 Dus_gen + 1 b3798_tRNA_3 + 1 h + 1 nadph <==> 1 b3798_tRNA_3_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_20_MODIF_2	modification of position 20 nt (D) in leuT by Dus_gen	1 b3798_tRNA_3_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3798_tRNA_4 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_38_MODIF_1	modification of position 38 nt (Y) in leuT by TruA_dim	1 TruA_dim + 1 b3798_tRNA_4 <==> 1 b3798_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_38_MODIF_2	modification of position 38 nt (Y) in leuT by TruA_dim	1 b3798_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b3798_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_40_MODIF_1	modification of position 40 nt (Y) in leuT by TruA_dim	1 TruA_dim + 1 b3798_tRNA_5 <==> 1 b3798_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_40_MODIF_2	modification of position 40 nt (Y) in leuT by TruA_dim	1 b3798_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b3798_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in leuT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3798_tRNA_6 <==> 1 b3798_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in leuT by TrmA_mono	1 b3798_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3798_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_55_MODIF_1	modification of position 55 nt (Y) in leuT by TruB_mono	1 TruB_mono + 1 b3798_tRNA_7 <==> 1 b3798_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_55_MODIF_2	modification of position 55 nt (Y) in leuT by TruB_mono	1 b3798_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 leuT_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3798_tRNA_Mg_BIND	Binding of two Mg2 to b3798_tRNA	1 b3798_RNA + 2 mg2 <==> 1 b3798_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_20_MODIF_1	modification of position 20 nt (D) in proM by Dus_gen	1 Dus_gen + 1 b3799_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3799_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_20_MODIF_2	modification of position 20 nt (D) in proM by Dus_gen	1 b3799_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3799_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_32_MODIF_1	modification of position 32 nt (Um) in proM by MeT_tRNA_pos_32_Um	1 MeT_tRNA_pos_32_Um + 1 amet + 1 b3799_tRNA_1 <==> 1 b3799_tRNA_1_MeT_tRNA_pos_32_Um_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_32_MODIF_2	modification of position 32 nt (Um) in proM by MeT_tRNA_pos_32_Um	1 b3799_tRNA_1_MeT_tRNA_pos_32_Um_cplx --> 1 MeT_tRNA_pos_32_Um_inact + 1 ahcys + 1 b3799_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_34_MODIF_1	modification of position 34 nt (cmo5U) in proM by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 HyL_tRNA_pos_34_ho5U + 1 YecO_mono + 1 YecP_mono + 1 amet + 1 b3799_tRNA_2 + 2 chor <==> 1 b3799_tRNA_2_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_34_MODIF_2	modification of position 34 nt (cmo5U) in proM by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 b3799_tRNA_2_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx --> 1 C10H8O5 + 1 C9H9O4 + 1 HyL_tRNA_pos_34_ho5U_inact + 1 YecO_mono_inact + 1 YecP_mono_inact + 1 ahcys + 1 b3799_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_37_MODIF_1	modification of position 37 nt (m1G) in proM by TrmD_dim	1 TrmD_dim + 1 amet + 1 b3799_tRNA_3 <==> 1 b3799_tRNA_3_TrmD_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_37_MODIF_2	modification of position 37 nt (m1G) in proM by TrmD_dim	1 b3799_tRNA_3_TrmD_dim_cplx --> 1 TrmD_dim_inact + 1 ahcys + 1 b3799_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in proM by YggH_mono	1 YggH_mono + 1 amet + 1 b3799_tRNA_4 <==> 1 b3799_tRNA_4_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in proM by YggH_mono	1 b3799_tRNA_4_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3799_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in proM by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3799_tRNA_5 <==> 1 b3799_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in proM by TrmA_mono	1 b3799_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3799_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_55_MODIF_1	modification of position 55 nt (Y) in proM by TruB_mono	1 TruB_mono + 1 b3799_tRNA_6 <==> 1 b3799_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_55_MODIF_2	modification of position 55 nt (Y) in proM by TruB_mono	1 b3799_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3799_tRNA_7	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_65_MODIF_1	modification of position 65 nt (Y) in proM by YqcB_mono	1 YqcB_mono + 1 b3799_tRNA_7 <==> 1 b3799_tRNA_7_YqcB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_65_MODIF_2	modification of position 65 nt (Y) in proM by YqcB_mono	1 b3799_tRNA_7_YqcB_mono_cplx --> 1 YqcB_mono_inact + 1 b3799_tRNA_8	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in proM by Thil_mono	1 IscS_dim_S-SH + 1 Thil_mono + 1 atp + 1 b3799_tRNA_8 + 1 mg2 + 1 trdrd <==> 1 b3799_tRNA_8_Thil_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in proM by Thil_mono	1 b3799_tRNA_8_Thil_mono_cplx --> 1 IscS_dim_S-H + 1 Thil_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 proM_tRNA + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3799_tRNA_Mg_BIND	Binding of two Mg2 to b3799_tRNA	1 b3799_RNA + 2 mg2 <==> 1 b3799_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
b3851_RNA_10_modif_1	b3851_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 RsmB_mono + 1 amet + 1 b3851_RNA_10 <==> 1 b3851_RNA_10_RsmB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_10_modif_2	b3851_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 b3851_RNA_10_RsmB_mono --> 1 RsmB_mono_inact + 1 ahcys + 1 h + 1 rrsA	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_1_modif_1	b3851_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 MeT_16S_1402 + 2 amet + 1 b3851_RNA_1 <==> 1 b3851_RNA_1_MeT_16S_1402	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_1_modif_2	b3851_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 b3851_RNA_1_MeT_16S_1402 --> 1 MeT_16S_1402_inact + 2 ahcys + 1 b3851_RNA_2 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_2_modif_1	b3851_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 MeT_16S_1407 + 1 amet + 1 b3851_RNA_2 <==> 1 b3851_RNA_2_MeT_16S_1407	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_2_modif_2	b3851_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 b3851_RNA_2_MeT_16S_1407 --> 1 MeT_16S_1407_inact + 1 ahcys + 1 b3851_RNA_3 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_3_modif_1	b3851_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 YggJ_mono + 1 amet + 1 b3851_RNA_3 <==> 1 b3851_RNA_3_YggJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6

b3851_RNA_3_modif_2	b3851_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 b3851_RNA_3_YggJ_mono --> 1 YggJ_mono_inact + 1 ahcys + 1 b3851_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_4_modif_1	b3851_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 MeT_16S_1516 + 1 amet + 1 b3851_RNA_4 <==> 1 b3851_RNA_4_MeT_16S_1516	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_4_modif_2	b3851_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 b3851_RNA_4_MeT_16S_1516 --> 1 MeT_16S_1516_inact + 1 ahcys + 1 b3851_RNA_5 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_5_modif_1	b3851_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b3851_RNA_5 <==> 1 b3851_RNA_5_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_5_modif_2	b3851_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 b3851_RNA_5_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b3851_RNA_6 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_6_modif_1	b3851_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b3851_RNA_6 <==> 1 b3851_RNA_6_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_6_modif_2	b3851_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 b3851_RNA_6_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b3851_RNA_7 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_7_modif_1	b3851_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 RsuA_mono + 1 b3851_RNA_7 <==> 1 b3851_RNA_7_RsuA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_7_modif_2	b3851_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 b3851_RNA_7_RsuA_mono --> 1 RsuA_mono_inact + 1 b3851_RNA_8	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_8_modif_1	b3851_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 MeT_16S_527 + 1 amet + 1 b3851_RNA_8 <==> 1 b3851_RNA_8_MeT_16S_527	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_8_modif_2	b3851_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 b3851_RNA_8_MeT_16S_527 --> 1 MeT_16S_527_inact + 1 ahcy + 1 b3851_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_9_modif_1	b3851_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 MeT_16S_966 + 1 amet + 1 b3851_RNA_9 <==> 1 b3851_RNA_9_MeT_16S_966	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_9_modif_2	b3851_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 b3851_RNA_9_MeT_16S_966 --> 1 MeT_16S_966_inact + 1 ahcy + 1 b3851_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_modif_1	b3851_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 RsmC_mono + 1 amet + 1 b3851_RNA <==> 1 b3851_RNA_RsmC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3851_RNA_modif_2	b3851_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 b3851_RNA_RsmC_mono --> 1 RsmC_mono_inact + 1 ahcys + 1 b3851_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_20A_MODIF_1	modification of position 20A nt (D) in ileT by Dus_gen	1 Dus_gen + 1 b3852_tRNA_1 + 1 h + 1 nadph <==> 1 b3852_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_20A_MODIF_2	modification of position 20A nt (D) in ileT by Dus_gen	1 b3852_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3852_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_20_MODIF_1	modification of position 20 nt (D) in ileT by Dus_gen	1 Dus_gen + 1 b3852_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3852_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_20_MODIF_2	modification of position 20 nt (D) in ileT by Dus_gen	1 b3852_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3852_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_37_MODIF_1	modification of position 37 nt (t6A) in ileT by Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A + 1 atp + 1 b3852_tRNA_2 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b3852_tRNA_2_Up_tRNA_pos_37_t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_37_MODIF_2	modification of position 37 nt (t6A) in ileT by Up_tRNA_pos_37_t6A	1 b3852_tRNA_2_Up_tRNA_pos_37_t6A_cplx --> 1 Up_tRNA_pos_37_t6A_inact + 1 amp + 1 b3852_tRNA_3 + 1 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in ileT by YggH_mono	1 YggH_mono + 1 amet + 1 b3852_tRNA_3 <==> 1 b3852_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in ileT by YggH_mono	1 b3852_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3852_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in ileT by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b3852_tRNA_4 <==> 1 b3852_tRNA_4_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in ileT by AcpT_tRNA_pos_47_acp3U	1 b3852_tRNA_4_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b3852_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in ileT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3852_tRNA_5 <==> 1 b3852_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in ileT by TrmA_mono	1 b3852_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3852_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_55_MODIF_1	modification of position 55 nt (Y) in ileT by TruB_mono	1 TruB_mono + 1 b3852_tRNA_6 <==> 1 b3852_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_55_MODIF_2	modification of position 55 nt (Y) in ileT by TruB_mono	1 b3852_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3852_tRNA_7	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_65_MODIF_1	modification of position 65 nt (Y) in ileT by YqcB_mono	1 YqcB_mono + 1 b3852_tRNA_7 <==> 1 b3852_tRNA_7_YqcB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_65_MODIF_2	modification of position 65 nt (Y) in ileT by YqcB_mono	1 b3852_tRNA_7_YqcB_mono_cplx --> 1 YqcB_mono_inact + 1 ileT_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3852_tRNA_Mg_BIND	Binding of two Mg2 to b3852_tRNA	1 b3852_RNA + 2 mg2 <==> 1 b3852_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3853_tRNA_17_MODIF_1	modification of position 17 nt (D) in alaT by Dus_gen	1 Dus_gen + 1 b3853_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3853_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3853_tRNA_17_MODIF_2	modification of position 17 nt (D) in alaT by Dus_gen	1 b3853_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3853_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3853_tRNA_34_MODIF_1	modification of position 34 nt (cmo5U) in alaT by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 HyL_tRNA_pos_34_ho5U + 1 YecO_mono + 1 YecP_mono + 1 amet + 1 b3853_tRNA_1 + 2 chor <==> 1 b3853_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3853_tRNA_34_MODIF_2	modification of position 34 nt (cmo5U) in alaT by YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U	1 b3853_tRNA_1_YecO_mono-YecP_mono-HyL_tRNA_pos_34_ho5U_cplx --> 1 C10H8O5 + 1 C9H9O4 + 1 HyL_tRNA_pos_34_ho5U_inact + 1 YecO_mono_inact + 1 YecP_mono_inact + 1 ahcys + 1 b3853_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3853_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in alaT by YggH_mono	1 YggH_mono + 1 amet + 1 b3853_tRNA_2 <==> 1 b3853_tRNA_2_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3853_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in alaT by YggH_mono	1 b3853_tRNA_2_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3853_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3853_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in alaT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3853_tRNA_3 <==> 1 b3853_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3853_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in alaT by TrmA_mono	1 b3853_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3853_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3853_tRNA_55_MODIF_1	modification of position 55 nt (Y) in alaT by TruB_mono	1 TruB_mono + 1 b3853_tRNA_4 <==> 1 b3853_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3853_tRNA_55_MODIF_2	modification of position 55 nt (Y) in alaT by TruB_mono	1 b3853_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 alaT_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3853_tRNA_Mg_BIND	Binding of two Mg2 to b3853_tRNA	1 b3853_RNA + 2 mg2 <==> 1 b3853_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_10_modif_1	b3854_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 MeT_23S_2445 + 1 amet + 1 b3854_RNA_10 <==> 1 b3854_RNA_10_MeT_23S_2445	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_10_modif_2	b3854_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 b3854_RNA_10_MeT_23S_2445 --> 1 MeT_23S_2445_inact + 1 ahcys + 1 b3854_RNA_11 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6

b3854_RNA_11_a_modif_1	b3854_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 DU_23S_2449 + 1 b3854_RNA_11 + 1 h + 1 nadh <==> 1 b3854_RNA_11_DU_23S_2449_a	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_11_a_modif_2	b3854_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 b3854_RNA_11_DU_23S_2449_a --> 1 DU_23S_2449_inact + 1 b3854_RNA_12 + 1 nad	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_11_b_modif_1	b3854_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 DU_23S_2449 + 1 b3854_RNA_11 + 1 h + 1 nadph <==> 1 b3854_RNA_11_DU_23S_2449_b	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_11_b_modif_2	b3854_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 b3854_RNA_11_DU_23S_2449_b --> 1 DU_23S_2449_inact + 1 b3854_RNA_12 + 1 nadp	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_12_modif_1	b3854_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 YmfC_mono + 1 b3854_RNA_12 <==> 1 b3854_RNA_12_YmfC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_12_modif_2	b3854_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 b3854_RNA_12_YmfC_mono --> 1 YmfC_mono_inact + 1 b3854_RNA_13	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_13_modif_1	b3854_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 MeT_23S_2498 + 1 amet + 1 b3854_RNA_13 <==> 1 b3854_RNA_13_MeT_23S_2498	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_13_modif_2	b3854_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 b3854_RNA_13_MeT_23S_2498 --> 1 MeT_23S_2498_inact + 1 ahcys + 1 b3854_RNA_14 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_14_modif_1	b3854_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 MeT_23S_2503 + 1 amet + 1 b3854_RNA_14 <==> 1 b3854_RNA_14_MeT_23S_2503	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_14_modif_2	b3854_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 b3854_RNA_14_MeT_23S_2503 --> 1 MeT_23S_2503_inact + 1 ahcys + 1 b3854_RNA_15 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_15_modif_1	b3854_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 RluC_mono + 1 b3854_RNA_15 <==> 1 b3854_RNA_15_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_15_modif_2	b3854_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 b3854_RNA_15_RluC_mono --> 1 RluC_mono_inact + 1 b3854_RNA_16	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_16_modif_1	b3854_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 RrmJ_mono + 1 amet + 1 b3854_RNA_16 <==> 1 b3854_RNA_16_RrmJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_16_modif_2	b3854_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 b3854_RNA_16_RrmJ_mono --> 1 RrmJ_mono_inact + 1 ahcys + b3854_RNA_17 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_17_modif_1	b3854_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 RluC_mono + 1 b3854_RNA_17 <==> 1 b3854_RNA_17_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_17_modif_2	b3854_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 b3854_RNA_17_RluC_mono --> 1 RluC_mono_inact + 1 b3854_RNA_18	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_18_modif_1	b3854_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 YjbC_mono + 1 b3854_RNA_18 <==> 1 b3854_RNA_18_YjbC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_18_modif_2	b3854_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 b3854_RNA_18_YjbC_mono --> 1 YjbC_mono_inact + 1 b3854_RNA_19	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_19_modif_1	b3854_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 RluB_mono + 1 b3854_RNA_19 <==> 1 b3854_RNA_19_RluB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_19_modif_2	b3854_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 b3854_RNA_19_RluB_mono --> 1 RluB_mono_inact + 1 b3854_RNA_20	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_1_modif_1	b3854_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 MeT_23S_1835 + 1 amet + 1 b3854_RNA_1 <==> 1 b3854_RNA_1_MeT_23S_1835	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_1_modif_2	b3854_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 b3854_RNA_1_MeT_23S_1835 --> 1 MeT_23S_1835_inact + 1 ahcys + 1 b3854_RNA_2 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_20_modif_1	b3854_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 RrmA_dim + 1 amet + 1 b3854_RNA_20 <==> 1 b3854_RNA_20_RrmA_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_20_modif_2	b3854_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 b3854_RNA_20_RrmA_dim --> 1 RrmA_dim_inact + 1 ahcys + 1 b3854_RNA_21 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_21_modif_1	b3854_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 RluA_mono + 1 b3854_RNA_21 <==> 1 b3854_RNA_21_RluA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_21_modif_2	b3854_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 b3854_RNA_21_RluA_mono --> 1 RluA_mono_inact + 1 b3854_RNA_22	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_22_modif_1	b3854_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 RumB_mono + 1 amet + 1 b3854_RNA_22 <==> 1 b3854_RNA_22_RumB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_22_modif_2	b3854_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 b3854_RNA_22_RumB_mono --> 1 RumB_mono_inact + 1 ahcys + 1 b3854_RNA_23 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_23_modif_1	b3854_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 RluC_mono + 1 b3854_RNA_23 <==> 1 b3854_RNA_23_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_23_modif_2	b3854_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 b3854_RNA_23_RluC_mono --> 1 RluC_mono_inact + 1 rrlA	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_2_modif_1	b3854_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 RluD_mono + 1 b3854_RNA_2 <==> 1 b3854_RNA_2_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_2_modif_2	b3854_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 b3854_RNA_2_RluD_mono --> 1 RluD_mono_inact + 1 b3854_RNA_3	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_3_modif_1	b3854_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 RluD_mono + 1 amet + 1 b3854_RNA_3 <==> 1 b3854_RNA_3_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_3_modif_2	b3854_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 b3854_RNA_3_RluD_mono --> 1 RluD_mono_inact + 1 ahcys + 1 b3854_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_4_modif_1	b3854_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 RluD_mono + 1 b3854_RNA_4 <==> 1 b3854_RNA_4_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_4_modif_2	b3854_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 b3854_RNA_4_RluD_mono --> 1 RluD_mono_inact + 1 b3854_RNA_5	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_5_modif_1	b3854_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 RumA_mono + 1 amet + 1 b3854_RNA_5 <==> 1 b3854_RNA_5_RumA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_5_modif_2	b3854_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 b3854_RNA_5_RumA_mono --> 1 RumA_mono_inact + 1 ahcys + 1 b3854_RNA_6 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6

b3854_RNA_6_modif_1	b3854_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 MeT_23S_1962 + 1 amet + 1 b3854_RNA_6 <==> 1 b3854_RNA_6_MeT_23S_1962	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_6_modif_2	b3854_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 b3854_RNA_6_MeT_23S_1962 --> 1 MeT_23S_1962_inact + 1 ahcys + 1 b3854_RNA_7 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_7_modif_1	b3854_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 MeT_23S_2030 + 1 amet + 1 b3854_RNA_7 <==> 1 b3854_RNA_7_MeT_23S_2030	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_7_modif_2	b3854_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 b3854_RNA_7_MeT_23S_2030 --> 1 MeT_23S_2030_inact + 1 ahcys + 1 b3854_RNA_8 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_8_modif_1	b3854_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 MeT_23S_2069 + 1 amet + 1 b3854_RNA_8 <==> 1 b3854_RNA_8_MeT_23S_2069	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_8_modif_2	b3854_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 b3854_RNA_8_MeT_23S_2069 --> 1 MeT_23S_2069_inact + 1 ahcys + 1 b3854_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_9_modif_1	b3854_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 RlmB_dim + 1 amet + 1 b3854_RNA_9 <==> 1 b3854_RNA_9_RlmB_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_9_modif_2	b3854_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 b3854_RNA_9_RlmB_dim --> 1 RlmB_dim_inact + 1 ahcys + 1 b3854_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_modif_1	b3854_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 MeT_23S_1618 + 1 amet + 1 b3854_RNA <==> 1 b3854_RNA_MeT_23S_1618	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3854_RNA_modif_2	b3854_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 b3854_RNA_MeT_23S_1618 --> 1 MeT_23S_1618_inact + 1 ahcy + 1 b3854_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
b3885_fold_spon	b3885_m folding: spontanous	1 b3885_m --> 1 YihX_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.90E+02	5.90E+02	0	9.63E+02	963.2302	0	1.04E+02	104.214
b3885_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3885_mRNA --> 1 b3885_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
b3885_mRNA_degr1	Degradation of b3885_mRNA I	1 Orn_dim + 150 atp + 1 b3885_mRNA_2 + 1 degradosome + 150 h2o <==> 150 adp + 1 b3885_mRNA_2_degr + 150 h + 150 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
b3885_mRNA_degr2	Degradation of b3885_mRNA II	1 b3885_mRNA_2_degr + 599 h2o --> 1 Orn_dim_inact + 142 amp + 1 atp + 138 cmp + 1 degradosome_inact + 165 gmp + 599 h + 154 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
b3885_maturation1	Polypeptide b3885 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3885_aa <==> 1 b3885_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.90E+02	5.90E+02	0	9.63E+02	963.2302	0	1.04E+02	104.214
b3885_maturation2	b3885 formation	1 b3885_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3885_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.90E+02	5.90E+02	0	9.63E+02	963.2302	0	1.04E+02	104.214
b3886_fold_spon	b3886_m folding: spontanous	1 b3886_m --> 1 Rbn_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.24E+02	8.24E+02	0	1.40E+03	1400.399	0	7.28E+01	72.828
b3886_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3886_mRNA --> 1 b3886_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
b3886_mRNA_degr1	Degradation of b3886_mRNA I	1 Orn_dim + 216 atp + 1 b3886_mRNA_2 + 1 degradosome + 216 h2o <==> 216 adp + 1 b3886_mRNA_2_degr + 216 h + 216 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
b3886_mRNA_degr2	Degradation of b3886_mRNA II	1 b3886_mRNA_2_degr + 865 h2o --> 1 Orn_dim_inact + 177 amp + 229 cmp + 1 degradosome_inact + 213 gmp + 865 h + 247 ump	irreversible	mRNA degradation	0.00E+00	1.04E-01	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
b3886_maturation1	Polypeptide b3886 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3886_aa <==> 1 b3886_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	8.24E+02	8.24E+02	0	1.40E+03	1400.399	0	7.28E+01	72.828
b3886_maturation2	b3886 formation	1 b3886_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3886_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	8.24E+02	8.24E+02	0	1.40E+03	1400.399	0	7.28E+01	72.828
b3887_fold_spon	b3887_m folding: spontanous	1 b3887_m_Zn --> 1 Dtd_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.32E+02	4.32E+02	0	7.03E+02	702.7711	0	7.80E+01	78.032
b3887_ion_BIND	Binding of ions to b3887	1 b3887_m + 6 zn2 <==> 1 b3887_m_Zn	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	4.32E+02	4.32E+02	0	7.03E+02	702.7711	0	7.80E+01	78.032
b3887_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3887_mRNA --> 1 b3887_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
b3887_mRNA_degr1	Degradation of b3887_mRNA I	1 Orn_dim + 108 atp + 1 b3887_mRNA_2 + 1 degradosome + 108 h2o <==> 108 adp + 1 b3887_mRNA_2_degr + 108 h + 108 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
b3887_mRNA_degr2	Degradation of b3887_mRNA II	1 b3887_mRNA_2_degr + 433 h2o --> 1 Orn_dim_inact + 102 amp + 105 cmp + 1 degradosome_inact + 135 gmp + 433 h + 92 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
b3887_maturation1	Polypeptide b3887 peptide deformylase complex	1 Def_mono + 1 b3887_aa <==> 1 b3887_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.32E+02	4.32E+02	0	7.03E+02	702.7711	0	7.80E+01	78.032
b3887_maturation2	b3887 formation	1 b3887_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3887_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.32E+02	4.32E+02	0	7.03E+02	702.7711	0	7.80E+01	78.032
b3888_fold_spon	b3888_m folding: spontanous	1 b3888_m --> 1 YiiD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.22E+02	9.22E+02	0	1.57E+03	1566.481	0	8.27E+01	82.726
b3888_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3888_mRNA --> 1 b3888_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
b3888_mRNA_degr1	Degradation of b3888_mRNA I	1 Orn_dim + 246 atp + 1 b3888_mRNA_2 + 1 degradosome + 246 h2o <==> 246 adp + 1 b3888_mRNA_2_degr + 246 h + 246 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
b3888_mRNA_degr2	Degradation of b3888_mRNA II	1 b3888_mRNA_2_degr + 985 h2o --> 1 Orn_dim_inact + 234 amp + 249 cmp + 1 degradosome_inact + 295 gmp + 985 h + 208 ump	irreversible	mRNA degradation	0.00E+00	1.17E-01	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
b3888_maturation1	Polypeptide b3888 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3888_aa <==> 1 b3888_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	9.22E+02	9.22E+02	0	1.57E+03	1566.481	0	8.27E+01	82.726
b3888_maturation2	b3888 formation	1 b3888_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3888_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	9.22E+02	9.22E+02	0	1.57E+03	1566.481	0	8.27E+01	82.726
b3936_fold_spon	b3936_m folding: spontanous	1 b3936_m --> 1 RpmE_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3936_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3936_mRNA --> 1 b3936_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	3.72E-01	0.372
b3936_mRNA_degr1	Degradation of b3936_mRNA I	1 Orn_dim + 53 atp + 1 b3936_mRNA_2 + 1 degradosome + 53 h2o <==> 53 adp + 1 b3936_mRNA_2_degr + 53 h + 53 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	3.72E-01	0.372
b3936_mRNA_degr2	Degradation of b3936_mRNA II	1 b3936_mRNA_2_degr + 212 h2o --> 1 Orn_dim_inact + 59 amp + 1 atp + 57 cmp + 1 degradosome_inact + 48 gmp + 212 h + 48 ump	irreversible	mRNA degradation	0.00E+00	3.72E-01	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	3.72E-01	0.372
b3936_maturation1	Polypeptide b3936 peptide deformylase complex	1 Def_mono + 1 b3936_aa <==> 1 b3936_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3936_maturation2	b3936 formation	1 b3936_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3936_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3965_fold_GroEL/ES_1	b3965_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3965_m + 1 transGroES_hepta --> 7 adp + 1 b3965_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.56E+03	2.56E+03	0	4.47E+03	4470.891	0	7.16E+01	71.5659
b3965_fold_GroEL/ES_2	b3965_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3965_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 TrmA_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.56E+03	2.56E+03	0	4.47E+03	4470.891	0	7.16E+01	71.5659
b3965_fold_GroEL/ES_3	b3965_m folding: GroEL/ES mediated; release of native protein	1 TrmA_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 TrmA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.56E+03	2.56E+03	0	4.47E+03	4470.891	0	7.16E+01	71.5659

b3965_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3965_mRNA --> 1 b3965_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.19E+02	1.19E+02	0	2.10E+02	209.5896	0	9.79E-02	0.0979
b3965_mRNA_degr1	Degradation of b3965_mRNA I	1 Orn_dim + 275 atp + 1 b3965_mRNA_2 + 1 degradosome + 275 h2o <==> 275 adp + 1 b3965_mRNA_2_degr + 275 h + 275 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.19E+02	1.19E+02	0	2.10E+02	209.5896	0	9.79E-02	0.0979
b3965_mRNA_degr2	Degradation of b3965_mRNA II	1 b3965_mRNA_2_degr + 1100 h2o --> 1 Orn_dim_inact + 288 amp + 1 atp + 269 cmp + 1 degradosome_inact + 291 gmp + 1100 h + 252 ump	irreversible	mRNA degradation	0.00E+00	9.79E-02	0	1.19E+02	1.19E+02	0	2.10E+02	209.5896	0	9.79E-02	0.0979
b3965_maturation1	Polypeptide b3965 peptide deformylase complex	1 Def_mono + 1 b3965_aa <==> 1 b3965_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.56E+03	2.56E+03	0	4.47E+03	4470.891	0	7.16E+01	71.5659
b3965_maturation2	b3965 formation	1 b3965_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3965_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.56E+03	2.56E+03	0	4.47E+03	4470.891	0	7.16E+01	71.5659
b3968_RNA_10_modif_1	b3968_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 RsmB_mono + 1 amet + 1 b3968_RNA_10 <==> 1 b3968_RNA_10_RsmB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_10_modif_2	b3968_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 b3968_RNA_10_RsmB_mono --> 1 RsmB_mono_inact + 1 ahcys + 1 h + 1 rrsB	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_1_modif_1	b3968_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 MeT_16S_1402 + 2 amet + 1 b3968_RNA_1 <==> 1 b3968_RNA_1_MeT_16S_1402	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_1_modif_2	b3968_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 b3968_RNA_1_MeT_16S_1402 --> 1 MeT_16S_1402_inact + 2 ahcys + 1 b3968_RNA_2 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_2_modif_1	b3968_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 MeT_16S_1407 + 1 amet + 1 b3968_RNA_2 <==> 1 b3968_RNA_2_MeT_16S_1407	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_2_modif_2	b3968_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 b3968_RNA_2_MeT_16S_1407 --> 1 MeT_16S_1407_inact + 1 ahcys + 1 b3968_RNA_3 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_3_modif_1	b3968_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 YggJ_mono + 1 amet + 1 b3968_RNA_3 <==> 1 b3968_RNA_3_YggJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_3_modif_2	b3968_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 b3968_RNA_3_YggJ_mono --> 1 YggJ_mono_inact + 1 ahcys + 1 b3968_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_4_modif_1	b3968_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 MeT_16S_1516 + 1 amet + 1 b3968_RNA_4 <==> 1 b3968_RNA_4_MeT_16S_1516	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_4_modif_2	b3968_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 b3968_RNA_4_MeT_16S_1516 --> 1 MeT_16S_1516_inact + 1 ahcys + 1 b3968_RNA_5 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_5_modif_1	b3968_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b3968_RNA_5 <==> 1 b3968_RNA_5_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_5_modif_2	b3968_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 b3968_RNA_5_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b3968_RNA_6 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_6_modif_1	b3968_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b3968_RNA_6 <==> 1 b3968_RNA_6_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_6_modif_2	b3968_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 b3968_RNA_6_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b3968_RNA_7 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_7_modif_1	b3968_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 RsuA_mono + 1 b3968_RNA_7 <==> 1 b3968_RNA_7_RsuA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_7_modif_2	b3968_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 b3968_RNA_7_RsuA_mono --> 1 RsuA_mono_inact + 1 b3968_RNA_8	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_8_modif_1	b3968_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 MeT_16S_527 + 1 amet + 1 b3968_RNA_8 <==> 1 b3968_RNA_8_MeT_16S_527	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_8_modif_2	b3968_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 b3968_RNA_8_MeT_16S_527 --> 1 MeT_16S_527_inact + 1 ahcy + 1 b3968_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_9_modif_1	b3968_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 MeT_16S_966 + 1 amet + 1 b3968_RNA_9 <==> 1 b3968_RNA_9_MeT_16S_966	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_9_modif_2	b3968_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 b3968_RNA_9_MeT_16S_966 --> 1 MeT_16S_966_inact + 1 ahcy + 1 b3968_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_modif_1	b3968_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 RsmC_mono + 1 amet + 1 b3968_RNA <==> 1 b3968_RNA_RsmC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_RNA_modif_2	b3968_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 b3968_RNA_RsmC_mono --> 1 RsmC_mono_inact + 1 ahcys + 1 b3968_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3968_v1_RNA_10_modif_1	b3968_v1_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 RsmB_mono + 1 amet + 1 b3968_v1_RNA_10 <==> 1 b3968_v1_RNA_10_RsmB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_10_modif_2	b3968_v1_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 b3968_v1_RNA_10_RsmB_mono --> 1 RsmB_mono_inact + 1 ahcys + 1 h + 1 rrsB	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_1_modif_1	b3968_v1_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 MeT_16S_1402 + 2 amet + 1 b3968_v1_RNA_1 <==> 1 b3968_v1_RNA_1_MeT_16S_1402	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_1_modif_2	b3968_v1_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 b3968_v1_RNA_1_MeT_16S_1402 --> 1 MeT_16S_1402_inact + 2 ahcys + 1 b3968_v1_RNA_2 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_2_modif_1	b3968_v1_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 MeT_16S_1407 + 1 amet + 1 b3968_v1_RNA_2 <==> 1 b3968_v1_RNA_2_MeT_16S_1407	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_2_modif_2	b3968_v1_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 b3968_v1_RNA_2_MeT_16S_1407 --> 1 MeT_16S_1407_inact + 1 ahcys + 1 b3968_v1_RNA_3 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_3_modif_1	b3968_v1_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 YggJ_mono + 1 amet + 1 b3968_v1_RNA_3 <==> 1 b3968_v1_RNA_3_YggJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_3_modif_2	b3968_v1_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 b3968_v1_RNA_3_YggJ_mono --> 1 YggJ_mono_inact + 1 ahcys + 1 b3968_v1_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_4_modif_1	b3968_v1_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 MeT_16S_1516 + 1 amet + 1 b3968_v1_RNA_4 <==> 1 b3968_v1_RNA_4_MeT_16S_1516	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_4_modif_2	b3968_v1_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 b3968_v1_RNA_4_MeT_16S_1516 --> 1 MeT_16S_1516_inact + 1 ahcys + 1 b3968_v1_RNA_5 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_5_modif_1	b3968_v1_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b3968_v1_RNA_5 <==> 1 b3968_v1_RNA_5_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_5_modif_2	b3968_v1_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 b3968_v1_RNA_5_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b3968_v1_RNA_6 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9

b3968_v1_RNA_6_modif_1	b3968_v1_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b3968_v1_RNA_6 <==> 1 b3968_v1_RNA_6_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_6_modif_2	b3968_v1_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 b3968_v1_RNA_6_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b3968_v1_RNA_7 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_7_modif_1	b3968_v1_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 RsuA_mono + 1 b3968_v1_RNA_7 <==> 1 b3968_v1_RNA_7_RsuA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_7_modif_2	b3968_v1_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 b3968_v1_RNA_7_RsuA_mono --> 1 RsuA_mono_inact + 1 b3968_v1_RNA_8	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_8_modif_1	b3968_v1_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 MeT_16S_527 + 1 amet + 1 b3968_v1_RNA_8 <==> 1 b3968_v1_RNA_8_MeT_16S_527	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_8_modif_2	b3968_v1_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 b3968_v1_RNA_8_MeT_16S_527 --> 1 MeT_16S_527_inact + 1 ahcys + 1 b3968_v1_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_9_modif_1	b3968_v1_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 MeT_16S_966 + 1 amet + 1 b3968_v1_RNA_9 <==> 1 b3968_v1_RNA_9_MeT_16S_966	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_9_modif_2	b3968_v1_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 b3968_v1_RNA_9_MeT_16S_966 --> 1 MeT_16S_966_inact + 1 ahcys + 1 b3968_v1_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_modif_1	b3968_v1_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 RsmC_mono + 1 amet + 1 b3968_v1_RNA <==> 1 b3968_v1_RNA_RsmC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3968_v1_RNA_modif_2	b3968_v1_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 b3968_v1_RNA_RsmC_mono --> 1 RsmC_mono_inact + 1 ahcys + 1 b3968_v1_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_tRNA_13_MODIF_1	modification of position 13 nt (Y) in gltT by TruD_mono	1 TruD_mono + 1 b3969_tRNA_Mg2 <==> 1 b3969_tRNA_Mg2_TruD_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_13_MODIF_2	modification of position 13 nt (Y) in gltT by TruD_mono	1 b3969_tRNA_Mg2_TruD_mono_cplx --> 1 TruD_mono_inact + 1 b3969_tRNA_1	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_34_MODIF_1	modification of position 34 nt (mnm5s2U) in gltT by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 IscS_dim_S-SH + 1 TrmC_mono + 1 TrmE_dim + 1 TrmU_mono + 1 YccK_mono + 1 YheLMN_cplx + 1 YhhP_mono + 1 amet + 1 atp + 1 b3969_tRNA_1 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o + 1 mg2 + 1 trdrd <==> 1 b3969_tRNA_1_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_34_MODIF_2	modification of position 34 nt (mnm5s2U) in gltT by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 b3969_tRNA_1_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 IscS_dim_S-H + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 TrmU_mono_inact + 1 YccK_mono_inact + 1 YheLMN_cplx_inact + 1 YhhP_mono_inact + 1 ahcys + 1 amp + 1 b3969_tRNA_2 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 4 h + 1 mg2 + 1 pi + 1 ppi + 1 thf + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_34_MODIF_3	replacement of sulfur with selenium: b3969_tRNA_2	1 YbbB_dim + 1 b3969_tRNA_2 + 1 h2o + 1 selnp <==> 1 b3969_tRNA_2_YbbB_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_34_MODIF_4	replacement of sulfur with selenium: b3969_tRNA_2	1 b3969_tRNA_2_YbbB_dim_cplx --> 1 YbbB_dim_inact + 1 b3969_tRNA_2_Se + 1 h + 1 h2s + 1 pi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in gltT by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b3969_tRNA_2 <==> 1 b3969_tRNA_2_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_37_MODIF_1_Se	modification of position 37 nt (m2A) in gltT by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b3969_tRNA_2_Se <==> 1 b3969_tRNA_2_Se_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in gltT by MeT_tRNA_pos_37_m2A	1 b3969_tRNA_2_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b3969_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_37_MODIF_2_Se	modification of position 37 nt (m2A) in gltT by MeT_tRNA_pos_37_m2A	1 b3969_tRNA_2_Se_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b3969_tRNA_3_Se + h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in gltT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3969_tRNA_3 <==> 1 b3969_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_54_MODIF_1_Se	modification of position 54 nt (m5U) in gltT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3969_tRNA_3_Se <==> 1 b3969_tRNA_3_Se_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in gltT by TrmA_mono	1 b3969_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3969_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_54_MODIF_2_Se	modification of position 54 nt (m5U) in gltT by TrmA_mono	1 b3969_tRNA_3_Se_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3969_tRNA_4_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_55_MODIF_1	modification of position 55 nt (Y) in gltT by TruB_mono	1 TruB_mono + 1 b3969_tRNA_4 <==> 1 b3969_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_55_MODIF_1_Se	modification of position 55 nt (Y) in gltT by TruB_mono	1 TruB_mono + 1 b3969_tRNA_4_Se <==> 1 b3969_tRNA_4_Se_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_55_MODIF_2	modification of position 55 nt (Y) in gltT by TruB_mono	1 b3969_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 gltT_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_55_MODIF_2_Se	modification of position 55 nt (Y) in gltT by TruB_mono	1 b3969_tRNA_4_Se_TruB_mono_cplx --> 1 TruB_mono_inact + 1 gltT_tRNA_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_tRNA_Mg_BIND	Binding of two Mg2 to b3969_tRNA	1 b3969_RNA + 2 mg2 <==> 1 b3969_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3969_v1_tRNA_13_MODIF_1	modification of position 13 nt (Y) in gltT by TruD_mono	1 TruD_mono + 1 b3969_v1_tRNA_Mg2 <==> 1 b3969_v1_tRNA_Mg2_TruD_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_13_MODIF_2	modification of position 13 nt (Y) in gltT by TruD_mono	1 b3969_v1_tRNA_Mg2_TruD_mono_cplx --> 1 TruD_mono_inact + 1 b3969_v1_tRNA_1	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_34_MODIF_1	modification of position 34 nt (mnm5s2U) in gltT by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 IscS_dim_S-SH + 1 TrmC_mono + 1 TrmE_dim + 1 TrmU_mono + 1 YccK_mono + 1 YheLMN_cplx + 1 YhhP_mono + 1 amet + 1 atp + 1 b3969_v1_tRNA_1 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o + 1 mg2 + 1 trdrd <==> 1 b3969_v1_tRNA_1_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_34_MODIF_2	modification of position 34 nt (mnm5s2U) in gltT by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 b3969_v1_tRNA_1_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 IscS_dim_S-H + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 TrmU_mono_inact + 1 YccK_mono_inact + 1 YheLMN_cplx_inact + 1 YhhP_mono_inact + 1 ahcys + 1 amp + 1 b3969_v1_tRNA_2 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 4 h + 1 mg2 + 1 pi + 1 ppi + 1 thf + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_34_MODIF_3	replacement of sulfur with selenium: b3969_tRNA_2	1 YbbB_dim + 1 b3969_v1_tRNA_2 + 1 h2o + 1 selnp <==> 1 b3969_v1_tRNA_2_YbbB_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_34_MODIF_4	replacement of sulfur with selenium: b3969_tRNA_2	1 b3969_v1_tRNA_2_YbbB_dim_cplx --> 1 YbbB_dim_inact + 1 b3969_v1_tRNA_2_Se + 1 h + 1 h2s + 1 pi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in gltT by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b3969_v1_tRNA_2 <==> 1 b3969_v1_tRNA_2_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_37_MODIF_1_Se	modification of position 37 nt (m2A) in gltT by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b3969_v1_tRNA_2_Se <==> 1 b3969_v1_tRNA_2_Se_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in gltT by MeT_tRNA_pos_37_m2A	1 b3969_v1_tRNA_2_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b3969_v1_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9

b3969_v1_tRNA_37_MODIF_2_Se	modification of position 37 nt (m2A) in gltT by MeT_tRNA_pos_37_m2A	1 b3969_v1_tRNA_2_Se_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b3969_v1_tRNA_3_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in gltT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3969_v1_tRNA_3 <==> 1 b3969_v1_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_54_MODIF_1_Se	modification of position 54 nt (m5U) in gltT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3969_v1_tRNA_3_Se <==> 1 b3969_v1_tRNA_3_Se_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in gltT by TrmA_mono	1 b3969_v1_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3969_v1_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_54_MODIF_2_Se	modification of position 54 nt (m5U) in gltT by TrmA_mono	1 b3969_v1_tRNA_3_Se_TrmA_mono_cplx --> 1 TrmA_mono_inact 1 ahcys + 1 b3969_v1_tRNA_4_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_55_MODIF_1	modification of position 55 nt (Y) in gltT by TruB_mono	1 TruB_mono + 1 b3969_v1_tRNA_4 <==> 1 b3969_v1_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_55_MODIF_1_Se	modification of position 55 nt (Y) in gltT by TruB_mono	1 TruB_mono + 1 b3969_v1_tRNA_4_Se <==> 1 b3969_v1_tRNA_4_Se_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_55_MODIF_2	modification of position 55 nt (Y) in gltT by TruB_mono	1 b3969_v1_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 gltT_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_55_MODIF_2_Se	modification of position 55 nt (Y) in gltT by TruB_mono	1 b3969_v1_tRNA_4_Se_TruB_mono_cplx --> 1 TruB_mono_inact + 1 gltT_tRNA_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3969_v1_tRNA_Mg_BIND	Binding of two Mg2 to b3969_v1_tRNA	1 b3969_v1_RNA + 2 mg2 <==> 1 b3969_v1_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_RNA_10_modif_1	b3970_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 MeT_23S_2445 + 1 amet + 1 b3970_RNA_10 <==> 1 b3970_RNA_10_MeT_23S_2445	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_10_modif_2	b3970_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 b3970_RNA_10_MeT_23S_2445 --> 1 MeT_23S_2445_inact + 1 ahcys + 1 b3970_RNA_11 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_11_a_modif_1	b3970_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 DU_23S_2449 + 1 b3970_RNA_11 + 1 h + 1 nadh <==> 1 b3970_RNA_11_DU_23S_2449_a	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_11_a_modif_2	b3970_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 b3970_RNA_11_DU_23S_2449_a --> 1 DU_23S_2449_inact + 1 b3970_RNA_12 + 1 nad	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_11_b_modif_1	b3970_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 DU_23S_2449 + 1 b3970_RNA_11 + 1 h + 1 nadph <==> 1 b3970_RNA_11_DU_23S_2449_b	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_11_b_modif_2	b3970_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 b3970_RNA_11_DU_23S_2449_b --> 1 DU_23S_2449_inact + 1 b3970_RNA_12 + 1 nadp	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_12_modif_1	b3970_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 YmfC_mono + 1 b3970_RNA_12 <==> 1 b3970_RNA_12_YmfC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_12_modif_2	b3970_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 b3970_RNA_12_YmfC_mono --> 1 YmfC_mono_inact + 1 b3970_RNA_13	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_13_modif_1	b3970_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 MeT_23S_2498 + 1 amet + 1 b3970_RNA_13 <==> 1 b3970_RNA_13_MeT_23S_2498	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_13_modif_2	b3970_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 b3970_RNA_13_MeT_23S_2498 --> 1 MeT_23S_2498_inact + 1 ahcys + 1 b3970_RNA_14 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_14_modif_1	b3970_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 MeT_23S_2503 + 1 amet + 1 b3970_RNA_14 <==> 1 b3970_RNA_14_MeT_23S_2503	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_14_modif_2	b3970_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 b3970_RNA_14_MeT_23S_2503 --> 1 MeT_23S_2503_inact + 1 ahcys + 1 b3970_RNA_15 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_15_modif_1	b3970_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 RluC_mono + 1 b3970_RNA_15 <==> 1 b3970_RNA_15_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_15_modif_2	b3970_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 b3970_RNA_15_RluC_mono --> 1 RluC_mono_inact + 1 b3970_RNA_16	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_16_modif_1	b3970_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 RrmJ_mono + 1 amet + 1 b3970_RNA_16 <==> 1 b3970_RNA_16_RrmJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_16_modif_2	b3970_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 b3970_RNA_16_RrmJ_mono --> 1 RrmJ_mono_inact + 1 ahcys + b3970_RNA_17 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_17_modif_1	b3970_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 RluC_mono + 1 b3970_RNA_17 <==> 1 b3970_RNA_17_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_17_modif_2	b3970_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 b3970_RNA_17_RluC_mono --> 1 RluC_mono_inact + 1 b3970_RNA_18	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_18_modif_1	b3970_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 YjbC_mono + 1 b3970_RNA_18 <==> 1 b3970_RNA_18_YjbC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_18_modif_2	b3970_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 b3970_RNA_18_YjbC_mono --> 1 YjbC_mono_inact + 1 b3970_RNA_19	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_19_modif_1	b3970_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 RluB_mono + 1 b3970_RNA_19 <==> 1 b3970_RNA_19_RluB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_19_modif_2	b3970_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 b3970_RNA_19_RluB_mono --> 1 RluB_mono_inact + 1 b3970_RNA_20	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_1_modif_1	b3970_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 MeT_23S_1835 + 1 amet + 1 b3970_RNA_1 <==> 1 b3970_RNA_1_MeT_23S_1835	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_1_modif_2	b3970_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 b3970_RNA_1_MeT_23S_1835 --> 1 MeT_23S_1835_inact + 1 ahcys + 1 b3970_RNA_2 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_20_modif_1	b3970_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 RrmA_dim + 1 amet + 1 b3970_RNA_20 <==> 1 b3970_RNA_20_RrmA_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_20_modif_2	b3970_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 b3970_RNA_20_RrmA_dim --> 1 RrmA_dim_inact + 1 ahcys + 1 b3970_RNA_21 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_21_modif_1	b3970_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 RluA_mono + 1 b3970_RNA_21 <==> 1 b3970_RNA_21_RluA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_21_modif_2	b3970_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 b3970_RNA_21_RluA_mono --> 1 RluA_mono_inact + 1 b3970_RNA_22	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_22_modif_1	b3970_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 RumB_mono + 1 amet + 1 b3970_RNA_22 <==> 1 b3970_RNA_22_RumB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_22_modif_2	b3970_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 b3970_RNA_22_RumB_mono --> 1 RumB_mono_inact + 1 ahcys + 1 b3970_RNA_23 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_23_modif_1	b3970_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 RluC_mono + 1 b3970_RNA_23 <==> 1 b3970_RNA_23_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0

b3970_RNA_23_modif_2	b3970_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 b3970_RNA_23_RluC_mono --> 1 RluC_mono_inact + 1 rrlB	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_2_modif_1	b3970_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 RluD_mono + 1 b3970_RNA_2 <==> 1 b3970_RNA_2_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_2_modif_2	b3970_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 b3970_RNA_2_RluD_mono --> 1 RluD_mono_inact + 1 b3970_RNA_3	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_3_modif_1	b3970_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 RluD_mono + 1 amet + 1 b3970_RNA_3 <==> 1 b3970_RNA_3_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_3_modif_2	b3970_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 b3970_RNA_3_RluD_mono --> 1 RluD_mono_inact + 1 ahcys + 1 b3970_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_4_modif_1	b3970_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 RluD_mono + 1 b3970_RNA_4 <==> 1 b3970_RNA_4_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_4_modif_2	b3970_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 b3970_RNA_4_RluD_mono --> 1 RluD_mono_inact + 1 b3970_RNA_5	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_5_modif_1	b3970_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 RumA_mono + 1 amet + 1 b3970_RNA_5 <==> 1 b3970_RNA_5_RumA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_5_modif_2	b3970_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 b3970_RNA_5_RumA_mono --> 1 RumA_mono_inact + 1 ahcys + 1 b3970_RNA_6 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_6_modif_1	b3970_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 MeT_23S_1962 + 1 amet + 1 b3970_RNA_6 <==> 1 b3970_RNA_6_MeT_23S_1962	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_6_modif_2	b3970_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 b3970_RNA_6_MeT_23S_1962 --> 1 MeT_23S_1962_inact + 1 ahcys + 1 b3970_RNA_7 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_7_modif_1	b3970_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 MeT_23S_2030 + 1 amet + 1 b3970_RNA_7 <==> 1 b3970_RNA_7_MeT_23S_2030	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_7_modif_2	b3970_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 b3970_RNA_7_MeT_23S_2030 --> 1 MeT_23S_2030_inact + 1 ahcys + 1 b3970_RNA_8 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_8_modif_1	b3970_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 MeT_23S_2069 + 1 amet + 1 b3970_RNA_8 <==> 1 b3970_RNA_8_MeT_23S_2069	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_8_modif_2	b3970_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 b3970_RNA_8_MeT_23S_2069 --> 1 MeT_23S_2069_inact + 1 ahcys + 1 b3970_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_9_modif_1	b3970_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 RlmB_dim + 1 amet + 1 b3970_RNA_9 <==> 1 b3970_RNA_9_RlmB_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_9_modif_2	b3970_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 b3970_RNA_9_RlmB_dim --> 1 RlmB_dim_inact + 1 ahcys + 1 b3970_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_modif_1	b3970_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 MeT_23S_1618 + 1 amet + 1 b3970_RNA <==> 1 b3970_RNA_MeT_23S_1618	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_RNA_modif_2	b3970_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 b3970_RNA_MeT_23S_1618 --> 1 MeT_23S_1618_inact + 1 ahcy + 1 b3970_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
b3970_v1_RNA_10_modif_1	b3970_v1_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 MeT_23S_2445 + 1 amet + 1 b3970_v1_RNA_10 <==> 1 b3970_v1_RNA_10_MeT_23S_2445	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_10_modif_2	b3970_v1_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 b3970_v1_RNA_10_MeT_23S_2445 --> 1 MeT_23S_2445_inact + 1 ahcys + 1 b3970_v1_RNA_11 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_11_a_modif_1	b3970_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 DU_23S_2449 + 1 b3970_v1_RNA_11 + 1 h + 1 nadh <==> 1 b3970_v1_RNA_11_DU_23S_2449_a	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_11_a_modif_2	b3970_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 b3970_v1_RNA_11_DU_23S_2449_a --> 1 DU_23S_2449_inact + 1 b3970_v1_RNA_12 + 1 nad	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_11_b_modif_1	b3970_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 DU_23S_2449 + 1 b3970_v1_RNA_11 + 1 h + 1 nadph <==> 1 b3970_v1_RNA_11_DU_23S_2449_b	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_11_b_modif_2	b3970_v1_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 b3970_v1_RNA_11_DU_23S_2449_b --> 1 DU_23S_2449_inact + 1 b3970_v1_RNA_12 + 1 nadp	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_12_modif_1	b3970_v1_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 YmfC_mono + 1 b3970_v1_RNA_12 <==> 1 b3970_v1_RNA_12_YmfC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_12_modif_2	b3970_v1_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 b3970_v1_RNA_12_YmfC_mono --> 1 YmfC_mono_inact + 1 b3970_v1_RNA_13	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_13_modif_1	b3970_v1_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 MeT_23S_2498 + 1 amet + 1 b3970_v1_RNA_13 <==> 1 b3970_v1_RNA_13_MeT_23S_2498	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_13_modif_2	b3970_v1_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 b3970_v1_RNA_13_MeT_23S_2498 --> 1 MeT_23S_2498_inact + 1 ahcys + 1 b3970_v1_RNA_14 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_14_modif_1	b3970_v1_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 MeT_23S_2503 + 1 amet + 1 b3970_v1_RNA_14 <==> 1 b3970_v1_RNA_14_MeT_23S_2503	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_14_modif_2	b3970_v1_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 b3970_v1_RNA_14_MeT_23S_2503 --> 1 MeT_23S_2503_inact + 1 ahcys + 1 b3970_v1_RNA_15 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_15_modif_1	b3970_v1_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 RluC_mono + 1 b3970_v1_RNA_15 <==> 1 b3970_v1_RNA_15_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_15_modif_2	b3970_v1_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 b3970_v1_RNA_15_RluC_mono --> 1 RluC_mono_inact + 1 b3970_v1_RNA_16	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_16_modif_1	b3970_v1_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 RrmJ_mono + 1 amet + 1 b3970_v1_RNA_16 <==> 1 b3970_v1_RNA_16_RrmJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_16_modif_2	b3970_v1_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 b3970_v1_RNA_16_RrmJ_mono --> 1 RrmJ_mono_inact + 1 ahcys + 1 b3970_v1_RNA_17 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_17_modif_1	b3970_v1_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 RluC_mono + 1 b3970_v1_RNA_17 <==> 1 b3970_v1_RNA_17_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_17_modif_2	b3970_v1_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 b3970_v1_RNA_17_RluC_mono --> 1 RluC_mono_inact + 1 b3970_v1_RNA_18	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_18_modif_1	b3970_v1_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 YjbC_mono + 1 b3970_v1_RNA_18 <==> 1 b3970_v1_RNA_18_YjbC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9

b3970_v1_RNA_18_modif_2	b3970_v1_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 b3970_v1_RNA_18_YjbC_mono --> 1 YjbC_mono_inact + 1 b3970_v1_RNA_19	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_19_modif_1	b3970_v1_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 RluB_mono + 1 b3970_v1_RNA_19 <==> 1 b3970_v1_RNA_19_RluB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_19_modif_2	b3970_v1_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 b3970_v1_RNA_19_RluB_mono --> 1 RluB_mono_inact + 1 b3970_v1_RNA_20	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_1_modif_1	b3970_v1_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 MeT_23S_1835 + 1 amet + 1 b3970_v1_RNA_1 <==> 1 b3970_v1_RNA_1_MeT_23S_1835	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_1_modif_2	b3970_v1_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 b3970_v1_RNA_1_MeT_23S_1835 --> 1 MeT_23S_1835_inact + 1 ahcys + 1 b3970_v1_RNA_2 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_20_modif_1	b3970_v1_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 RrmA_dim + 1 amet + 1 b3970_v1_RNA_20 <==> 1 b3970_v1_RNA_20_RrmA_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_20_modif_2	b3970_v1_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 b3970_v1_RNA_20_RrmA_dim --> 1 RrmA_dim_inact + 1 ahcys + 1 b3970_v1_RNA_21 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_21_modif_1	b3970_v1_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 RluA_mono + 1 b3970_v1_RNA_21 <==> 1 b3970_v1_RNA_21_RluA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_21_modif_2	b3970_v1_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 b3970_v1_RNA_21_RluA_mono --> 1 RluA_mono_inact + 1 b3970_v1_RNA_22	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_22_modif_1	b3970_v1_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 RumB_mono + 1 amet + 1 b3970_v1_RNA_22 <==> 1 b3970_v1_RNA_22_RumB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_22_modif_2	b3970_v1_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 b3970_v1_RNA_22_RumB_mono --> 1 RumB_mono_inact + 1 ahcys + 1 b3970_v1_RNA_23 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_23_modif_1	b3970_v1_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 RluC_mono + 1 b3970_v1_RNA_23 <==> 1 b3970_v1_RNA_23_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_23_modif_2	b3970_v1_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 b3970_v1_RNA_23_RluC_mono --> 1 RluC_mono_inact + 1 rrlB	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_2_modif_1	b3970_v1_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 RluD_mono + 1 b3970_v1_RNA_2 <==> 1 b3970_v1_RNA_2_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_2_modif_2	b3970_v1_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 b3970_v1_RNA_2_RluD_mono --> 1 RluD_mono_inact + 1 b3970_v1_RNA_3	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_3_modif_1	b3970_v1_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 RluD_mono + 1 amet + 1 b3970_v1_RNA_3 <==> 1 b3970_v1_RNA_3_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_3_modif_2	b3970_v1_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 b3970_v1_RNA_3_RluD_mono --> 1 RluD_mono_inact + 1 ahcys + 1 b3970_v1_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_4_modif_1	b3970_v1_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 RluD_mono + 1 b3970_v1_RNA_4 <==> 1 b3970_v1_RNA_4_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_4_modif_2	b3970_v1_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 b3970_v1_RNA_4_RluD_mono --> 1 RluD_mono_inact + 1 b3970_v1_RNA_5	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_5_modif_1	b3970_v1_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 RumA_mono + 1 amet + 1 b3970_v1_RNA_5 <==> 1 b3970_v1_RNA_5_RumA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_5_modif_2	b3970_v1_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 b3970_v1_RNA_5_RumA_mono --> 1 RumA_mono_inact + 1 ahcy + 1 b3970_v1_RNA_6 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_6_modif_1	b3970_v1_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 MeT_23S_1962 + 1 amet + 1 b3970_v1_RNA_6 <==> 1 b3970_v1_RNA_6_MeT_23S_1962	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_6_modif_2	b3970_v1_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 b3970_v1_RNA_6_MeT_23S_1962 --> 1 MeT_23S_1962_inact + 1 ahcys + 1 b3970_v1_RNA_7 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_7_modif_1	b3970_v1_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 MeT_23S_2030 + 1 amet + 1 b3970_v1_RNA_7 <==> 1 b3970_v1_RNA_7_MeT_23S_2030	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_7_modif_2	b3970_v1_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 b3970_v1_RNA_7_MeT_23S_2030 --> 1 MeT_23S_2030_inact + 1 ahcys + 1 b3970_v1_RNA_8 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_8_modif_1	b3970_v1_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 MeT_23S_2069 + 1 amet + 1 b3970_v1_RNA_8 <==> 1 b3970_v1_RNA_8_MeT_23S_2069	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_8_modif_2	b3970_v1_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 b3970_v1_RNA_8_MeT_23S_2069 --> 1 MeT_23S_2069_inact + 1 ahcys + 1 b3970_v1_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_9_modif_1	b3970_v1_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 RlmB_dim + 1 amet + 1 b3970_v1_RNA_9 <==> 1 b3970_v1_RNA_9_RlmB_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_9_modif_2	b3970_v1_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 b3970_v1_RNA_9_RlmB_dim --> 1 RlmB_dim_inact + 1 ahcys + 1 b3970_v1_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_modif_1	b3970_v1_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 MeT_23S_1618 + 1 amet + 1 b3970_v1_RNA <==> 1 b3970_v1_RNA_MeT_23S_1618	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3970_v1_RNA_modif_2	b3970_v1_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 b3970_v1_RNA_MeT_23S_1618 --> 1 MeT_23S_1618_inact + 1 ahcys + 1 b3970_v1_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
b3976_tRNA_16_MODIF_1	modification of position 16 nt (D) in thrU by Dus_gen	1 Dus_gen + 1 b3976_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3976_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3976_tRNA_16_MODIF_2	modification of position 16 nt (D) in thrU by Dus_gen	1 b3976_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3976_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3976_tRNA_20_MODIF_1	modification of position 20 nt (D) in thrU by Dus_gen	1 Dus_gen + 1 b3976_tRNA_1 + 1 h + 1 nadph <==> 1 b3976_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3976_tRNA_20_MODIF_2	modification of position 20 nt (D) in thrU by Dus_gen	1 b3976_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3976_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3976_tRNA_37_MODIF_1	modification of position 37 nt (m6t6A) in thrU by Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A	1 MeT_tRNA_pos_37_m6t6A + 1 Up_tRNA_pos_37_t6A + 1 amet + atp + 1 b3976_tRNA_2 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b3976_tRNA_2_Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3976_tRNA_37_MODIF_2	modification of position 37 nt (m6t6A) in thrU by Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A	1 b3976_tRNA_2_Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A_cplx --> 1 MeT_tRNA_pos_37_m6t6A_inact + 1 Up_tRNA_pos_37_t6A_inact + 1 ahcys + 1 amp + 1 b3976_tRNA_3 + 2 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3976_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in thrU by YggH_mono	1 YggH_mono + 1 amet + 1 b3976_tRNA_3 <==> 1 b3976_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3976_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in thrU by YggH_mono	1 b3976_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3976_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8

b3976_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in thrU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3976_tRNA_4 <==> 1 b3976_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3976_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in thrU by TrmA_mono	1 b3976_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3976_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3976_tRNA_55_MODIF_1	modification of position 55 nt (Y) in thrU by TruB_mono	1 TruB_mono + 1 b3976_tRNA_5 <==> 1 b3976_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3976_tRNA_55_MODIF_2	modification of position 55 nt (Y) in thrU by TruB_mono	1 b3976_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 thrU_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3976_tRNA_Mg_BIND	Binding of two Mg2 to b3976_tRNA	1 b3976_RNA + 2 mg2 <==> 1 b3976_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in tyrU by TrmH_dim	1 TrmH_dim + 1 amet + 1 b3977_tRNA_Mg2 <==> 1 b3977_tRNA_Mg2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in tyrU by TrmH_dim	1 b3977_tRNA_Mg2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b3977_tRNA_1 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_34_MODIF_1	modification of position 34 nt (Q) in tyrU by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 EoR_tRNA_pos34_Q + 1 QueA_mono + 1 Tgt_hexa + 1 adocbl + 1 amet + 1 b3977_tRNA_1 + 1 h + 1 nadh + 1 pre_Q1 <==> 1 b3977_tRNA_1_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_34_MODIF_2	modification of position 34 nt (Q) in tyrU by Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q	1 b3977_tRNA_1_Tgt_hexa-QueA_mono-EoR_tRNA_pos34_Q_cplx > 1 EoR_tRNA_pos34_Q_inact + 1 QueA_mono_inact + 1 Tgt_hexa_inact + 1 ade + 1 adocbl + 1 b3977_tRNA_2 + 1 gua + 2 h + 1 h2o + 1 met-L + 1 nad	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_37_MODIF_1	modification of position 37 nt (ms2i6A) in tyrU by MiaA_dim-MiaB_mono	1 IscS_dim_S-SH + 1 MiaA_dim + 1 MiaB_mono + 2 amet + 1 b3977_tRNA_2 + 1 dmpp + 1 fldrd <==> 1 b3977_tRNA_2_MiaA_dim-MiaB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_37_MODIF_2	modification of position 37 nt (ms2i6A) in tyrU by MiaA_dim-MiaB_mono	1 b3977_tRNA_2_MiaA_dim-MiaB_mono_cplx --> 1 IscS_dim_S-H + 1 MiaA_dim_inact + 1 MiaB_mono_inact + 1 ahcys + 1 b3977_tRNA_3 + 1 dad-5 + 1 fldox + 2 h + 1 met-L + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_39_MODIF_1	modification of position 39 nt (Y) in tyrU by TruA_dim	1 TruA_dim + 1 b3977_tRNA_3 <==> 1 b3977_tRNA_3_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_39_MODIF_2	modification of position 39 nt (Y) in tyrU by TruA_dim	1 b3977_tRNA_3_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b3977_tRNA_4	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in tyrU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3977_tRNA_4 <==> 1 b3977_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in tyrU by TrmA_mono	1 b3977_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3977_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_55_MODIF_1	modification of position 55 nt (Y) in tyrU by TruB_mono	1 TruB_mono + 1 b3977_tRNA_5 <==> 1 b3977_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_55_MODIF_2	modification of position 55 nt (Y) in tyrU by TruB_mono	1 b3977_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b3977_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in tyrU by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b3977_tRNA_6 + 1 mg2 + 1 trdrd <==> 1 b3977_tRNA_6_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in tyrU by ThiI_mono	1 b3977_tRNA_6_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 ppi + 1 trdox + 1 tyrU_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3977_tRNA_Mg_BIND	Binding of two Mg2 to b3977_tRNA	1 b3977_RNA + 2 mg2 <==> 1 b3977_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3978_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in glyT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3978_tRNA_Mg2 <==> 1 b3978_tRNA_Mg2_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3978_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in glyT by TrmA_mono	1 b3978_tRNA_Mg2_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3978_tRNA_1 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3978_tRNA_55_MODIF_1	modification of position 55 nt (Y) in glyT by TruB_mono	1 TruB_mono + 1 b3978_tRNA_1 <==> 1 b3978_tRNA_1_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3978_tRNA_55_MODIF_2	modification of position 55 nt (Y) in glyT by TruB_mono	1 b3978_tRNA_1_TruB_mono_cplx --> 1 TruB_mono_inact + 1 glyT_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3978_tRNA_Mg_BIND	Binding of two Mg2 to b3978_tRNA	1 b3978_RNA + 2 mg2 <==> 1 b3978_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_16_MODIF_1	modification of position 16 nt (D) in thrT by Dus_gen	1 Dus_gen + 1 b3979_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b3979_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_16_MODIF_2	modification of position 16 nt (D) in thrT by Dus_gen	1 b3979_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3979_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_17_MODIF_1	modification of position 17 nt (D) in thrT by Dus_gen	1 Dus_gen + 1 b3979_tRNA_1 + 1 h + 1 nadph <==> 1 b3979_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_17_MODIF_2	modification of position 17 nt (D) in thrT by Dus_gen	1 b3979_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3979_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_20_MODIF_1	modification of position 20 nt (D) in thrT by Dus_gen	1 Dus_gen + 1 b3979_tRNA_2 + 1 h + 1 nadph <==> 1 b3979_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_20_MODIF_2	modification of position 20 nt (D) in thrT by Dus_gen	1 b3979_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b3979_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_37_MODIF_1	modification of position 37 nt (m6t6A) in thrT by Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A	1 MeT_tRNA_pos_37_m6t6A + 1 Up_tRNA_pos_37_t6A + 1 amet + atp + 1 b3979_tRNA_3 + 1 hco3 + 1 mg2 + 1 thr-L <==> 1 b3979_tRNA_3_Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_37_MODIF_2	modification of position 37 nt (m6t6A) in thrT by Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A	1 b3979_tRNA_3_Up_tRNA_pos_37_t6A-MeT_tRNA_pos_37_m6t6A_cplx --> 1 MeT_tRNA_pos_37_m6t6A_inact + 1 ahcys + 1 amp + 1 b3979_tRNA_4 + 2 h + 1 h2o + 1 mg2 + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in thrT by YggH_mono	1 YggH_mono + 1 amet + 1 b3979_tRNA_4 <==> 1 b3979_tRNA_4_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in thrT by YggH_mono	1 b3979_tRNA_4_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b3979_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in thrT by TrmA_mono	1 TrmA_mono + 1 amet + 1 b3979_tRNA_5 <==> 1 b3979_tRNA_5_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in thrT by TrmA_mono	1 b3979_tRNA_5_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b3979_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_55_MODIF_1	modification of position 55 nt (Y) in thrT by TruB_mono	1 TruB_mono + 1 b3979_tRNA_6 <==> 1 b3979_tRNA_6_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_55_MODIF_2	modification of position 55 nt (Y) in thrT by TruB_mono	1 b3979_tRNA_6_TruB_mono_cplx --> 1 TruB_mono_inact + 1 thrT_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3979_tRNA_Mg_BIND	Binding of two Mg2 to b3979_tRNA	1 b3979_RNA + 2 mg2 <==> 1 b3979_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
b3980_fold_KJE_1	b3980_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3980_m <==> 1 b3980_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	3.66E+03	3.66E+03	0	5.33E+03	5328.195	0	1.30E+03	1297.43
b3980_fold_KJE_2	b3980_m folding: KJE mediated	1 GrpE_dim + 1 b3980_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 TufB_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.66E+03	3.66E+03	0	5.33E+03	5328.195	0	1.30E+03	1297.43
b3980_fold_KJE_3	b3980_m folding: KJE mediated	1 TufB_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 TufB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.66E+03	3.66E+03	0	5.33E+03	5328.195	0	1.30E+03	1297.43
b3980_fold_spon	b3980_m folding: spontanous	1 b3980_m --> 1 TufB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.66E+03	3.66E+03	0	5.33E+03	5328.195	0	1.30E+03	1297.43
b3980_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3980_mRNA --> 1 b3980_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.84E+02	183.6469	0	1.51E+00	1.51
b3980_mRNA_degr1	Degradation of b3980_mRNA I	1 Orn_dim + 296 atp + 1 b3980_mRNA_2 + 1 degradosome + 296 h2o <==> 296 adp + 1 b3980_mRNA_2_degr + 296 h + 296 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	1.84E+02	183.6469	0	1.51E+00	1.51
b3980_mRNA_degr2	Degradation of b3980_mRNA II	1 b3980_mRNA_2_degr + 1184 h2o --> 1 Orn_dim_inact + 289 amp + 1 atp + 307 cmp + 1 degradosome_inact + 326 gmp + 1184 h + 262 ump	irreversible	mRNA degradation	0.00E+00	1.51E+00	0	1.04E+02	1.04E+02	0	1.84E+02	183.6469	0	1.51E+00	1.51
b3980_maturation1	Polypeptide b3980 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3980_aa <==> 1 b3980_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.66E+03	3.66E+03	0	5.33E+03	5328.195	0	1.30E+03	1297.43
b3980_maturation2	b3980 formation	1 b3980_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3980_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.66E+03	3.66E+03	0	5.33E+03	5328.195	0	1.30E+03	1297.43

b3980_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3980_v1_mRNA --> 1 b3980_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.84E+02	183.6469	0	1.51E+00	1.51
b3981_fold_spon	b3981_m folding: spontanous	1 b3981_m --> 1 SecE_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.13E+03	1.13E+03	0	1.93E+03	1931.692	0	8.92E+01	89.173
b3981_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3981_mRNA --> 1 b3981_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	2.39E-01	0.239
b3981_mRNA_degr1	Degradation of b3981_mRNA I	1 Orn_dim + 96 atp + 1 b3981_mRNA_2 + 1 degradosome + 96 h2o <==> 96 adp + 1 b3981_mRNA_2_degr + 96 h + 96 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	2.39E-01	0.239
b3981_mRNA_degr2	Degradation of b3981_mRNA II	1 b3981_mRNA_2_degr + 383 h2o --> 1 Orn_dim_inact + 72 amp + 1 atp + 90 cmp + 1 degradosome_inact + 121 gmp + 383 h + 100 ump	irreversible	mRNA degradation	0.00E+00	2.39E-01	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	2.39E-01	0.239
b3981_maturation1	Polypeptide b3981 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3981_aa <==> 1 b3981_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.13E+03	1.13E+03	0	1.93E+03	1931.692	0	8.92E+01	89.173
b3981_maturation2	b3981 formation	1 b3981_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3981_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.13E+03	1.13E+03	0	1.93E+03	1931.692	0	8.92E+01	89.173
b3982_fold_GroEL/ES_1	b3982_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3982_m + 1 transGroES_hepta --> 7 adp + 1 b3982_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.58E+03	1.58E+03	0	2.72E+03	2722.16	0	9.00E+01	89.99
b3982_fold_GroEL/ES_2	b3982_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b3982_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 NusG_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.58E+03	1.58E+03	0	2.72E+03	2722.16	0	9.00E+01	89.99
b3982_fold_GroEL/ES_3	b3982_m folding: GroEL/ES mediated; release of native protein	1 NusG_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 NusG_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.58E+03	1.58E+03	0	2.72E+03	2722.16	0	9.00E+01	89.99
b3982_fold_KJE_1	b3982_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3982_m <==> 1 b3982_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	1.58E+03	1.58E+03	0	2.72E+03	2722.16	0	9.00E+01	89.99
b3982_fold_KJE_2	b3982_m folding: KJE mediated	1 GrpE_dim + 1 b3982_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 NusG_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.58E+03	1.58E+03	0	2.72E+03	2722.16	0	9.00E+01	89.99
b3982_fold_KJE_3	b3982_m folding: KJE mediated	1 NusG_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 NusG_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.58E+03	1.58E+03	0	2.72E+03	2722.16	0	9.00E+01	89.99
b3982_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3982_mRNA --> 1 b3982_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	2.39E-01	0.239
b3982_mRNA_degr1	Degradation of b3982_mRNA I	1 Orn_dim + 136 atp + 1 b3982_mRNA_2 + 1 degradosome + 136 h2o <==> 136 adp + 1 b3982_mRNA_2_degr + 136 h + 136 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	2.39E-01	0.239
b3982_mRNA_degr2	Degradation of b3982_mRNA II	1 b3982_mRNA_2_degr + 545 h2o --> 1 Orn_dim_inact + 128 amp + 124 cmp + 1 degradosome_inact + 158 gmp + 545 h + 136 ump	irreversible	mRNA degradation	0.00E+00	3.26E-01	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	2.39E-01	0.239
b3982_maturation1	Polypeptide b3982 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3982_aa <==> 1 b3982_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.58E+03	1.58E+03	0	2.72E+03	2722.16	0	9.00E+01	89.99
b3982_maturation2	b3982 formation	1 b3982_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3982_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.58E+03	1.58E+03	0	2.72E+03	2722.16	0	9.00E+01	89.99
b3983_fold_spon	b3983_m folding: spontanous	1 b3983_m --> 1 RplK_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3983_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3983_mRNA --> 1 b3983_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
b3983_mRNA_degr1	Degradation of b3983_mRNA I	1 Orn_dim + 107 atp + 1 b3983_mRNA_2 + 1 degradosome + 107 h2o <==> 107 adp + 1 b3983_mRNA_2_degr + 107 h + 107 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
b3983_mRNA_degr2	Degradation of b3983_mRNA II	1 b3983_mRNA_2_degr + 428 h2o --> 1 Orn_dim_inact + 113 amp + 1 atp + 110 cmp + 1 degradosome_inact + 114 gmp + 428 h + 91 ump	irreversible	mRNA degradation	0.00E+00	1.08E+00	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
b3983_maturation1	Polypeptide b3983 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3983_aa <==> 1 b3983_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3983_maturation2	b3983 formation	1 b3983_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3983_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3984_fold_spon	b3984_m folding: spontanous	1 b3984_m --> 1 RplA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3984_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3984_mRNA --> 1 b3984_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
b3984_mRNA_degr1	Degradation of b3984_mRNA I	1 Orn_dim + 176 atp + 1 b3984_mRNA_2 + 1 degradosome + 176 h2o <==> 176 adp + 1 b3984_mRNA_2_degr + 176 h + 176 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
b3984_mRNA_degr2	Degradation of b3984_mRNA II	1 b3984_mRNA_2_degr + 704 h2o --> 1 Orn_dim_inact + 196 amp + 173 cmp + 1 degradosome_inact + 191 gmp + 704 h + 145 ump	irreversible	mRNA degradation	0.00E+00	4.62E-01	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
b3984_maturation1	Polypeptide b3984 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3984_aa <==> 1 b3984_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3984_maturation2	b3984 formation	1 b3984_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3984_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3985_fold_spon	b3985_m folding: spontanous	1 b3985_m --> 1 RplJ_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3985_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3985_mRNA --> 1 b3985_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.32E+01	1.32E+01	0	2.33E+01	23.27811	0	1.89E-01	0.189
b3985_mRNA_degr1	Degradation of b3985_mRNA I	1 Orn_dim + 124 atp + 1 b3985_mRNA_2 + 1 degradosome + 124 h2o <==> 124 adp + 1 b3985_mRNA_2_degr + 124 h + 124 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.32E+01	1.32E+01	0	2.33E+01	23.27811	0	1.89E-01	0.189
b3985_mRNA_degr2	Degradation of b3985_mRNA II	1 b3985_mRNA_2_degr + 497 h2o --> 1 Orn_dim_inact + 120 amp + 1 atp + 122 cmp + 1 degradosome_inact + 139 gmp + 497 h + 116 ump	irreversible	mRNA degradation	0.00E+00	4.04E-01	0	1.32E+01	1.32E+01	0	2.33E+01	23.27811	0	1.89E-01	0.189
b3985_maturation1	Polypeptide b3985 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3985_aa <==> 1 b3985_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3985_maturation2	b3985 formation	1 b3985_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3985_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b3985_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3985_v1_mRNA --> 1 b3985_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
b3986_fold_spon	b3986_m folding: spontanous	1 b3986_m --> 1 RplL_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	3.38E+02	4.50E+02	1.13E+02	2.49E+02	3.32E+02	82.88	2.49E+02	3.32E+02	82.88
b3986_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3986_mRNA --> 1 b3986_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.32E+01	1.32E+01	0	2.33E+01	23.27811	0	1.89E-01	0.189
b3986_mRNA_degr1	Degradation of b3986_mRNA I	1 Orn_dim + 91 atp + 1 b3986_mRNA_2 + 1 degradosome + 91 h2o <==> 91 adp + 1 b3986_mRNA_2_degr + 91 h + 91 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.61E+02	3.61E+02	0	3.32E+02	331.52	0	1.70E+00	1.7
b3986_mRNA_degr2	Degradation of b3986_mRNA II	1 b3986_mRNA_2_degr + 365 h2o --> 1 Orn_dim_inact + 112 amp + 70 cmp + 1 degradosome_inact + 99 gmp + 365 h + 85 ump	irreversible	mRNA degradation	0.00E+00	1.70E+00	0	3.61E+02	3.61E+02	0	3.32E+02	331.52	0	1.70E+00	1.7
b3986_maturation1	Polypeptide b3986 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b3986_aa <==> 1 b3986_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	3.38E+02	4.50E+02	1.13E+02	2.49E+02	3.32E+02	82.88	2.49E+02	3.32E+02	82.88
b3986_maturation2	b3986 formation	1 b3986_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b3986_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	3.38E+02	4.50E+02	1.13E+02	2.49E+02	3.32E+02	82.88	2.49E+02	3.32E+02	82.88
b3986_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3986_v1_mRNA --> 1 b3986_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.61E+02	3.61E+02	0	3.32E+02	331.52	0	1.70E+00	1.7
b3986_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3986_v2_mRNA --> 1 b3986_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
b3987_fold_GroEL/ES_1	b3987_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3987_m_Zn + 1 transGroES_hepta --> 7 adp + 1 b3987_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418

b3987_fold_GroEL/ES_2	b3987_m folding: GroEL/ES mediated folding of polypeptide under ATP hydrolysis	1 b3987_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 RpoB_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3987_fold_GroEL/ES_3	b3987_m folding: GroEL/ES mediated release of native protein	1 RpoB_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 RpoB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3987_fold_KJE_1	b3987_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3987_m_Zn <==> 1 b3987_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3987_fold_KJE_2	b3987_m folding: KJE mediated	1 GrpE_dim + 1 b3987_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 RpoB_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3987_fold_KJE_3	b3987_m folding: KJE mediated	1 RpoB_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 RpoB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3987_ion_BIND	Binding of ions to b3987	1 b3987_m + 1 zn2 <==> 1 b3987_m_Zn	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3987_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3987_mRNA --> 1 b3987_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.32E+01	1.32E+01	0	2.33E+01	23.27811	0	1.89E-01	0.189
b3987_mRNA_degr1	Degradation of b3987_mRNA I	1 Orn_dim + 1007 atp + 1 b3987_mRNA_2 + 1 degradosome + 1007 h2o <==> 1007 adp + 1 b3987_mRNA_2_degr + 1007 h + 1007 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.49E+01	1.49E+01	0	2.63E+01	26.30872	0	1.89E-01	0.189
b3987_mRNA_degr2	Degradation of b3987_mRNA II	1 b3987_mRNA_2_degr + 4028 h2o --> 1 Orn_dim_inact + 1017 amp + 1033 cmp + 1 degradosome_inact + 1087 gmp + 4028 h + 892 ump	irreversible	mRNA degradation	0.00E+00	2.84E-01	0	1.49E+01	1.49E+01	0	2.63E+01	26.30872	0	1.89E-01	0.189
b3987_maturation1	Polypeptide b3987 peptide deformylase complex	1 Def_mono + 1 b3987_aa <==> 1 b3987_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3987_maturation2	b3987 formation	1 b3987_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3987_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3987_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3987_v1_mRNA --> 1 b3987_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+01	1.49E+01	0	2.63E+01	26.30872	0	1.89E-01	0.189
b3987_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3987_v2_mRNA --> 1 b3987_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
b3988_fold_GroEL/ES_1	b3988_m folding: GroEL/ES mediated polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b3988_m_Mg + 1 transGroES_hepta --> 7 adp + 1 b3988_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3988_fold_GroEL/ES_2	b3988_m folding: GroEL/ES mediated folding of polypeptide under ATP hydrolysis	1 b3988_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 RpoC_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3988_fold_GroEL/ES_3	b3988_m folding: GroEL/ES mediated release of native protein	1 RpoC_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 RpoC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3988_fold_KJE_1	b3988_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b3988_m_Mg <==> 1 b3988_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3988_fold_KJE_2	b3988_m folding: KJE mediated	1 GrpE_dim + 1 b3988_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 RpoC_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3988_fold_KJE_3	b3988_m folding: KJE mediated	1 RpoC_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 RpoC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3988_ion_BIND	Binding of ions to b3988	1 b3988_m + 2 mg2 <==> 1 b3988_m_Mg	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3988_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3988_mRNA --> 1 b3988_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.32E+01	1.32E+01	0	2.33E+01	23.27811	0	1.89E-01	0.189
b3988_mRNA_degr1	Degradation of b3988_mRNA I	1 Orn_dim + 1056 atp + 1 b3988_mRNA_2 + 1 degradosome + 1056 h2o <==> 1056 adp + 1 b3988_mRNA_2_degr + 1056 h + 1056 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.49E+01	1.49E+01	0	2.63E+01	26.30872	0	1.89E-01	0.189
b3988_mRNA_degr2	Degradation of b3988_mRNA II	1 b3988_mRNA_2_degr + 4223 h2o --> 1 Orn_dim_inact + 1012 amp + 1088 cmp + 1 degradosome_inact + 1186 gmp + 4223 h + 938 ump	irreversible	mRNA degradation	0.00E+00	1.89E-01	0	1.49E+01	1.49E+01	0	2.63E+01	26.30872	0	1.89E-01	0.189
b3988_maturation1	Polypeptide b3988 peptide deformylase complex	1 Def_mono + 1 b3988_aa <==> 1 b3988_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3988_maturation2	b3988 formation	1 b3988_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b3988_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
b3988_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3988_v1_mRNA --> 1 b3988_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+01	1.49E+01	0	2.63E+01	26.30872	0	1.89E-01	0.189
b3988_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b3988_v2_mRNA --> 1 b3988_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
b4007_RNA_10_modif_1	b4007_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 RsmB_mono + 1 amet + 1 b4007_RNA_10 <==> 1 b4007_RNA_10_RsmB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_10_modif_2	b4007_RNA modification (16S rRNA): position: 967, m5C by RsmB_mono	1 b4007_RNA_10_RsmB_mono --> 1 RsmB_mono_inact + 1 ahcys + 1 h + 1 rrsE	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_1_modif_1	b4007_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 MeT_16S_1402 + 2 amet + 1 b4007_RNA_1 <==> 1 b4007_RNA_1_MeT_16S_1402	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_1_modif_2	b4007_RNA modification (16S rRNA): position: 1402, m4Cm by MeT_16S_1402	1 b4007_RNA_1_MeT_16S_1402 --> 1 MeT_16S_1402_inact + 2 ahcys + 1 b4007_RNA_2 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_2_modif_1	b4007_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 MeT_16S_1407 + 1 amet + 1 b4007_RNA_2 <==> 1 b4007_RNA_2_MeT_16S_1407	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_2_modif_2	b4007_RNA modification (16S rRNA): position: 1407, m5C by MeT_16S_1407	1 b4007_RNA_2_MeT_16S_1407 --> 1 MeT_16S_1407_inact + 1 ahcys + 1 b4007_RNA_3 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_3_modif_1	b4007_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 YggJ_mono + 1 amet + 1 b4007_RNA_3 <==> 1 b4007_RNA_3_YggJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_3_modif_2	b4007_RNA modification (16S rRNA): position: 1498, m3U by YggJ_mono	1 b4007_RNA_3_YggJ_mono --> 1 YggJ_mono_inact + 1 ahcys + 1 b4007_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_4_modif_1	b4007_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 MeT_16S_1516 + 1 amet + 1 b4007_RNA_4 <==> 1 b4007_RNA_4_MeT_16S_1516	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_4_modif_2	b4007_RNA modification (16S rRNA): position: 1516, m2G by MeT_16S_1516	1 b4007_RNA_4_MeT_16S_1516 --> 1 MeT_16S_1516_inact + 1 ahcys + 1 b4007_RNA_5 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_5_modif_1	b4007_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b4007_RNA_5 <==> 1 b4007_RNA_5_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_5_modif_2	b4007_RNA modification (16S rRNA): position: 1518, m6(2)A by KsgA_mono	1 b4007_RNA_5_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b4007_RNA_6 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_6_modif_1	b4007_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 KsgA_mono + 2 amet + 1 b4007_RNA_6 <==> 1 b4007_RNA_6_KsgA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_6_modif_2	b4007_RNA modification (16S rRNA): position: 1519, m6(2)A by KsgA_mono	1 b4007_RNA_6_KsgA_mono --> 1 KsgA_mono_inact + 2 ahcys + 1 b4007_RNA_7 + 2 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_7_modif_1	b4007_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 RsuA_mono + 1 b4007_RNA_7 <==> 1 b4007_RNA_7_RsuA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_7_modif_2	b4007_RNA modification (16S rRNA): position: 516, Y by RsuA_mono	1 b4007_RNA_7_RsuA_mono --> 1 RsuA_mono_inact + 1 b4007_RNA_8	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6

b4007_RNA_8_modif_1	b4007_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 MeT_16S_527 + 1 amet + 1 b4007_RNA_8 <==> 1 b4007_RNA_8_MeT_16S_527	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_8_modif_2	b4007_RNA modification (16S rRNA): position: 527, m7G by MeT_16S_527	1 b4007_RNA_8_MeT_16S_527 --> 1 MeT_16S_527_inact + 1 ahcy + 1 b4007_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_9_modif_1	b4007_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 MeT_16S_966 + 1 amet + 1 b4007_RNA_9 <==> 1 b4007_RNA_9_MeT_16S_966	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_9_modif_2	b4007_RNA modification (16S rRNA): position: 966, m2G by MeT_16S_966	1 b4007_RNA_9_MeT_16S_966 --> 1 MeT_16S_966_inact + 1 ahcy + 1 b4007_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_modif_1	b4007_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 RsmC_mono + 1 amet + 1 b4007_RNA <==> 1 b4007_RNA_RsmC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4007_RNA_modif_2	b4007_RNA modification (16S rRNA): position: 1207, m2G by RsmC_mono	1 b4007_RNA_RsmC_mono --> 1 RsmC_mono_inact + 1 ahcys + 1 b4007_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_13_MODIF_1	modification of position 13 nt (Y) in gltV by TruD_mono	1 TruD_mono + 1 b4008_tRNA_Mg2 <==> 1 b4008_tRNA_Mg2_TruD_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_13_MODIF_2	modification of position 13 nt (Y) in gltV by TruD_mono	1 b4008_tRNA_Mg2_TruD_mono_cplx --> 1 TruD_mono_inact + 1 b4008_tRNA_1	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_34_MODIF_1	modification of position 34 nt (mnm5s2U) in gltV by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 5fthf + 1 GidA_mono + 1 IscS_dim_S-SH + 1 TrmC_mono + 1 TrmE_dim + 1 TrmU_mono + 1 YccK_mono + 1 YheLMN_cplx + 1 YhhP_mono + 1 amet + 1 atp + 1 b4008_tRNA_1 + 1 fad + 1 fadh2 + 1 gly + 1 gtp + 1 h2o + 1 mg2 + 1 trdrd <==> 1 b4008_tRNA_1_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mon TrmE_dim-GidA_mono-TrmC_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_34_MODIF_2	modification of position 34 nt (mnm5s2U) in gltV by TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono	1 b4008_tRNA_1_TrmU_mono-YhhP_mono-YheLMN_cplx-YccK_mono-TrmE_dim-GidA_mono-TrmC_mono_cplx --> 1 GidA_mono_inact + 1 IscS_dim_S-H + 1 TrmC_mono_inact + 1 TrmE_dim_inact + 1 TrmU_mono_inact + 1 YccK_mono_inact + 1 YheLMN_cplx_inact + 1 YhhP_mono_inact + 1 ahcys + 1 amp + 1 b4008_tRNA_2 + 1 fad + 1 fadh2 + 1 gdp + 1 glx + 4 h + 1 mg2 + 1 pi + 1 ppi + 1 thf + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_34_MODIF_3	replacement of sulfur with selenium: b4008_tRNA_2	1 YbbB_dim + 1 b4008_tRNA_2 + 1 h2o + 1 selnp <==> 1 b4008_tRNA_2_YbbB_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_34_MODIF_4	replacement of sulfur with selenium: b4008_tRNA_2	1 b4008_tRNA_2_YbbB_dim_cplx --> 1 YbbB_dim_inact + 1 b4008_tRNA_2_Se + 1 h + 1 h2s + 1 pi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_37_MODIF_1	modification of position 37 nt (m2A) in gltV by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b4008_tRNA_2 <==> 1 b4008_tRNA_2_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_37_MODIF_1_Se	modification of position 37 nt (m2A) in gltV by MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A + 1 amet + 1 b4008_tRNA_2_Se <==> 1 b4008_tRNA_2_Se_MeT_tRNA_pos_37_m2A_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_37_MODIF_2	modification of position 37 nt (m2A) in gltV by MeT_tRNA_pos_37_m2A	1 b4008_tRNA_2_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b4008_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_37_MODIF_2_Se	modification of position 37 nt (m2A) in gltV by MeT_tRNA_pos_37_m2A	1 b4008_tRNA_2_Se_MeT_tRNA_pos_37_m2A_cplx --> 1 MeT_tRNA_pos_37_m2A_inact + 1 ahcys + 1 b4008_tRNA_3_Se + h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in gltV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b4008_tRNA_3 <==> 1 b4008_tRNA_3_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_54_MODIF_1_Se	modification of position 54 nt (m5U) in gltV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b4008_tRNA_3_Se <==> 1 b4008_tRNA_3_Se_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in gltV by TrmA_mono	1 b4008_tRNA_3_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b4008_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_54_MODIF_2_Se	modification of position 54 nt (m5U) in gltV by TrmA_mono	1 b4008_tRNA_3_Se_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b4008_tRNA_4_Se + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_55_MODIF_1	modification of position 55 nt (Y) in gltV by TruB_mono	1 TruB_mono + 1 b4008_tRNA_4 <==> 1 b4008_tRNA_4_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_55_MODIF_1_Se	modification of position 55 nt (Y) in gltV by TruB_mono	1 TruB_mono + 1 b4008_tRNA_4_Se <==> 1 b4008_tRNA_4_Se_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_55_MODIF_2	modification of position 55 nt (Y) in gltV by TruB_mono	1 b4008_tRNA_4_TruB_mono_cplx --> 1 TruB_mono_inact + 1 gltV_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_55_MODIF_2_Se	modification of position 55 nt (Y) in gltV by TruB_mono	1 b4008_tRNA_4_Se_TruB_mono_cplx --> 1 TruB_mono_inact + 1 gltV_tRNA_Se	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4008_tRNA_Mg_BIND	Binding of two Mg2 to b4008_tRNA	1 b4008_RNA + 2 mg2 <==> 1 b4008_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_10_modif_1	b4009_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 MeT_23S_2445 + 1 amet + 1 b4009_RNA_10 <==> 1 b4009_RNA_10_MeT_23S_2445	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_10_modif_2	b4009_RNA modification (23S rRNA): position: 2445, m2G by MeT_23S_2445	1 b4009_RNA_10_MeT_23S_2445 --> 1 MeT_23S_2445_inact + 1 ahcys + 1 b4009_RNA_11 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_11_a_modif_1	b4009_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 DU_23S_2449 + 1 b4009_RNA_11 + 1 h + 1 nadh <==> 1 b4009_RNA_11_DU_23S_2449_a	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_11_a_modif_2	b4009_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADH)	1 b4009_RNA_11_DU_23S_2449_a --> 1 DU_23S_2449_inact + 1 b4009_RNA_12 + 1 nad	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_11_b_modif_1	b4009_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 DU_23S_2449 + 1 b4009_RNA_11 + 1 h + 1 nadph <==> 1 b4009_RNA_11_DU_23S_2449_b	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_11_b_modif_2	b4009_RNA modification (23S rRNA): position: 2449, D by DU_23S_2449 (NADPH)	1 b4009_RNA_11_DU_23S_2449_b --> 1 DU_23S_2449_inact + 1 b4009_RNA_12 + 1 nadp	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_12_modif_1	b4009_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 YmfC_mono + 1 b4009_RNA_12 <==> 1 b4009_RNA_12_YmfC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_12_modif_2	b4009_RNA modification (23S rRNA): position: 2457, Y by YmfC_mono	1 b4009_RNA_12_YmfC_mono --> 1 YmfC_mono_inact + 1 b4009_RNA_13	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_13_modif_1	b4009_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 MeT_23S_2498 + 1 amet + 1 b4009_RNA_13 <==> 1 b4009_RNA_13_MeT_23S_2498	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_13_modif_2	b4009_RNA modification (23S rRNA): position: 2498, Cm by MeT_23S_2498	1 b4009_RNA_13_MeT_23S_2498 --> 1 MeT_23S_2498_inact + 1 ahcys + 1 b4009_RNA_14 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_14_modif_1	b4009_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 MeT_23S_2503 + 1 amet + 1 b4009_RNA_14 <==> 1 b4009_RNA_14_MeT_23S_2503	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_14_modif_2	b4009_RNA modification (23S rRNA): position: 2503, m2A by MeT_23S_2503	1 b4009_RNA_14_MeT_23S_2503 --> 1 MeT_23S_2503_inact + 1 ahcys + 1 b4009_RNA_15 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_15_modif_1	b4009_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 RluC_mono + 1 b4009_RNA_15 <==> 1 b4009_RNA_15_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_15_modif_2	b4009_RNA modification (23S rRNA): position: 2504, Y by RluC_mono	1 b4009_RNA_15_RluC_mono --> 1 RluC_mono_inact + 1 b4009_RNA_16	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_16_modif_1	b4009_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 RrmJ_mono + 1 amet + 1 b4009_RNA_16 <==> 1 b4009_RNA_16_RrmJ_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6

b4009_RNA_16_modif_2	b4009_RNA modification (23S rRNA): position: 2552, Um by RrmJ_mono	1 b4009_RNA_16_RrmJ_mono --> 1 RrmJ_mono_inact + 1 ahcys + b4009_RNA_17 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_17_modif_1	b4009_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 RluC_mono + 1 b4009_RNA_17 <==> 1 b4009_RNA_17_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_17_modif_2	b4009_RNA modification (23S rRNA): position: 2580, Y by RluC_mono	1 b4009_RNA_17_RluC_mono --> 1 RluC_mono_inact + 1 b4009_RNA_18	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_18_modif_1	b4009_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 YjbC_mono + 1 b4009_RNA_18 <==> 1 b4009_RNA_18_YjbC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_18_modif_2	b4009_RNA modification (23S rRNA): position: 2604, Y by YjbC_mono	1 b4009_RNA_18_YjbC_mono --> 1 YjbC_mono_inact + 1 b4009_RNA_19	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_19_modif_1	b4009_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 RluB_mono + 1 b4009_RNA_19 <==> 1 b4009_RNA_19_RluB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_19_modif_2	b4009_RNA modification (23S rRNA): position: 2605, Y by RluB_mono	1 b4009_RNA_19_RluB_mono --> 1 RluB_mono_inact + 1 b4009_RNA_20	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_1_modif_1	b4009_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 MeT_23S_1835 + 1 amet + 1 b4009_RNA_1 <==> 1 b4009_RNA_1_MeT_23S_1835	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_1_modif_2	b4009_RNA modification (23S rRNA): position: 1835, m2G by MeT_23S_1835	1 b4009_RNA_1_MeT_23S_1835 --> 1 MeT_23S_1835_inact + 1 ahcys + 1 b4009_RNA_2 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_20_modif_1	b4009_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 RrmA_dim + 1 amet + 1 b4009_RNA_20 <==> 1 b4009_RNA_20_RrmA_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_20_modif_2	b4009_RNA modification (23S rRNA): position: 745, m1G by RrmA_dim	1 b4009_RNA_20_RrmA_dim --> 1 RrmA_dim_inact + 1 ahcys + 1 b4009_RNA_21 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_21_modif_1	b4009_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 RluA_mono + 1 b4009_RNA_21 <==> 1 b4009_RNA_21_RluA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_21_modif_2	b4009_RNA modification (23S rRNA): position: 746, Y by RluA_mono	1 b4009_RNA_21_RluA_mono --> 1 RluA_mono_inact + 1 b4009_RNA_22	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_22_modif_1	b4009_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 RumB_mono + 1 amet + 1 b4009_RNA_22 <==> 1 b4009_RNA_22_RumB_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_22_modif_2	b4009_RNA modification (23S rRNA): position: 747, m5U by RumB_mono	1 b4009_RNA_22_RumB_mono --> 1 RumB_mono_inact + 1 ahcys + 1 b4009_RNA_23 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_23_modif_1	b4009_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 RluC_mono + 1 b4009_RNA_23 <==> 1 b4009_RNA_23_RluC_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_23_modif_2	b4009_RNA modification (23S rRNA): position: 955, Y by RluC_mono	1 b4009_RNA_23_RluC_mono --> 1 RluC_mono_inact + 1 rrlE	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_2_modif_1	b4009_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 RluD_mono + 1 b4009_RNA_2 <==> 1 b4009_RNA_2_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_2_modif_2	b4009_RNA modification (23S rRNA): position: 1911, Y by RluD_mono	1 b4009_RNA_2_RluD_mono --> 1 RluD_mono_inact + 1 b4009_RNA_3	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_3_modif_1	b4009_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 RluD_mono + 1 amet + 1 b4009_RNA_3 <==> 1 b4009_RNA_3_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_3_modif_2	b4009_RNA modification (23S rRNA): position: 1915, m3Y by RluD_mono	1 b4009_RNA_3_RluD_mono --> 1 RluD_mono_inact + 1 ahcys + 1 b4009_RNA_4 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_4_modif_1	b4009_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 RluD_mono + 1 b4009_RNA_4 <==> 1 b4009_RNA_4_RluD_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_4_modif_2	b4009_RNA modification (23S rRNA): position: 1917, Y by RluD_mono	1 b4009_RNA_4_RluD_mono --> 1 RluD_mono_inact + 1 b4009_RNA_5	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_5_modif_1	b4009_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 RumA_mono + 1 amet + 1 b4009_RNA_5 <==> 1 b4009_RNA_5_RumA_mono	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_5_modif_2	b4009_RNA modification (23S rRNA): position: 1939, m5U by RumA_mono	1 b4009_RNA_5_RumA_mono --> 1 RumA_mono_inact + 1 ahcys + 1 b4009_RNA_6 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_6_modif_1	b4009_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 MeT_23S_1962 + 1 amet + 1 b4009_RNA_6 <==> 1 b4009_RNA_6_MeT_23S_1962	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_6_modif_2	b4009_RNA modification (23S rRNA): position: 1962, m5C by MeT_23S_1962	1 b4009_RNA_6_MeT_23S_1962 --> 1 MeT_23S_1962_inact + 1 ahcys + 1 b4009_RNA_7 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_7_modif_1	b4009_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 MeT_23S_2030 + 1 amet + 1 b4009_RNA_7 <==> 1 b4009_RNA_7_MeT_23S_2030	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_7_modif_2	b4009_RNA modification (23S rRNA): position: 2030, m6A by MeT_23S_2030	1 b4009_RNA_7_MeT_23S_2030 --> 1 MeT_23S_2030_inact + 1 ahcys + 1 b4009_RNA_8 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_8_modif_1	b4009_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 MeT_23S_2069 + 1 amet + 1 b4009_RNA_8 <==> 1 b4009_RNA_8_MeT_23S_2069	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_8_modif_2	b4009_RNA modification (23S rRNA): position: 2069, m7G by MeT_23S_2069	1 b4009_RNA_8_MeT_23S_2069 --> 1 MeT_23S_2069_inact + 1 ahcys + 1 b4009_RNA_9 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_9_modif_1	b4009_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 RlmB_dim + 1 amet + 1 b4009_RNA_9 <==> 1 b4009_RNA_9_RlmB_dim	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_9_modif_2	b4009_RNA modification (23S rRNA): position: 2251, Gm by RlmB_dim	1 b4009_RNA_9_RlmB_dim --> 1 RlmB_dim_inact + 1 ahcys + 1 b4009_RNA_10 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_modif_1	b4009_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 MeT_23S_1618 + 1 amet + 1 b4009_RNA <==> 1 b4009_RNA_MeT_23S_1618	reversible	rRNA modification	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4009_RNA_modif_2	b4009_RNA modification (23S rRNA): position: 1618, m6A by MeT_23S_1618	1 b4009_RNA_MeT_23S_1618 --> 1 MeT_23S_1618_inact + 1 ahcy + 1 b4009_RNA_1 + 1 h	irreversible	rRNA modification	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
b4022_fold_spon	b4022_m folding: spontanous	1 b4022_m --> 1 YjbC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.70E+03	2.70E+03	0	4.70E+03	4700.938	0	9.59E+01	95.897
b4022_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4022_mRNA --> 1 b4022_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.71E+02	271.0557	0	1.71E-01	0.171
b4022_mRNA_degr1	Degradation of b4022_mRNA I	1 Orn_dim + 218 atp + 1 b4022_mRNA_2 + 1 degradosome + 218 h2o <==> 218 adp + 1 b4022_mRNA_2_degr + 218 h + 218 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.54E+02	1.54E+02	0	2.71E+02	271.0557	0	1.71E-01	0.171
b4022_mRNA_degr2	Degradation of b4022_mRNA II	1 b4022_mRNA_2_degr + 872 h2o --> 1 Orn_dim_inact + 241 amp + 1 atp + 208 cmp + 1 degradosome_inact + 242 gmp + 872 h + 181 ump	irreversible	mRNA degradation	0.00E+00	1.71E-01	0	1.54E+02	1.54E+02	0	2.71E+02	271.0557	0	1.71E-01	0.171

b4022_maturation1	Polypeptide b4022 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4022_aa <==> 1 b4022_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.70E+03	2.70E+03	0	4.70E+03	4700.938	0	9.59E+01	95.897
b4022_maturation2	b4022 formation	1 b4022_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4022_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.70E+03	2.70E+03	0	4.70E+03	4700.938	0	9.59E+01	95.897
b4049_fold_GroEL/ES_1	b4049_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b4049_m + 1 transGroES_hepta --> 7 adp + 1 b4049_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.73E+03	2.73E+03	0	4.75E+03	4751.471	0	9.56E+01	95.6
b4049_fold_GroEL/ES_2	b4049_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b4049_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 DusA_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.73E+03	2.73E+03	0	4.75E+03	4751.471	0	9.56E+01	95.6
b4049_fold_GroEL/ES_3	b4049_m folding: GroEL/ES mediated; release of native protein	1 DusA_GroEL.(7)ADP.transGroES --> 1 DusA_mono + 1 GroEL.(7)ADP.transGroES	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.73E+03	2.73E+03	0	4.75E+03	4751.471	0	9.56E+01	95.6
b4049_fold_KJE_1	b4049_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b4049_m <==> 1 b4049_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.73E+03	2.73E+03	0	4.75E+03	4751.471	0	9.56E+01	95.6
b4049_fold_KJE_2	b4049_m folding: KJE mediated	1 GrpE_dim + 1 b4049_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 DusA_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.73E+03	2.73E+03	0	4.75E+03	4751.471	0	9.56E+01	95.6
b4049_fold_KJE_3	b4049_m folding: KJE mediated	1 DusA_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 DusA_mono + 1 GrpE_dim_inact	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.73E+03	2.73E+03	0	4.75E+03	4751.471	0	9.56E+01	95.6
b4049_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4049_mRNA --> 1 b4049_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.32E+02	1.32E+02	0	2.33E+02	232.9735	0	1.80E-01	0.18
b4049_mRNA_degr1	Degradation of b4049_mRNA I	1 Orn_dim + 259 atp + 1 b4049_mRNA_2 + 1 degradosome + 259 h2o <==> 259 adp + 1 b4049_mRNA_2_degr + 259 h + 259 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.32E+02	1.32E+02	0	2.33E+02	232.9735	0	1.80E-01	0.18
b4049_mRNA_degr2	Degradation of b4049_mRNA II	1 b4049_mRNA_2_degr + 1037 h2o --> 1 Orn_dim_inact + 243 amp + 1 atp + 242 cmp + 1 degradosome_inact + 315 gmp + 1037 h + 237 ump	irreversible	mRNA degradation	0.00E+00	1.80E-01	0	1.32E+02	1.32E+02	0	2.33E+02	232.9735	0	1.80E-01	0.18
b4049_maturation1	Polypeptide b4049 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4049_aa <==> 1 b4049_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.73E+03	2.73E+03	0	4.75E+03	4751.471	0	9.56E+01	95.6
b4049_maturation2	b4049 formation	1 b4049_def_map_cplx + 17 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 ala-L + 2 asn-L + 1 b4049_m + 1 for + 2 gln-L + 1 glu-L + 1 gly + 1 his-L + 1 ile-L + 1 lys-L + 3 met-L + 2 ser-L + 1 thr-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.73E+03	2.73E+03	0	4.75E+03	4751.471	0	9.56E+01	95.6
b4129_fold_KJE_1	b4129_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b4129_m_Mg <==> 1 b4129_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.84E+03	2.84E+03	0	4.29E+03	4285.722	0	1.19E+02	118.523
b4129_fold_KJE_2	b4129_m folding: KJE mediated	1 GrpE_dim + 1 b4129_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 LysU_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.84E+03	2.84E+03	0	4.29E+03	4285.722	0	1.19E+02	118.523
b4129_fold_KJE_3	b4129_m folding: KJE mediated	1 LysU_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 LysU_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.84E+03	2.84E+03	0	4.29E+03	4285.722	0	1.19E+02	118.523
b4129_fold_spon	b4129_m folding: spontanous	1 b4129_m_Mg --> 1 LysU_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.84E+03	2.84E+03	0	4.29E+03	4285.722	0	1.19E+02	118.523
b4129_ion_BIND	Binding of ions to b4129	1 b4129_m + 3 mg2 <==> 1 b4129_m_Mg	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	2.84E+03	2.84E+03	0	4.29E+03	4285.722	0	1.19E+02	118.523
b4129_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4129_mRNA --> 1 b4129_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.39E+01	9.39E+01	0	1.66E+02	165.8223	0	2.07E-01	0.207
b4129_mRNA_degr1	Degradation of b4129_mRNA I	1 Orn_dim + 379 atp + 1 b4129_mRNA_2 + 1 degradosome + 379 h2o <==> 379 adp + 1 b4129_mRNA_2_degr + 379 h + 379 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	9.39E+01	9.39E+01	0	1.66E+02	165.8223	0	2.07E-01	0.207
b4129_mRNA_degr2	Degradation of b4129_mRNA II	1 b4129_mRNA_2_degr + 1517 h2o --> 1 Orn_dim_inact + 400 amp + 1 atp + 340 cmp + 1 degradosome_inact + 380 gmp + 1517 h + 397 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	9.39E+01	9.39E+01	0	1.66E+02	165.8223	0	2.07E-01	0.207
b4129_maturation1	Polypeptide b4129 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4129_aa <==> 1 b4129_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.84E+03	2.84E+03	0	4.29E+03	4285.722	0	1.19E+02	118.523
b4129_maturation2	b4129 formation	1 b4129_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4129_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.84E+03	2.84E+03	0	4.29E+03	4285.722	0	1.19E+02	118.523
b4129_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4129_v1_mRNA --> 1 b4129_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.39E+01	9.39E+01	0	1.66E+02	165.8223	0	2.07E-01	0.207
b4134_tRNA_16_MODIF_1	modification of position 16 nt (D) in pheU by Dus_gen	1 Dus_gen + 1 b4134_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b4134_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_16_MODIF_2	modification of position 16 nt (D) in pheU by Dus_gen	1 b4134_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4134_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_20_MODIF_1	modification of position 20 nt (D) in pheU by Dus_gen	1 Dus_gen + 1 b4134_tRNA_1 + 1 h + 1 nadph <==> 1 b4134_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_20_MODIF_2	modification of position 20 nt (D) in pheU by Dus_gen	1 b4134_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4134_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_32_MODIF_1	modification of position 32 nt (Y) in pheU by RluA_mono	1 RluA_mono + 1 b4134_tRNA_2 <==> 1 b4134_tRNA_2_RluA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_32_MODIF_2	modification of position 32 nt (Y) in pheU by RluA_mono	1 b4134_tRNA_2_RluA_mono_cplx --> 1 RluA_mono_inact + 1 b4134_tRNA_3	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_37_MODIF_1	modification of position 37 nt (ms2i6A) in pheU by MiaA_dim-MiaB_mono	1 IscS_dim_S-SH + 1 MiaA_dim + 1 MiaB_mono + 2 amet + 1 b4134_tRNA_3 + 1 dmpp + 1 fldrd <==> 1 b4134_tRNA_3_MiaA_dim-MiaB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_37_MODIF_2	modification of position 37 nt (ms2i6A) in pheU by MiaA_dim-MiaB_mono	1 b4134_tRNA_3_MiaA_dim-MiaB_mono_cplx --> 1 IscS_dim_S-H + 1 MiaA_dim_inact + 1 MiaB_mono_inact + 1 ahcys + 1 b4134_tRNA_4 + 1 dad-5 + 1 fldox + 2 h + 1 met-L + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_39_MODIF_1	modification of position 39 nt (Y) in pheU by TruA_dim	1 TruA_dim + 1 b4134_tRNA_4 <==> 1 b4134_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_39_MODIF_2	modification of position 39 nt (Y) in pheU by TruA_dim	1 b4134_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b4134_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in pheU by YggH_mono	1 YggH_mono + 1 amet + 1 b4134_tRNA_5 <==> 1 b4134_tRNA_5_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in pheU by YggH_mono	1 b4134_tRNA_5_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b4134_tRNA_6 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_47_MODIF_1	modification of position 47 nt (acp3U) in pheU by AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U + 1 amet + 1 b4134_tRNA_6 <==> 1 b4134_tRNA_6_AcpT_tRNA_pos_47_acp3U_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_47_MODIF_2	modification of position 47 nt (acp3U) in pheU by AcpT_tRNA_pos_47_acp3U	1 b4134_tRNA_6_AcpT_tRNA_pos_47_acp3U_cplx --> 1 5mta + 1 AcpT_tRNA_pos_47_acp3U_inact + 1 b4134_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in pheU by TrmA_mono	1 TrmA_mono + 1 amet + 1 b4134_tRNA_7 <==> 1 b4134_tRNA_7_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in pheU by TrmA_mono	1 b4134_tRNA_7_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b4134_tRNA_8 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_55_MODIF_1	modification of position 55 nt (Y) in pheU by TruB_mono	1 TruB_mono + 1 b4134_tRNA_8 <==> 1 b4134_tRNA_8_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_55_MODIF_2	modification of position 55 nt (Y) in pheU by TruB_mono	1 b4134_tRNA_8_TruB_mono_cplx --> 1 TruB_mono_inact + 1 b4134_tRNA_9	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_8_MODIF_1	modification of position 8 nt (s4U) in pheU by ThiI_mono	1 IscS_dim_S-SH + 1 ThiI_mono + 1 atp + 1 b4134_tRNA_9 + 1 mg2 + 1 trdrd <==> 1 b4134_tRNA_9_ThiI_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_8_MODIF_2	modification of position 8 nt (s4U) in pheU by ThiI_mono	1 b4134_tRNA_9_ThiI_mono_cplx --> 1 IscS_dim_S-H + 1 ThiI_mono_inact + 1 amp + 1 h + 1 mg2 + 1 pheU_tRNA + 1 ppi + 1 trdox	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4134_tRNA_Mg_BIND	Binding of two Mg2 to b4134_tRNA	1 b4134_RNA + 2 mg2 <==> 1 b4134_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
b4142_fold_spon	b4142_m folding: spontanous	1 b4142_m --> 1 GroS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.96E+03	2.96E+03	0	5.00E+03	5001.3	0	3.06E+02	306.11
b4142_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4142_mRNA --> 1 b4142_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+02	5.32E+02	0	9.40E+02	939.6599	0	6.22E-01	0.622

b4142_mRNA_degr1	Degradation of b4142_mRNA I	1 Orn_dim + 73 atp + 1 b4142_mRNA_2 + 1 degradosome + 73 h2o <==> 73 adp + 1 b4142_mRNA_2_degr + 73 h + 73 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	5.32E+02	5.32E+02	0	9.40E+02	939.6599	0	6.22E-01	0.622
b4142_mRNA_degr2	Degradation of b4142_mRNA II	1 b4142_mRNA_2_degr + 293 h2o --> 1 Orn_dim_inact + 78 amp + 1 atp + 60 cmp + 1 degradosome_inact + 83 gmp + 293 h + 72 ump	irreversible	mRNA degradation	0.00E+00	6.22E-01	0	5.32E+02	5.32E+02	0	9.40E+02	939.6599	0	6.22E-01	0.622
b4142_maturation1	Polypeptide b4142 peptide deformylase complex	1 Def_mono + 1 b4142_aa <==> 1 b4142_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.96E+03	2.96E+03	0	5.00E+03	5001.3	0	3.06E+02	306.11
b4142_maturation2	b4142 formation	1 b4142_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b4142_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.96E+03	2.96E+03	0	5.00E+03	5001.3	0	3.06E+02	306.11
b4143_DNA_act_bind	b4143_DNA binding of activator	1 b4143_DNA_neu --> 1 b4143_DNA_act	irreversible	Transcription Regulation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.43E+02	143.0954	0	3.12E-01	0.312
b4143_fold_spon	b4143_m folding: spontanous	1 b4143_m --> 1 GroL_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.09E+03	2.09E+03	0	3.43E+03	3427.479	0	2.33E+02	233.344
b4143_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4143_mRNA --> 1 b4143_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.43E+02	143.0954	0	3.12E-01	0.312
b4143_mRNA_degr1	Degradation of b4143_mRNA I	1 Orn_dim + 411 atp + 1 b4143_mRNA_2 + 1 degradosome + 411 h2o <==> 411 adp + 1 b4143_mRNA_2_degr + 411 h + 411 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.11E+01	8.11E+01	0	1.43E+02	143.0954	0	3.12E-01	0.312
b4143_mRNA_degr2	Degradation of b4143_mRNA II	1 b4143_mRNA_2_degr + 1646 h2o --> 1 Orn_dim_inact + 436 amp + 1 atp + 394 cmp + 1 degradosome_inact + 477 gmp + 1646 h + 339 ump	irreversible	mRNA degradation	0.00E+00	3.12E-01	0	8.11E+01	8.11E+01	0	1.43E+02	143.0954	0	3.12E-01	0.312
b4143_maturation1	Polypeptide b4143 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4143_aa <==> 1 b4143_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.09E+03	2.09E+03	0	3.43E+03	3427.479	0	2.33E+02	233.344
b4143_maturation2	b4143 formation	1 b4143_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4143_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.09E+03	2.09E+03	0	3.43E+03	3427.479	0	2.33E+02	233.344
b4162_fold_spon	b4162_m folding: spontanous	1 b4162_m_Mg --> 1 Orn_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.47E+03	2.47E+03	0	4.31E+03	4311.167	0	7.35E+01	73.52
b4162_ion_BIND	Binding of ions to b4162	1 b4162_m + 1 mg2 <==> 1 b4162_m_Mg	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	2.47E+03	2.47E+03	0	4.31E+03	4311.167	0	7.35E+01	73.52
b4162_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4162_mRNA --> 1 b4162_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.40E+02	2.40E+02	0	4.24E+02	423.9067	0	1.42E-01	0.142
b4162_mRNA_degr1	Degradation of b4162_mRNA I	1 Orn_dim + 136 atp + 1 b4162_mRNA_2 + 1 degradosome + 136 h2o <==> 136 adp + 1 b4162_mRNA_2_degr + 136 h + 136 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	2.40E+02	2.40E+02	0	4.24E+02	423.9067	0	1.42E-01	0.142
b4162_mRNA_degr2	Degradation of b4162_mRNA II	1 b4162_mRNA_2_degr + 545 h2o --> 1 Orn_dim_inact + 133 amp + 1 atp + 133 cmp + 1 degradosome_inact + 162 gmp + 545 h + 117 ump	irreversible	mRNA degradation	0.00E+00	1.42E-01	0	2.40E+02	2.40E+02	0	4.24E+02	423.9067	0	1.42E-01	0.142
b4162_maturation1	Polypeptide b4162 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4162_aa <==> 1 b4162_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.47E+03	2.47E+03	0	4.31E+03	4311.167	0	7.35E+01	73.52
b4162_maturation2	b4162 formation	1 b4162_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4162_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.47E+03	2.47E+03	0	4.31E+03	4311.167	0	7.35E+01	73.52
b4163_tRNA_16_MODIF_1	modification of position 16 nt (D) in glyV by Dus_gen	1 Dus_gen + 1 b4163_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b4163_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4163_tRNA_16_MODIF_2	modification of position 16 nt (D) in glyV by Dus_gen	1 b4163_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4163_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4163_tRNA_17_MODIF_1	modification of position 17 nt (D) in glyV by Dus_gen	1 Dus_gen + 1 b4163_tRNA_1 + 1 h + 1 nadph <==> 1 b4163_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4163_tRNA_17_MODIF_2	modification of position 17 nt (D) in glyV by Dus_gen	1 b4163_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4163_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4163_tRNA_20_MODIF_1	modification of position 20 nt (D) in glyV by Dus_gen	1 Dus_gen + 1 b4163_tRNA_2 + 1 h + 1 nadph <==> 1 b4163_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4163_tRNA_20_MODIF_2	modification of position 20 nt (D) in glyV by Dus_gen	1 b4163_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4163_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4163_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in glyV by YggH_mono	1 YggH_mono + 1 amet + 1 b4163_tRNA_3 <==> 1 b4163_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4163_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in glyV by YggH_mono	1 b4163_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b4163_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4163_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in glyV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b4163_tRNA_4 <==> 1 b4163_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4163_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in glyV by TrmA_mono	1 b4163_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b4163_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4163_tRNA_55_MODIF_1	modification of position 55 nt (Y) in glyV by TruB_mono	1 TruB_mono + 1 b4163_tRNA_5 <==> 1 b4163_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4163_tRNA_55_MODIF_2	modification of position 55 nt (Y) in glyV by TruB_mono	1 b4163_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 glyV_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4163_tRNA_Mg_BIND	Binding of two Mg2 to b4163_tRNA	1 b4163_RNA + 2 mg2 <==> 1 b4163_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4164_tRNA_16_MODIF_1	modification of position 16 nt (D) in glyX by Dus_gen	1 Dus_gen + 1 b4164_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b4164_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4164_tRNA_16_MODIF_2	modification of position 16 nt (D) in glyX by Dus_gen	1 b4164_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4164_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4164_tRNA_17_MODIF_1	modification of position 17 nt (D) in glyX by Dus_gen	1 Dus_gen + 1 b4164_tRNA_1 + 1 h + 1 nadph <==> 1 b4164_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4164_tRNA_17_MODIF_2	modification of position 17 nt (D) in glyX by Dus_gen	1 b4164_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4164_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4164_tRNA_20_MODIF_1	modification of position 20 nt (D) in glyX by Dus_gen	1 Dus_gen + 1 b4164_tRNA_2 + 1 h + 1 nadph <==> 1 b4164_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4164_tRNA_20_MODIF_2	modification of position 20 nt (D) in glyX by Dus_gen	1 b4164_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4164_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4164_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in glyX by YggH_mono	1 YggH_mono + 1 amet + 1 b4164_tRNA_3 <==> 1 b4164_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4164_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in glyX by YggH_mono	1 b4164_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b4164_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4164_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in glyX by TrmA_mono	1 TrmA_mono + 1 amet + 1 b4164_tRNA_4 <==> 1 b4164_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4164_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in glyX by TrmA_mono	1 b4164_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b4164_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4164_tRNA_55_MODIF_1	modification of position 55 nt (Y) in glyX by TruB_mono	1 TruB_mono + 1 b4164_tRNA_5 <==> 1 b4164_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4164_tRNA_55_MODIF_2	modification of position 55 nt (Y) in glyX by TruB_mono	1 b4164_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 glyX_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4164_tRNA_Mg_BIND	Binding of two Mg2 to b4164_tRNA	1 b4164_RNA + 2 mg2 <==> 1 b4164_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4165_tRNA_16_MODIF_1	modification of position 16 nt (D) in glyY by Dus_gen	1 Dus_gen + 1 b4165_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b4165_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4165_tRNA_16_MODIF_2	modification of position 16 nt (D) in glyY by Dus_gen	1 b4165_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4165_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4165_tRNA_17_MODIF_1	modification of position 17 nt (D) in glyY by Dus_gen	1 Dus_gen + 1 b4165_tRNA_1 + 1 h + 1 nadph <==> 1 b4165_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4165_tRNA_17_MODIF_2	modification of position 17 nt (D) in glyY by Dus_gen	1 b4165_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4165_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4165_tRNA_20_MODIF_1	modification of position 20 nt (D) in glyY by Dus_gen	1 Dus_gen + 1 b4165_tRNA_2 + 1 h + 1 nadph <==> 1 b4165_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4165_tRNA_20_MODIF_2	modification of position 20 nt (D) in glyY by Dus_gen	1 b4165_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4165_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4165_tRNA_46_MODIF_1	modification of position 46 nt (m7G) in glyY by YggH_mono	1 YggH_mono + 1 amet + 1 b4165_tRNA_3 <==> 1 b4165_tRNA_3_YggH_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4165_tRNA_46_MODIF_2	modification of position 46 nt (m7G) in glyY by YggH_mono	1 b4165_tRNA_3_YggH_mono_cplx --> 1 YggH_mono_inact + 1 ahcys + 1 b4165_tRNA_4 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4165_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in glyY by TrmA_mono	1 TrmA_mono + 1 amet + 1 b4165_tRNA_4 <==> 1 b4165_tRNA_4_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4165_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in glyY by TrmA_mono	1 b4165_tRNA_4_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b4165_tRNA_5 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7

b4165_tRNA_55_MODIF_1	modification of position 55 nt (Y) in glyY by TruB_mono	1 TruB_mono + 1 b4165_tRNA_5 <==> 1 b4165_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4165_tRNA_55_MODIF_2	modification of position 55 nt (Y) in glyY by TruB_mono	1 b4165_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 glyY_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4165_tRNA_Mg_BIND	Binding of two Mg2 to b4165_tRNA	1 b4165_RNA + 2 mg2 <==> 1 b4165_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
b4167_fold_spon	b4167_m folding: spontanous	1 b4167_m --> 1 YjeF_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.59E+02	4.59E+02	0	7.39E+02	739.2022	0	9.55E+01	95.52
b4167_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4167_mRNA --> 1 b4167_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4167_mRNA_degr1	Degradation of b4167_mRNA I	1 Orn_dim + 387 atp + 1 b4167_mRNA_2 + 1 degradosome + 387 h2o <==> 387 adp + 1 b4167_mRNA_2_degr + 387 h + 387 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4167_mRNA_degr2	Degradation of b4167_mRNA II	1 b4167_mRNA_2_degr + 1547 h2o --> 1 Orn_dim_inact + 328 amp + 1 atp + 402 cmp + 1 degradosome_inact + 482 gmp + 1547 h + 335 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4167_maturation1	Polypeptide b4167 peptide deformylase complex	1 Def_mono + 1 b4167_aa <==> 1 b4167_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.59E+02	4.59E+02	0	7.39E+02	739.2022	0	9.55E+01	95.52
b4167_maturation2	b4167 formation	1 b4167_def_cplx + 2 h2o --> 1 Def_mono_inact + 1 b4167_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.59E+02	4.59E+02	0	7.39E+02	739.2022	0	9.55E+01	95.52
b4167_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4167_v1_mRNA --> 1 b4167_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4167_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4167_v2_mRNA --> 1 b4167_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4168_fold_spon	b4168_m folding: spontanous	1 b4168_m --> 1 YjeE_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	2.54E+02	254.4307	0	6.13E+01	61.326
b4168_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4168_mRNA --> 1 b4168_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4168_mRNA_degr1	Degradation of b4168_mRNA I	1 Orn_dim + 108 atp + 1 b4168_mRNA_2 + 1 degradosome + 108 h2o <==> 108 adp + 1 b4168_mRNA_2_degr + 108 h + 108 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4168_mRNA_degr2	Degradation of b4168_mRNA II	1 b4168_mRNA_2_degr + 432 h2o --> 1 Orn_dim_inact + 95 amp + 105 cmp + 1 degradosome_inact + 124 gmp + 432 h + 109 ump	irreversible	mRNA degradation	0.00E+00	1.04E-01	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4168_maturation1	Polypeptide b4168 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4168_aa <==> 1 b4168_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	2.54E+02	254.4307	0	6.13E+01	61.326
b4168_maturation2	b4168 formation	1 b4168_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4168_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	2.54E+02	254.4307	0	6.13E+01	61.326
b4168_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4168_v1_mRNA --> 1 b4168_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4168_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4168_v2_mRNA --> 1 b4168_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4169_fold_spon	b4169_m folding: spontanous	1 b4169_m --> 1 AmiB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	4.10E+02	4.10E+02	0	6.53E+02	653.1219	0	9.53E+01	95.264
b4169_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4169_mRNA --> 1 b4169_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4169_mRNA_degr1	Degradation of b4169_mRNA I	1 Orn_dim + 334 atp + 1 b4169_mRNA_2 + 1 degradosome + 334 h2o <==> 334 adp + 1 b4169_mRNA_2_degr + 334 h + 334 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4169_mRNA_degr2	Degradation of b4169_mRNA II	1 b4169_mRNA_2_degr + 1337 h2o --> 1 Orn_dim_inact + 318 amp + 356 cmp + 1 degradosome_inact + 381 gmp + 1337 h + 283 ump	irreversible	mRNA degradation	0.00E+00	2.91E-01	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4169_maturation1	Polypeptide b4169 peptide deformylase complex	1 Def_mono + 1 b4169_aa <==> 1 b4169_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	4.10E+02	4.10E+02	0	6.53E+02	653.1219	0	9.53E+01	95.264
b4169_maturation2	b4169 formation	1 b4169_def_cplx + 23 h2o --> 1 Def_mono_inact + 2 ala-L + 2 arg-L + 1 asn-L + 1 b4169_m + 1 cys-L + 1 for + 1 gly + 1 ile-L + 5 leu-L + 2 met-L + 1 pro-L + 2 thr-L + 1 trp-L + 1 tyr-L + 2 val-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	4.10E+02	4.10E+02	0	6.53E+02	653.1219	0	9.53E+01	95.264
b4169_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4169_v1_mRNA --> 1 b4169_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4169_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4169_v2_mRNA --> 1 b4169_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4170_fold_spon	b4170_m folding: spontanous	1 b4170_m --> 1 MutL_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.05E+02	5.05E+02	0	8.42E+02	841.6827	0	6.93E+01	69.264
b4170_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4170_mRNA --> 1 b4170_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4170_mRNA_degr1	Degradation of b4170_mRNA I	1 Orn_dim + 462 atp + 1 b4170_mRNA_2 + 1 degradosome + 462 h2o <==> 462 adp + 1 b4170_mRNA_2_degr + 462 h + 462 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4170_mRNA_degr2	Degradation of b4170_mRNA II	1 b4170_mRNA_2_degr + 1847 h2o --> 1 Orn_dim_inact + 436 amp + 516 cmp + 1 degradosome_inact + 524 gmp + 1847 h + 372 ump	irreversible	mRNA degradation	0.00E+00	2.00E-01	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4170_maturation1	Polypeptide b4170 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4170_aa <==> 1 b4170_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.05E+02	5.05E+02	0	8.42E+02	841.6827	0	6.93E+01	69.264
b4170_maturation2	b4170 formation	1 b4170_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4170_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.05E+02	5.05E+02	0	8.42E+02	841.6827	0	6.93E+01	69.264
b4170_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4170_v1_mRNA --> 1 b4170_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4170_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4170_v2_mRNA --> 1 b4170_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4171_fold_spon	b4171_m folding: spontanous	1 b4171_m_Mg --> 1 MiaA_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.79E+02	3.79E+02	0	5.47E+02	547.3813	0	1.61E+02	161.172
b4171_ion_BIND	Binding of ions to b4171	1 b4171_m + 1 mg2 <==> 1 b4171_m_Mg	reversible	Metallo-ion Binding	-1.00E+09	1.00E+09	0	3.79E+02	3.79E+02	0	5.47E+02	547.3813	0	1.61E+02	161.172
b4171_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4171_mRNA --> 1 b4171_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4171_mRNA_degr1	Degradation of b4171_mRNA I	1 Orn_dim + 235 atp + 1 b4171_mRNA_2 + 1 degradosome + 235 h2o <==> 235 adp + 1 b4171_mRNA_2_degr + 235 h + 235 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4171_mRNA_degr2	Degradation of b4171_mRNA II	1 b4171_mRNA_2_degr + 942 h2o --> 1 Orn_dim_inact + 211 amp + 219 cmp + 1 degradosome_inact + 286 gmp + 942 h + 227 ump	irreversible	mRNA degradation	0.00E+00	2.61E-01	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4171_maturation1	Polypeptide b4171 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4171_aa <==> 1 b4171_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.79E+02	3.79E+02	0	5.47E+02	547.3813	0	1.61E+02	161.172
b4171_maturation2	b4171 formation	1 b4171_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4171_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.79E+02	3.79E+02	0	5.47E+02	547.3813	0	1.61E+02	161.172
b4171_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4171_v1_mRNA --> 1 b4171_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4171_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4171_v2_mRNA --> 1 b4171_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4172_fold_spon	b4172_m folding: spontanous	1 b4172_m --> 1 Hfq_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.82E+02	6.82E+02	0	7.38E+02	738.3065	0	6.10E+02	609.57
b4172_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4172_mRNA --> 1 b4172_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4172_mRNA_degr1	Degradation of b4172_mRNA I	1 Orn_dim + 77 atp + 1 b4172_mRNA_2 + 1 degradosome + 77 h2o <==> 77 adp + 1 b4172_mRNA_2_degr + 77 h + 77 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4172_mRNA_degr2	Degradation of b4172_mRNA II	1 b4172_mRNA_2_degr + 308 h2o --> 1 Orn_dim_inact + 81 amp + 75 cmp + 1 degradosome_inact + 76 gmp + 308 h + 77 ump	irreversible	mRNA degradation	0.00E+00	8.23E-01	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4172_maturation1	Polypeptide b4172 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4172_aa <==> 1 b4172_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.82E+02	6.82E+02	0	7.38E+02	738.3065	0	6.10E+02	609.57
b4172_maturation2	b4172 formation	1 b4172_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4172_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.82E+02	6.82E+02	0	7.38E+02	738.3065	0	6.10E+02	609.57

b4172_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4172_v1_mRNA --> 1 b4172_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4172_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4172_v2_mRNA --> 1 b4172_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4173_fold_spon	b4173_m folding: spontanous	1 b4173_m --> 1 HflX_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.93E+02	3.93E+02	0	6.27E+02	626.5019	0	9.01E+01	90.1
b4173_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4173_mRNA --> 1 b4173_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4173_mRNA_degr1	Degradation of b4173_mRNA I	1 Orn_dim + 320 atp + 1 b4173_mRNA_2 + 1 degradosome + 320 h2o <==> 320 adp + 1 b4173_mRNA_2_degr + 320 h + 320 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4173_mRNA_degr2	Degradation of b4173_mRNA II	1 b4173_mRNA_2_degr + 1280 h2o --> 1 Orn_dim_inact + 298 amp 312 cmp + 1 degradosome_inact + 378 gmp + 1280 h + 293 ump	irreversible	mRNA degradation	0.00E+00	2.84E-01	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4173_maturation1	Polypeptide b4173 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4173_aa <==> 1 b4173_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.93E+02	3.93E+02	0	6.27E+02	626.5019	0	9.01E+01	90.1
b4173_maturation2	b4173 formation	1 b4173_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4173_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.93E+02	3.93E+02	0	6.27E+02	626.5019	0	9.01E+01	90.1
b4173_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4173_v1_mRNA --> 1 b4173_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4173_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4173_v2_mRNA --> 1 b4173_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4174_fold_spon	b4174_m folding: spontanous	1 b4174_m --> 1 HflK_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.95E+02	3.95E+02	0	6.19E+02	618.9618	0	1.04E+02	104.016
b4174_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4174_mRNA --> 1 b4174_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4174_mRNA_degr1	Degradation of b4174_mRNA I	1 Orn_dim + 315 atp + 1 b4174_mRNA_2 + 1 degradosome + 315 h2o <==> 315 adp + 1 b4174_mRNA_2_degr + 315 h + 315 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4174_mRNA_degr2	Degradation of b4174_mRNA II	1 b4174_mRNA_2_degr + 1259 h2o --> 1 Orn_dim_inact + 317 amp 327 cmp + 1 degradosome_inact + 381 gmp + 1259 h + 235 ump	irreversible	mRNA degradation	0.00E+00	4.90E-01	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4174_maturation1	Polypeptide b4174 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4174_aa <==> 1 b4174_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.95E+02	3.95E+02	0	6.19E+02	618.9618	0	1.04E+02	104.016
b4174_maturation2	b4174 formation	1 b4174_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4174_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.95E+02	3.95E+02	0	6.19E+02	618.9618	0	1.04E+02	104.016
b4174_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4174_v1_mRNA --> 1 b4174_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4174_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4174_v2_mRNA --> 1 b4174_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4175_fold_spon	b4175_m folding: spontanous	1 b4175_m --> 1 HflC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.28E+02	3.28E+02	0	5.05E+02	505.2114	0	9.75E+01	97.546
b4175_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4175_mRNA --> 1 b4175_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4175_mRNA_degr1	Degradation of b4175_mRNA I	1 Orn_dim + 251 atp + 1 b4175_mRNA_2 + 1 degradosome + 251 h2o <==> 251 adp + 1 b4175_mRNA_2_degr + 251 h + 251 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4175_mRNA_degr2	Degradation of b4175_mRNA II	1 b4175_mRNA_2_degr + 1004 h2o --> 1 Orn_dim_inact + 248 amp 249 cmp + 1 degradosome_inact + 284 gmp + 1004 h + 224 ump	irreversible	mRNA degradation	0.00E+00	3.37E-01	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4175_maturation1	Polypeptide b4175 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4175_aa <==> 1 b4175_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.28E+02	3.28E+02	0	5.05E+02	505.2114	0	9.75E+01	97.546
b4175_maturation2	b4175 formation	1 b4175_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4175_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.28E+02	3.28E+02	0	5.05E+02	505.2114	0	9.75E+01	97.546
b4175_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4175_v1_mRNA --> 1 b4175_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4175_v2_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4175_v2_mRNA --> 1 b4175_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
b4178_fold_spon	b4178_m folding: spontanous	1 b4178_m --> 1 YjeB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	3.53E+02	3.53E+02	0	5.59E+02	559.0763	0	8.57E+01	85.744
b4178_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4178_mRNA --> 1 b4178_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118
b4178_mRNA_degr1	Degradation of b4178_mRNA I	1 Orn_dim + 106 atp + 1 b4178_mRNA_2 + 1 degradosome + 106 h2o <==> 106 adp + 1 b4178_mRNA_2_degr + 106 h + 106 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118
b4178_mRNA_degr2	Degradation of b4178_mRNA II	1 b4178_mRNA_2_degr + 425 h2o --> 1 Orn_dim_inact + 103 amp + 89 cmp + 1 degradosome_inact + 116 gmp + 1 gtp + 425 h + 117 ump	irreversible	mRNA degradation	0.00E+00	1.18E-01	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118
b4178_maturation1	Polypeptide b4178 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4178_aa <==> 1 b4178_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	3.53E+02	3.53E+02	0	5.59E+02	559.0763	0	8.57E+01	85.744
b4178_maturation2	b4178 formation	1 b4178_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4178_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	3.53E+02	3.53E+02	0	5.59E+02	559.0763	0	8.57E+01	85.744
b4179_fold_GroEL/ES_1	b4179_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b4179_m + 1 transGroES_hepta --> 7 adp + 1 b4179_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.65E+03	1.65E+03	0	2.79E+03	2794.799	0	7.56E+01	75.576
b4179_fold_GroEL/ES_2	b4179_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b4179_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 Rnr_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.65E+03	1.65E+03	0	2.79E+03	2794.799	0	7.56E+01	75.576
b4179_fold_GroEL/ES_3	b4179_m folding: GroEL/ES mediated; release of native protein	1 Rnr_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 Rnr_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.65E+03	1.65E+03	0	2.79E+03	2794.799	0	7.56E+01	75.576
b4179_fold_KJE_1	b4179_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b4179_m <==> 1 b4179_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	1.65E+03	1.65E+03	0	2.79E+03	2794.799	0	7.56E+01	75.576
b4179_fold_KJE_2	b4179_m folding: KJE mediated	1 GrpE_dim + 1 b4179_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 Rnr_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.65E+03	1.65E+03	0	2.79E+03	2794.799	0	7.56E+01	75.576
b4179_fold_KJE_3	b4179_m folding: KJE mediated	1 Rnr_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 Rnr_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.65E+03	1.65E+03	0	2.79E+03	2794.799	0	7.56E+01	75.576
b4179_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4179_mRNA --> 1 b4179_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118
b4179_mRNA_degr1	Degradation of b4179_mRNA I	1 Orn_dim + 610 atp + 1 b4179_mRNA_2 + 1 degradosome + 610 h2o <==> 610 adp + 1 b4179_mRNA_2_degr + 610 h + 610 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118
b4179_mRNA_degr2	Degradation of b4179_mRNA II	1 b4179_mRNA_2_degr + 2441 h2o --> 1 Orn_dim_inact + 589 amp 622 cmp + 1 degradosome_inact + 728 gmp + 2441 h + 503 ump	irreversible	mRNA degradation	0.00E+00	1.35E-01	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118
b4179_maturation1	Polypeptide b4179 peptide deformylas and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4179_aa <==> 1 b4179_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.65E+03	1.65E+03	0	2.79E+03	2794.799	0	7.56E+01	75.576
b4179_maturation2	b4179 formation	1 b4179_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4179_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.65E+03	1.65E+03	0	2.79E+03	2794.799	0	7.56E+01	75.576
b4180_fold_spon	b4180_m folding: spontanous	1 b4180_m --> 1 RlmB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	5.61E+02	5.61E+02	0	9.21E+02	921.2635	0	9.29E+01	92.932
b4180_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4180_mRNA --> 1 b4180_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118
b4180_mRNA_degr1	Degradation of b4180_mRNA I	1 Orn_dim + 183 atp + 1 b4180_mRNA_2 + 1 degradosome + 183 h2o <==> 183 adp + 1 b4180_mRNA_2_degr + 183 h + 183 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118

b4180_mRNA_degr2	Degradation of b4180_mRNA II	1 b4180_mRNA_2_degr + 731 h2o --> 1 Orn_dim_inact + 163 amp + 194 cmp + 1 degradosome_inact + 218 gmp + 731 h + 157 ump	irreversible	mRNA degradation	0.00E+00	3.26E-01	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118
b4180_maturation1	Polypeptide b4180 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4180_aa <==> 1 b4180_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	5.61E+02	5.61E+02	0	9.21E+02	921.2635	0	9.29E+01	92.932
b4180_maturation2	b4180 formation	1 b4180_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4180_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	5.61E+02	5.61E+02	0	9.21E+02	921.2635	0	9.29E+01	92.932
b4200_fold_spon	b4200_m folding: spontanous	1 b4200_m --> 1 RpsF_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b4200_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4200_mRNA --> 1 b4200_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
b4200_mRNA_degr1	Degradation of b4200_mRNA I	1 Orn_dim + 99 atp + 1 b4200_mRNA_2 + 1 degradosome + 99 h2o <==> 99 adp + 1 b4200_mRNA_2_degr + 99 h + 99 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
b4200_mRNA_degr2	Degradation of b4200_mRNA II	1 b4200_mRNA_2_degr + 395 h2o --> 1 Orn_dim_inact + 103 amp + 1 atp + 102 cmp + 1 degradosome_inact + 106 gmp + 395 h + 84 ump	irreversible	mRNA degradation	0.00E+00	7.70E-01	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
b4200_maturation1	Polypeptide b4200 peptide deformylase complex	1 Def_mono + 1 b4200_aa <==> 1 b4200_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b4200_maturation2	b4200 formation	1 b4200_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b4200_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b4201_fold_spon	b4201_m folding: spontanous	1 b4201_m --> 1 PriB_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	8.89E+02	8.89E+02	0	8.74E+02	874.08	0	3.79E+02	378.534
b4201_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4201_mRNA --> 1 b4201_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
b4201_mRNA_degr1	Degradation of b4201_mRNA I	1 Orn_dim + 78 atp + 1 b4201_mRNA_2 + 1 degradosome + 78 h2o <==> 78 adp + 1 b4201_mRNA_2_degr + 78 h + 78 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
b4201_mRNA_degr2	Degradation of b4201_mRNA II	1 b4201_mRNA_2_degr + 314 h2o --> 1 Orn_dim_inact + 76 amp + 78 cmp + 1 degradosome_inact + 87 gmp + 314 h + 74 ump	irreversible	mRNA degradation	0.00E+00	5.55E-01	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
b4201_maturation1	Polypeptide b4201 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4201_aa <==> 1 b4201_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	8.89E+02	8.89E+02	0	8.74E+02	874.08	0	3.79E+02	378.534
b4201_maturation2	b4201 formation	1 b4201_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4201_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	8.89E+02	8.89E+02	0	8.74E+02	874.08	0	3.79E+02	378.534
b4202_fold_spon	b4202_m folding: spontanous	1 b4202_m --> 1 RpsR_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b4202_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4202_mRNA --> 1 b4202_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
b4202_mRNA_degr1	Degradation of b4202_mRNA I	1 Orn_dim + 57 atp + 1 b4202_mRNA_2 + 1 degradosome + 57 h2o <==> 57 adp + 1 b4202_mRNA_2_degr + 57 h + 57 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
b4202_mRNA_degr2	Degradation of b4202_mRNA II	1 b4202_mRNA_2_degr + 227 h2o --> 1 Orn_dim_inact + 58 amp + 69 cmp + 1 degradosome_inact + 51 gmp + 227 h + 50 ump	irreversible	mRNA degradation	0.00E+00	1.04E+00	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
b4202_maturation1	Polypeptide b4202 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4202_aa <==> 1 b4202_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b4202_maturation2	b4202 formation	1 b4202_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4202_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b4203_fold_spon	b4203_m folding: spontanous	1 b4203_m --> 1 RplI_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b4203_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4203_mRNA --> 1 b4203_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
b4203_mRNA_degr1	Degradation of b4203_mRNA I	1 Orn_dim + 112 atp + 1 b4203_mRNA_2 + 1 degradosome + 112 h2o <==> 112 adp + 1 b4203_mRNA_2_degr + 112 h + 112 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
b4203_mRNA_degr2	Degradation of b4203_mRNA II	1 b4203_mRNA_2_degr + 449 h2o --> 1 Orn_dim_inact + 121 amp + 102 cmp + 1 degradosome_inact + 122 gmp + 449 h + 105 ump	irreversible	mRNA degradation	0.00E+00	2.89E-01	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
b4203_maturation1	Polypeptide b4203 peptide deformylase complex	1 Def_mono + 1 b4203_aa <==> 1 b4203_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b4203_maturation2	b4203 formation	1 b4203_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b4203_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
b4258_fold_KJE_1	b4258_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b4258_m <==> 1 b4258_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.02E+03	2.02E+03	0	2.06E+03	2056.765	0	1.19E+02	118.8
b4258_fold_KJE_2	b4258_m folding: KJE mediated	1 GrpE_dim + 1 b4258_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 ValS_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.02E+03	2.02E+03	0	2.06E+03	2056.765	0	1.19E+02	118.8
b4258_fold_KJE_3	b4258_m folding: KJE mediated	1 ValS_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 ValS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.02E+03	2.02E+03	0	2.06E+03	2056.765	0	1.19E+02	118.8
b4258_fold_spon	b4258_m folding: spontanous	1 b4258_m --> 1 ValS_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.02E+03	2.02E+03	0	2.06E+03	2056.765	0	1.19E+02	118.8
b4258_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4258_mRNA --> 1 b4258_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	7.43E+01	74.28142	0	4.90E-01	0.49
b4258_mRNA_degr1	Degradation of b4258_mRNA I	1 Orn_dim + 714 atp + 1 b4258_mRNA_2 + 1 degradosome + 714 h2o <==> 714 adp + 1 b4258_mRNA_2_degr + 714 h + 714 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	4.21E+01	4.21E+01	0	7.43E+01	74.28142	0	4.90E-01	0.49
b4258_mRNA_degr2	Degradation of b4258_mRNA II	1 b4258_mRNA_2_degr + 2855 h2o --> 1 Orn_dim_inact + 707 amp 1 atp + 759 cmp + 1 degradosome_inact + 800 gmp + 2855 h + 589 ump	irreversible	mRNA degradation	0.00E+00	4.90E-01	0	4.21E+01	4.21E+01	0	7.43E+01	74.28142	0	4.90E-01	0.49
b4258_maturation1	Polypeptide b4258 peptide deformylase complex	1 Def_mono + 1 b4258_aa <==> 1 b4258_def_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.02E+03	2.02E+03	0	2.06E+03	2056.765	0	1.19E+02	118.8
b4258_maturation2	b4258 formation	1 b4258_def_cplx + 1 h2o --> 1 Def_mono_inact + 1 b4258_m + 1 for	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.02E+03	2.02E+03	0	2.06E+03	2056.765	0	1.19E+02	118.8
b4258_v1_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4258_v1_mRNA --> 1 b4258_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	7.43E+01	74.28142	0	4.90E-01	0.49
b4270_tRNA_16_MODIF_1	modification of position 16 nt (D) in leuX by Dus_gen	1 Dus_gen + 1 b4270_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b4270_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
b4270_tRNA_16_MODIF_2	modification of position 16 nt (D) in leuX by Dus_gen	1 b4270_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4270_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
b4270_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in leuX by TrmH_dim	1 TrmH_dim + 1 amet + 1 b4270_tRNA_1 <==> 1 b4270_tRNA_1_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
b4270_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in leuX by TrmH_dim	1 b4270_tRNA_1_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b4270_tRNA_2 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
b4270_tRNA_20_MODIF_1	modification of position 20 nt (D) in leuX by Dus_gen	1 Dus_gen + 1 b4270_tRNA_2 + 1 h + 1 nadph <==> 1 b4270_tRNA_2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
b4270_tRNA_20_MODIF_2	modification of position 20 nt (D) in leuX by Dus_gen	1 b4270_tRNA_2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4270_tRNA_3 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
b4270_tRNA_37_MODIF_1	modification of position 37 nt (ms2i6A) in leuX by MiaA_dim-MiaB_mono	1 IscS_dim_S-SH + 1 MiaA_dim + 1 MiaB_mono + 2 amet + 1 b4270_tRNA_3 + 1 dmpp + 1 fldrd <==> 1 b4270_tRNA_3_MiaA_dim-MiaB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
b4270_tRNA_37_MODIF_2	modification of position 37 nt (ms2i6A) in leuX by MiaA_dim-MiaB_mono	1 b4270_tRNA_3_MiaA_dim-MiaB_mono_cplx --> 1 IscS_dim_S-H + 1 MiaA_dim_inact + 1 MiaB_mono_inact + 1 ahcys + 1 b4270_tRNA_4 + 1 dad-5 + 1 fldox + 2 h + 1 met-L + 1 ppi	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
b4270_tRNA_39_MODIF_1	modification of position 39 nt (Y) in leuX by TruA_dim	1 TruA_dim + 1 b4270_tRNA_4 <==> 1 b4270_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
b4270_tRNA_39_MODIF_2	modification of position 39 nt (Y) in leuX by TruA_dim	1 b4270_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b4270_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
b4270_tRNA_55_MODIF_1	modification of position 55 nt (Y) in leuX by TruB_mono	1 TruB_mono + 1 b4270_tRNA_5 <==> 1 b4270_tRNA_5_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
b4270_tRNA_55_MODIF_2	modification of position 55 nt (Y) in leuX by TruB_mono	1 b4270_tRNA_5_TruB_mono_cplx --> 1 TruB_mono_inact + 1 leuX_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
b4270_tRNA_Mg_BIND	Binding of two Mg2 to b4270_tRNA	1 b4270_RNA + 2 mg2 <==> 1 b4270_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
b4292_fold_spon	b4292_m folding: spontanous	1 b4292_m --> 1 FecR_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	9.00E+01	9.00E+01	0	9.00E+01	90	0	9.00E+01	90

b4292_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4292_mRNA --> 1 b4292_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b4292_mRNA_degr1	Degradation of b4292_mRNA I	1 Orn_dim + 237 atp + 1 b4292_mRNA_2 + 1 degradosome + 237 h2o <==> 237 adp + 1 b4292_mRNA_2_degr + 237 h + 237 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b4292_mRNA_degr2	Degradation of b4292_mRNA II	1 b4292_mRNA_2_degr + 949 h2o --> 1 Orn_dim_inact + 205 amp + 286 cmp + 1 degradosome_inact + 276 gmp + 949 h + 183 ump	irreversible	mRNA degradation	0.00E+00	2.07E-01	0	0	0.00E+00	0	0	0	0	0	0
b4292_maturation1	Polypeptide b4292 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4292_aa <==> 1 b4292_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	9.00E+01	9.00E+01	0	9.00E+01	90	0	9.00E+01	90
b4292_maturation2	b4292 formation	1 b4292_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4292_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	9.00E+01	9.00E+01	0	9.00E+01	90	0	9.00E+01	90
b4293_fold_spon	b4293_m folding: spontanous	1 b4293_m --> 1 FecI_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b4293_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4293_mRNA --> 1 b4293_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b4293_mRNA_degr1	Degradation of b4293_mRNA I	1 Orn_dim + 130 atp + 1 b4293_mRNA_2 + 1 degradosome + 130 h2o <==> 130 adp + 1 b4293_mRNA_2_degr + 130 h + 130 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b4293_mRNA_degr2	Degradation of b4293_mRNA II	1 b4293_mRNA_2_degr + 521 h2o --> 1 Orn_dim_inact + 119 amp + 1 atp + 145 cmp + 1 degradosome_inact + 140 gmp + 521 h + 117 ump	irreversible	mRNA degradation	0.00E+00	1.46E-01	0	0	0.00E+00	0	0	0	0	0	0
b4293_maturation1	Polypeptide b4293 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4293_aa <==> 1 b4293_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b4293_maturation2	b4293 formation	1 b4293_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4293_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
b4368_tRNA_16_MODIF_1	modification of position 16 nt (D) in leuV by Dus_gen	1 Dus_gen + 1 b4368_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b4368_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_16_MODIF_2	modification of position 16 nt (D) in leuV by Dus_gen	1 b4368_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4368_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_17_MODIF_1	modification of position 17 nt (D) in leuV by Dus_gen	1 Dus_gen + 1 b4368_tRNA_1 + 1 h + 1 nadph <==> 1 b4368_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_17_MODIF_2	modification of position 17 nt (D) in leuV by Dus_gen	1 b4368_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4368_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in leuV by TrmH_dim	1 TrmH_dim + 1 amet + 1 b4368_tRNA_2 <==> 1 b4368_tRNA_2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in leuV by TrmH_dim	1 b4368_tRNA_2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b4368_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_20_MODIF_1	modification of position 20 nt (D) in leuV by Dus_gen	1 Dus_gen + 1 b4368_tRNA_3 + 1 h + 1 nadph <==> 1 b4368_tRNA_3_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_20_MODIF_2	modification of position 20 nt (D) in leuV by Dus_gen	1 b4368_tRNA_3_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4368_tRNA_4 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_38_MODIF_1	modification of position 38 nt (Y) in leuV by TruA_dim	1 TruA_dim + 1 b4368_tRNA_4 <==> 1 b4368_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_38_MODIF_2	modification of position 38 nt (Y) in leuV by TruA_dim	1 b4368_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b4368_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_40_MODIF_1	modification of position 40 nt (Y) in leuV by TruA_dim	1 TruA_dim + 1 b4368_tRNA_5 <==> 1 b4368_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_40_MODIF_2	modification of position 40 nt (Y) in leuV by TruA_dim	1 b4368_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b4368_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in leuV by TrmA_mono	1 TrmA_mono + 1 amet + 1 b4368_tRNA_6 <==> 1 b4368_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in leuV by TrmA_mono	1 b4368_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b4368_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_55_MODIF_1	modification of position 55 nt (Y) in leuV by TruB_mono	1 TruB_mono + 1 b4368_tRNA_7 <==> 1 b4368_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_55_MODIF_2	modification of position 55 nt (Y) in leuV by TruB_mono	1 b4368_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 leuV_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4368_tRNA_Mg_BIND	Binding of two Mg2 to b4368_tRNA	1 b4368_RNA + 2 mg2 <==> 1 b4368_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_16_MODIF_1	modification of position 16 nt (D) in leuP by Dus_gen	1 Dus_gen + 1 b4369_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b4369_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_16_MODIF_2	modification of position 16 nt (D) in leuP by Dus_gen	1 b4369_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4369_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_17_MODIF_1	modification of position 17 nt (D) in leuP by Dus_gen	1 Dus_gen + 1 b4369_tRNA_1 + 1 h + 1 nadph <==> 1 b4369_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_17_MODIF_2	modification of position 17 nt (D) in leuP by Dus_gen	1 b4369_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4369_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in leuP by TrmH_dim	1 TrmH_dim + 1 amet + 1 b4369_tRNA_2 <==> 1 b4369_tRNA_2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in leuP by TrmH_dim	1 b4369_tRNA_2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b4369_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_20_MODIF_1	modification of position 20 nt (D) in leuP by Dus_gen	1 Dus_gen + 1 b4369_tRNA_3 + 1 h + 1 nadph <==> 1 b4369_tRNA_3_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_20_MODIF_2	modification of position 20 nt (D) in leuP by Dus_gen	1 b4369_tRNA_3_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4369_tRNA_4 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_38_MODIF_1	modification of position 38 nt (Y) in leuP by TruA_dim	1 TruA_dim + 1 b4369_tRNA_4 <==> 1 b4369_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_38_MODIF_2	modification of position 38 nt (Y) in leuP by TruA_dim	1 b4369_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b4369_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_40_MODIF_1	modification of position 40 nt (Y) in leuP by TruA_dim	1 TruA_dim + 1 b4369_tRNA_5 <==> 1 b4369_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_40_MODIF_2	modification of position 40 nt (Y) in leuP by TruA_dim	1 b4369_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b4369_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in leuP by TrmA_mono	1 TrmA_mono + 1 amet + 1 b4369_tRNA_6 <==> 1 b4369_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in leuP by TrmA_mono	1 b4369_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b4369_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_55_MODIF_1	modification of position 55 nt (Y) in leuP by TruB_mono	1 TruB_mono + 1 b4369_tRNA_7 <==> 1 b4369_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_55_MODIF_2	modification of position 55 nt (Y) in leuP by TruB_mono	1 b4369_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 leuP_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4369_tRNA_Mg_BIND	Binding of two Mg2 to b4369_tRNA	1 b4369_RNA + 2 mg2 <==> 1 b4369_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_16_MODIF_1	modification of position 16 nt (D) in leuQ by Dus_gen	1 Dus_gen + 1 b4370_tRNA_Mg2 + 1 h + 1 nadph <==> 1 b4370_tRNA_Mg2_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_16_MODIF_2	modification of position 16 nt (D) in leuQ by Dus_gen	1 b4370_tRNA_Mg2_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4370_tRNA_1 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_17_MODIF_1	modification of position 17 nt (D) in leuQ by Dus_gen	1 Dus_gen + 1 b4370_tRNA_1 + 1 h + 1 nadph <==> 1 b4370_tRNA_1_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_17_MODIF_2	modification of position 17 nt (D) in leuQ by Dus_gen	1 b4370_tRNA_1_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4370_tRNA_2 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_18_MODIF_1	modification of position 18 nt (Gm) in leuQ by TrmH_dim	1 TrmH_dim + 1 amet + 1 b4370_tRNA_2 <==> 1 b4370_tRNA_2_TrmH_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_18_MODIF_2	modification of position 18 nt (Gm) in leuQ by TrmH_dim	1 b4370_tRNA_2_TrmH_dim_cplx --> 1 TrmH_dim_inact + 1 ahcys + 1 b4370_tRNA_3 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_20_MODIF_1	modification of position 20 nt (D) in leuQ by Dus_gen	1 Dus_gen + 1 b4370_tRNA_3 + 1 h + 1 nadph <==> 1 b4370_tRNA_3_Dus_gen_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_20_MODIF_2	modification of position 20 nt (D) in leuQ by Dus_gen	1 b4370_tRNA_3_Dus_gen_cplx --> 1 Dus_gen_inact + 1 b4370_tRNA_4 + 1 nadp	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_38_MODIF_1	modification of position 38 nt (Y) in leuQ by TruA_dim	1 TruA_dim + 1 b4370_tRNA_4 <==> 1 b4370_tRNA_4_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7

b4370_tRNA_38_MODIF_2	modification of position 38 nt (Y) in leuQ by TruA_dim	1 b4370_tRNA_4_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b4370_tRNA_5	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_40_MODIF_1	modification of position 40 nt (Y) in leuQ by TruA_dim	1 TruA_dim + 1 b4370_tRNA_5 <==> 1 b4370_tRNA_5_TruA_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_40_MODIF_2	modification of position 40 nt (Y) in leuQ by TruA_dim	1 b4370_tRNA_5_TruA_dim_cplx --> 1 TruA_dim_inact + 1 b4370_tRNA_6	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_54_MODIF_1	modification of position 54 nt (m5U) in leuQ by TrmA_mono	1 TrmA_mono + 1 amet + 1 b4370_tRNA_6 <==> 1 b4370_tRNA_6_TrmA_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_54_MODIF_2	modification of position 54 nt (m5U) in leuQ by TrmA_mono	1 b4370_tRNA_6_TrmA_mono_cplx --> 1 TrmA_mono_inact + 1 ahcys + 1 b4370_tRNA_7 + 1 h	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_55_MODIF_1	modification of position 55 nt (Y) in leuQ by TruB_mono	1 TruB_mono + 1 b4370_tRNA_7 <==> 1 b4370_tRNA_7_TruB_mono_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_55_MODIF_2	modification of position 55 nt (Y) in leuQ by TruB_mono	1 b4370_tRNA_7_TruB_mono_cplx --> 1 TruB_mono_inact + 1 leuQ_tRNA	irreversible	tRNA modification	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4370_tRNA_Mg_BIND	Binding of two Mg2 to b4370_tRNA	1 b4370_RNA + 2 mg2 <==> 1 b4370_tRNA_Mg2	reversible	Metallo-ion binding	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
b4371_fold_GroEL/ES_1	b4371_m folding: GroEL/ES mediated; polypeptide is going in GroEL/ES complex	1 GroEL.(7)ADP.cisGroES + 7 atp + 1 b4371_m + 1 transGroES_hepta --> 7 adp + 1 b4371_m_GroEL.(7)ATP.transGroES + 1 cisGroES_hepta	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.44E+03	2.44E+03	0	4.24E+03	4237.958	0	9.91E+01	99.14
b4371_fold_GroEL/ES_2	b4371_m folding: GroEL/ES mediated; folding of polypeptide under ATP hydrolysis	1 b4371_m_GroEL.(7)ATP.transGroES + 7 h2o --> 1 RsmC_GroEL.(7)ADP.transGroES + 7 h + 7 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.44E+03	2.44E+03	0	4.24E+03	4237.958	0	9.91E+01	99.14
b4371_fold_GroEL/ES_3	b4371_m folding: GroEL/ES mediated; release of native protein	1 RsmC_GroEL.(7)ADP.transGroES --> 1 GroEL.(7)ADP.transGroES + 1 RsmC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.44E+03	2.44E+03	0	4.24E+03	4237.958	0	9.91E+01	99.14
b4371_fold_KJE_1	b4371_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b4371_m <==> 1 b4371_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.44E+03	2.44E+03	0	4.24E+03	4237.958	0	9.91E+01	99.14
b4371_fold_KJE_2	b4371_m folding: KJE mediated	1 GrpE_dim + 1 b4371_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 RsmC_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.44E+03	2.44E+03	0	4.24E+03	4237.958	0	9.91E+01	99.14
b4371_fold_KJE_3	b4371_m folding: KJE mediated	1 RsmC_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 RsmC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.44E+03	2.44E+03	0	4.24E+03	4237.958	0	9.91E+01	99.14
b4371_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4371_mRNA --> 1 b4371_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.17E+02	1.17E+02	0	2.07E+02	207.2779	0	3.37E-01	0.337
b4371_mRNA_degr1	Degradation of b4371_mRNA I	1 Orn_dim + 258 atp + 1 b4371_mRNA_2 + 1 degradosome + 258 h2o <==> 258 adp + 1 b4371_mRNA_2_degr + 258 h + 258 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	1.17E+02	1.17E+02	0	2.07E+02	207.2779	0	3.37E-01	0.337
b4371_mRNA_degr2	Degradation of b4371_mRNA II	1 b4371_mRNA_2_degr + 1031 h2o --> 1 Orn_dim_inact + 215 amp + 1 atp + 272 cmp + 1 degradosome_inact + 303 gmp + 1031 h + 241 ump	irreversible	mRNA degradation	0.00E+00	3.37E-01	0	1.17E+02	1.17E+02	0	2.07E+02	207.2779	0	3.37E-01	0.337
b4371_maturation1	Polypeptide b4371 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4371_aa <==> 1 b4371_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.44E+03	2.44E+03	0	4.24E+03	4237.958	0	9.91E+01	99.14
b4371_maturation2	b4371 formation	1 b4371_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4371_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.44E+03	2.44E+03	0	4.24E+03	4237.958	0	9.91E+01	99.14
b4372_fold_spon	b4372_m folding: spontanous	1 b4372_m --> 1 HolD_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.91E+02	6.91E+02	0	1.17E+03	1165.549	0	7.15E+01	71.5432
b4372_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4372_mRNA --> 1 b4372_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
b4372_mRNA_degr1	Degradation of b4372_mRNA I	1 Orn_dim + 103 atp + 1 b4372_mRNA_2 + 1 degradosome + 103 h2o <==> 103 adp + 1 b4372_mRNA_2_degr + 103 h + 103 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
b4372_mRNA_degr2	Degradation of b4372_mRNA II	1 b4372_mRNA_2_degr + 413 h2o --> 1 Orn_dim_inact + 92 amp + 1 atp + 124 cmp + 1 degradosome_inact + 115 gmp + 413 h + 82 ump	irreversible	mRNA degradation	0.00E+00	1.04E-01	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
b4372_maturation1	Polypeptide b4372 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4372_aa <==> 1 b4372_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.91E+02	6.91E+02	0	1.17E+03	1165.549	0	7.15E+01	71.5432
b4372_maturation2	b4372 formation	1 b4372_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4372_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.91E+02	6.91E+02	0	1.17E+03	1165.549	0	7.15E+01	71.5432
b4373_fold_spon	b4373_m folding: spontanous	1 b4373_m --> 1 RimI_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	6.96E+02	6.96E+02	0	1.17E+03	1170.349	0	7.63E+01	76.3432
b4373_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4373_mRNA --> 1 b4373_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
b4373_mRNA_degr1	Degradation of b4373_mRNA I	1 Orn_dim + 103 atp + 1 b4373_mRNA_2 + 1 degradosome + 103 h2o <==> 103 adp + 1 b4373_mRNA_2_degr + 103 h + 103 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
b4373_mRNA_degr2	Degradation of b4373_mRNA II	1 b4373_mRNA_2_degr + 414 h2o --> 1 Orn_dim_inact + 105 amp + 108 cmp + 1 degradosome_inact + 112 gmp + 414 h + 90 ump	irreversible	mRNA degradation	0.00E+00	1.58E-01	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
b4373_maturation1	Polypeptide b4373 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4373_aa <==> 1 b4373_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	6.96E+02	6.96E+02	0	1.17E+03	1170.349	0	7.63E+01	76.3432
b4373_maturation2	b4373 formation	1 b4373_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4373_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	6.96E+02	6.96E+02	0	1.17E+03	1170.349	0	7.63E+01	76.3432
b4374_fold_spon	b4374_m folding: spontanous	1 b4374_m --> 1 YjjG_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	1.08E+03	1.08E+03	0	1.85E+03	1854.368	0	7.66E+01	76.6077
b4374_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4374_mRNA --> 1 b4374_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
b4374_mRNA_degr1	Degradation of b4374_mRNA I	1 Orn_dim + 169 atp + 1 b4374_mRNA_2 + 1 degradosome + 169 h2o <==> 169 adp + 1 b4374_mRNA_2_degr + 169 h + 169 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
b4374_mRNA_degr2	Degradation of b4374_mRNA II	1 b4374_mRNA_2_degr + 677 h2o --> 1 Orn_dim_inact + 152 amp + 179 cmp + 1 degradosome_inact + 184 gmp + 677 h + 163 ump	irreversible	mRNA degradation	0.00E+00	9.29E-02	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
b4374_maturation1	Polypeptide b4374 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4374_aa <==> 1 b4374_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	1.08E+03	1.08E+03	0	1.85E+03	1854.368	0	7.66E+01	76.6077
b4374_maturation2	b4374 formation	1 b4374_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4374_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	1.08E+03	1.08E+03	0	1.85E+03	1854.368	0	7.66E+01	76.6077
b4375_fold_KJE_1	b4375_m folding: KJE mediated	1 DnaJ_dim + 1 DnaK_mono.ATP + 1 b4375_m <==> 1 b4375_m_DnaKJ_complex	reversible	Protein Folding	-1.00E+09	1.00E+09	0	2.49E+03	2.49E+03	0	4.33E+03	4334.315	0	9.14E+01	91.388
b4375_fold_KJE_2	b4375_m folding: KJE mediated	1 GrpE_dim + 1 b4375_m_DnaKJ_complex + 1 h2o --> 1 DnaJ_dim_inact + 1 PrfC_DnaK_GrpE_complex + 1 adp + 1 h + 1 pi	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.49E+03	2.49E+03	0	4.33E+03	4334.315	0	9.14E+01	91.388
b4375_fold_KJE_3	b4375_m folding: KJE mediated	1 PrfC_DnaK_GrpE_complex + 1 atp --> 1 DnaK_mono.ATP_inact + 1 GrpE_dim_inact + 1 PrfC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.49E+03	2.49E+03	0	4.33E+03	4334.315	0	9.14E+01	91.388
b4375_fold_spon	b4375_m folding: spontanous	1 b4375_m --> 1 PrfC_mono	irreversible	Protein Folding	0.00E+00	1.00E+09	0	2.49E+03	2.49E+03	0	4.33E+03	4334.315	0	9.14E+01	91.388
b4375_mRNA_CONV	convsersion of mRNA to mRNA_1 (synthetic rxn)	1 b4375_mRNA --> 1 b4375_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.77E+01	7.77E+01	0	1.37E+02	137.1766	0	3.08E-01	0.308
b4375_mRNA_degr1	Degradation of b4375_mRNA I	1 Orn_dim + 397 atp + 1 b4375_mRNA_2 + 1 degradosome + 397 h2o <==> 397 adp + 1 b4375_mRNA_2_degr + 397 h + 397 pi	reversible	mRNA degradation	-1.00E+09	1.00E+09	0	7.77E+01	7.77E+01	0	1.37E+02	137.1766	0	3.08E-01	0.308
b4375_mRNA_degr2	Degradation of b4375_mRNA II	1 b4375_mRNA_2_degr + 1589 h2o --> 1 Orn_dim_inact + 383 amp + 1 atp + 411 cmp + 1 degradosome_inact + 448 gmp + 1589 h + 347 ump	irreversible	mRNA degradation	0.00E+00	3.08E-01	0	7.77E+01	7.77E+01	0	1.37E+02	137.1766	0	3.08E-01	0.308
b4375_maturation1	Polypeptide b4375 peptide deformylase and methionine aminopeptidase complex	1 Def_mono + 1 Map_mono + 1 b4375_aa <==> 1 b4375_def_map_cplx	reversible	Protein Maturation	-1.00E+09	1.00E+09	0	2.49E+03	2.49E+03	0	4.33E+03	4334.315	0	9.14E+01	91.388
b4375_maturation2	b4375 formation	1 b4375_def_map_cplx + 2 h2o --> 1 Def_mono_inact + 1 Map_mono_inact + 1 b4375_m + 1 for + 1 met-L	irreversible	Protein Maturation	0.00E+00	1.00E+09	0	2.49E+03	2.49E+03	0	4.33E+03	4334.315	0	9.14E+01	91.388
cdp_exch	cdp transport	1 cdp[e] <==> 1 cdp	reversible	Transport	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
chort	transport of chor	1 chor <==> 1 chor[e]	reversible	Transport	-1.00E+09	1.00E+09	-2.76E+03	0	2.76E+03	-1.88E+02	-2.78E+01	159.66	-1.88E+02	-2.78E+01	159.66

cis/transGroES_CONV	conversion of cisGroES to transGroES	1 cisGroES_hepta <==> 1 transGroES_hepta	reversible	Protein Folding	-1.00E+09	1.00E+09	-1.49E+02	7.94E+03	8.09E+03	-2.45E+02	9.80E+03	10048.1279	-1.67E+01	5.83E+03	5842.3344
cisGroES_FORM	formation of cis GroES	1 GroS_hepta --> 1 cisGroES_hepta	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	4.23E+02	4.23E+02	0	7.14E+02	714.4714	0	4.37E+01	43.73
cmp_exch	cmp transport	1 cmp[e] <==> 1 cmp	reversible	Transport	-1.00E+09	1.00E+09	-3.75E+04	-5.49E+03	3.20E+04	-6.08E+04	-4.17E+03	56611.87	-2.62E+04	-4.17E+03	22046.26
coat	transport of coa	1 coa <==> 1 coa[e]	reversible	Transport	-1.00E+09	1.00E+09	3.38E+02	5.24E+03	4.90E+03	2.49E+02	5.59E+03	5343.775	2.49E+02	2.91E+03	2664.524
ctp_exch	ctp transport	1 ctp[e] <==> 1 ctp	reversible	Transport	-1.00E+09	1.00E+09	9.45E+04	1.26E+05	3.19E+04	7.00E+04	1.26E+05	56379.6	7.00E+04	1.26E+05	56379.6
cysT_tRNA_CHARG	charging cysT_tRNA	1 Cys_RS_cys_amp + 1 cysT_tRNA --> 1 CysS_mono_inact + 1 amp + 1 cysT_tRNA_cys	irreversible	tRNA charging	0.00E+00	1.00E+09	3.38E+03	6.85E+04	6.51E+04	2.49E+03	7.80E+04	75550.35	2.49E+03	5.61E+04	53616.26
dad-5t	transport of dad-5	1 dad-5 <==> 1 dad-5[e]	reversible	Transport	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	7.95E+02	795.0555	0	8.59E+01	85.864
dmppt	transport of dmpp	1 dmpp <==> 1 dmpp[e]	reversible	Transport	-1.00E+09	1.00E+09	-1.52E+03	0	1.52E+03	-8.03E+02	0	803.4932	-9.96E+01	0	99.564
fadh2t	transport of fadh2	1 fadh2 <==> 1 fadh2[e]	reversible	Transport	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
fadt	transport of fad	1 fad <==> 1 fad[e]	reversible	Transport	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
fldoxt	transport of fldox	1 fldox <==> 1 fldox[e]	reversible	Transport	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	7.95E+02	795.0555	0	8.59E+01	85.864
fldrdt	transport of fldrd	1 fldrd <==> 1 fldrd[e]	reversible	Transport	-1.00E+09	1.00E+09	-1.52E+03	0	1.52E+03	-7.95E+02	0	795.0555	-8.59E+01	0	85.864
fmet_tRNA_CHARGa	charging fmet_tRNA	1 Met_RS_2met_2amp + 2 fmet_tRNA --> 1 Met_RS_dim_inact + 2 amp + 2 fmet_tRNA_met_1	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.15E+04	1.15E+04	0	1.19E+04	11853.42	0	1.07E+04	10749.04
fmet_tRNA_CHARGb	charging fmet_tRNA	1 Met_RS_met_amp + 1 fmet_tRNA --> 1 Met_RS_dim_inact + 1 amp + 1 fmet_tRNA_met_1	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.30E+04	2.30E+04	0	2.37E+04	23706.84	0	2.15E+04	21498.08
fmet_tRNA_TF_1	methionyl-tRNA formyltransferase 1	1 10fthf + 1 Fmt_mono + 1 fmet_tRNA_met_1 --> 1 Fmt_fmet_tRNA_met_1_cplx	irreversible	tRNA charging	0.00E+00	1.00E+09	5.23E+03	2.30E+04	1.78E+04	3.85E+03	2.37E+04	19852.92	3.85E+03	2.15E+04	17644.16
fmet_tRNA_TF_2	methionyl-tRNA formyltransferase 2	1 Fmt_fmet_tRNA_met_1_cplx --> 1 Fmt_mono_inact + 1 fmet_tRNA_met + 1 h + 1 thf	irreversible	tRNA charging	0.00E+00	1.00E+09	5.23E+03	2.30E+04	1.78E+04	3.85E+03	2.37E+04	19852.92	3.85E+03	2.15E+04	17644.16
gdp_exch	gdp transport	1 gdp[e] <==> 1 gdp	reversible	Transport	-1.00E+09	1.00E+09	-8.51E+06	-1.54E+06	6.97E+06	-8.64E+06	-1.13E+06	7509213	-8.04E+06	-1.13E+06	6911881
gln1_tRNA_CHARG	charging gln1_tRNA	1 Gln_RS_gln_amp + 1 gln1_tRNA --> 1 GlnS_mono_inact + 1 amp + 1 gln1_tRNA_gln	irreversible	tRNA charging	0.00E+00	1.00E+09	1.95E+04	1.61E+05	1.42E+05	1.44E+04	1.74E+05	159569.24	1.44E+04	1.48E+05	133738.94
gln2_tRNA_CHARG	charging gln2_tRNA	1 Gln_RS_gln_amp + 1 gln2_tRNA --> 1 GlnS_mono_inact + 1 amp + 1 gln2_tRNA_gln	irreversible	tRNA charging	0.00E+00	1.00E+09	6.92E+03	1.10E+05	1.03E+05	5.10E+03	1.25E+05	119982.98	5.10E+03	8.11E+04	76038.87
glnU_to_gln1	glnU_to_gln1	1 glnU_tRNA --> 1 gln1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
glnV_to_gln2	glnV_to_gln2	1 glnV_tRNA --> 1 gln2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
glnW_to_gln1	glnW_to_gln1	1 glnW_tRNA --> 1 gln1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
glnX_to_gln2	glnX_to_gln2	1 glnX_tRNA --> 1 gln2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
glu1_tRNA_CHARG	charging glu1_tRNA	1 Glu_RS_glu_amp + 1 glu1_tRNA --> 1 GltX_mono_inact + 1 amp + 1 glu1_tRNA_glu	irreversible	tRNA charging	0.00E+00	1.00E+09	5.91E+04	2.44E+05	1.85E+05	4.35E+04	2.46E+05	202239.9	4.35E+04	2.41E+05	197591.3
gluT_to_glu1	gluT_to_glu1	1 gltT_tRNA --> 1 glu1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
gluU_to_glu1	gluU_to_glu1	1 gltU_tRNA --> 1 glu1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
gluV_to_glu1	gluV_to_glu1	1 gltV_tRNA --> 1 glu1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
gluW_to_glu1	gluW_to_glu1	1 gltW_tRNA --> 1 glu1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
glxt	transport of glx	1 glx <==> 1 glx[e]	reversible	Transport	-1.00E+09	1.00E+09	0	1.86E+03	1.86E+03	2.75E+01	1.09E+02	81.96	2.75E+01	1.09E+02	81.96
gly1_tRNA_CHARGa	charging gly1_tRNA	1 Gly_RS_2gly_2amp + 2 gly1_tRNA --> 1 Gly_RS_tetra_inact + 2 amp + 2 gly1_tRNA_gly	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.61E+05	1.61E+05	0	1.71E+05	170733.1	0	1.45E+05	144524
gly1_tRNA_CHARGb	charging gly1_tRNA	1 Gly_RS_gly_amp + 1 gly1_tRNA --> 1 Gly_RS_tetra_inact + 1 amp + 1 gly1_tRNA_gly	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.22E+05	3.22E+05	0	3.41E+05	341466.1	0	2.89E+05	289047.9
glyT_tRNA_CHARGa	charging glyT_tRNA	1 Gly_RS_2gly_2amp + 2 glyT_tRNA --> 1 Gly_RS_tetra_inact + 2 amp + 2 glyT_tRNA_gly	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.07E+04	2.07E+04	0	2.35E+04	23529.24	0	1.80E+04	18036.03
glyT_tRNA_CHARGb	charging glyT_tRNA	1 Gly_RS_gly_amp + 1 glyT_tRNA --> 1 Gly_RS_tetra_inact + 1 amp + 1 glyT_tRNA_gly	irreversible	tRNA charging	0.00E+00	1.00E+09	0	4.14E+04	4.14E+04	0	4.71E+04	47058.48	0	3.61E+04	36072.07
glyU_tRNA_CHARGa	charging gly2_tRNA	1 Gly_RS_2gly_2amp + 2 glyU_tRNA --> 1 Gly_RS_tetra_inact + 2 amp + 2 glyU_tRNA_gly	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.69E+04	2.69E+04	0	3.13E+04	31269.22	0	2.30E+04	22994.44
glyU_tRNA_CHARGb	charging gly2_tRNA	1 Gly_RS_gly_amp + 1 glyU_tRNA --> 1 Gly_RS_tetra_inact + 1 amp + 1 glyU_tRNA_gly	irreversible	tRNA charging	0.00E+00	1.00E+09	0	5.39E+04	5.39E+04	0	6.25E+04	62538.44	0	4.60E+04	45988.88
glyV_to_gly1	glyV_to_gly1	1 glyV_tRNA --> 1 gly1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
glyW_to_gly1	glyW_to_gly1	1 glyW_tRNA --> 1 gly1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
glyX_to_gly1	glyX_to_gly1	1 glyX_tRNA --> 1 gly1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
glyY_to_gly1	glyY_to_gly1	1 glyY_tRNA --> 1 gly1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
gmp_exch	gmp transport	1 gmp[e] <==> 1 gmp	reversible	Transport	-1.00E+09	1.00E+09	-5.42E+04	-6.84E+03	4.73E+04	-8.85E+04	-5.26E+03	83260.94	-2.99E+04	-5.26E+03	24655.18
gtp_exch	gtp transport	1 gtp[e] <==> 1 gtp	reversible	Transport	-1.00E+09	1.00E+09	1.67E+06	8.68E+06	7.01E+06	1.23E+06	8.80E+06	7573145	1.23E+06	8.20E+06	6970628
guat	transport of gua	1 gua <==> 1 gua[e]	reversible	Transport	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.90E+02	789.686	0	8.58E+01	85.794
h2st	transport of h2s	1 h2s <==> 1 h2s[e]	reversible	Transport	-1.00E+09	1.00E+09	0	1.86E+03	1.86E+03	0	9.36E+01	93.62	0	9.36E+01	93.62
hRNAP_FORM	holo RNA polymerase formation	2 RpoA_mono + 1 RpoB_mono + 1 RpoC_mono <==> 1 hRNAP	reversible	Protein complex formation	-1.00E+09	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
hco3t	transport of hco3	1 hco3 <==> 1 hco3[e]	reversible	Transport	-1.00E+09	1.00E+09	-1.81E+03	0	1.81E+03	-2.12E+02	-1.39E+01	197.71	-2.12E+02	-1.39E+01	197.71
hisR_tRNA_CHARGa	charging hisR_tRNA	1 His_RS_his_amp + 1 hisR_tRNA --> 1 His_RS_dim_inact + 1 amp + 1 hisR_tRNA_his	irreversible	tRNA charging	0.00E+00	1.00E+09	0	8.97E+04	8.97E+04	0	9.17E+04	91685.86	0	8.70E+04	87033.61
hisR_tRNA_CHARGb	charging hisR_tRNA	1 His_RS_2his_2amp + 2 hisR_tRNA --> 1 His_RS_dim_inact + 2 amp + 2 hisR_tRNA_his	irreversible	tRNA charging	0.00E+00	1.00E+09	0	4.48E+04	4.48E+04	0	4.58E+04	45842.93	0	4.35E+04	43516.8
ile1_tRNA_CHARG	charging ile1_tRNA	1 Ile_RS_ile_Amp + 1 ile1_tRNA --> 1 IleS_mono_inact + 1 amp + 1 ile1_tRNA_ile	irreversible	tRNA charging	0.00E+00	1.00E+09	4.22E+04	2.66E+05	2.24E+05	3.11E+04	2.68E+05	237268.6	3.11E+04	2.44E+05	212773.4
ile2_tRNA_CHARG	charging ile2_tRNA	1 Ile_RS_ile_Amp + 1 ile2_tRNA --> 1 IleS_mono_inact + 1 amp + 1 ile2_tRNA_ile	irreversible	tRNA charging	0.00E+00	1.00E+09	2.53E+02	2.35E+04	2.32E+04	1.86E+02	2.88E+04	28643.74	1.86E+02	1.69E+04	16706.63
ileT_to_ile1	ileT_to_ile1	1 ileT_tRNA --> 1 ile1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
ileU_to_ile1	ileU_to_ile1	1 ileU_tRNA --> 1 ile1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
ileV_to_ile1	ileV_to_ile1	1 ileV_tRNA --> 1 ile1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
ileX_to_ile2	ileX_to_ile2	1 ileX_tRNA --> 1 ile2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
ileY_to_ile2	ileY_to_ile2	1 ileY_tRNA --> 1 ile2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
leu1_tRNA_CHARG	charging leu1_tRNA	1 Leu_RS_leu_amp + 1 leu1_tRNA --> 1 LeuS_mono_inact + 1 amp 1 leu1_tRNA_leu	irreversible	tRNA charging	0.00E+00	1.00E+09	4.42E+04	2.86E+05	2.42E+05	3.26E+04	2.97E+05	264787.16	3.26E+04	2.51E+05	218188.56
leu2_tRNA_CHARG	charging leu2_tRNA	1 Leu_RS_leu_amp + 1 leu2_tRNA --> 1 LeuS_mono_inact + 1 amp 1 leu2_tRNA_leu	irreversible	tRNA charging	0.00E+00	1.00E+09	2.11E+03	7.59E+04	7.38E+04	1.55E+03	8.47E+04	83125.76	1.55E+03	6.29E+04	61390.68
leuP_to_leu1	leuP_to_leu1	1 leuP_tRNA --> 1 leu1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
leuQ_to_leu1	leuQ_to_leu1	1 leuQ_tRNA --> 1 leu1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
leuT_to_leu1	leuT_to_leu1	1 leuT_tRNA --> 1 leu1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
leuU_tRNA_CHARG	charging leuU_tRNA	1 Leu_RS_leu_amp + 1 leuU_tRNA --> 1 LeuS_mono_inact + 1 amp + 1 leuU_tRNA_leu	irreversible	tRNA charging	0.00E+00	1.00E+09	5.23E+03	1.07E+05	1.02E+05	3.85E+03	1.18E+05	113903.98	3.85E+03	9.56E+04	91727.67
leuV_to_leu1	leuV_to_leu1	1 leuV_tRNA --> 1 leu1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
leuW_tRNA_CHARG	charging leuW_tRNA	1 Leu_RS_leu_amp + 1 leuW_tRNA --> 1 LeuS_mono_inact + 1 amp + 1 leuW_tRNA_leu	irreversible	tRNA charging	0.00E+00	1.00E+09	8.44E+01	2.16E+04	2.15E+04	6.22E+01	2.54E+04	25300.64	6.22E+01	1.72E+04	17178.58
leuW_to_leu1	leuW_to_leu1	1 leuW_tRNA --> 1 leu1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
leuX_to_leu2	leuX_to_leu2	1 leuX_tRNA --> 1 leu2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
leuZ_tRNA_CHARG	charging leuZ_tRNA	1 Leu_RS_leu_amp + 1 leuZ_tRNA --> 1 LeuS_mono_inact + 1 amp 1 leuZ_tRNA_leu	irreversible	tRNA charging	0.00E+00	1.00E+09	1.52E+03	8.27E+04	8.12E+04	1.12E+03	9.15E+04	90351.38	1.12E+03	5.88E+04	57667.91

leuZ_to_leu2	leuZ_to_leu2	1 leuZ_tRNA --> 1 leu2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
lys1_tRNA1_CHARGa	charging lys1_tRNA (by lysI_RS)	1 LysI_RS_lys_amp + 1 lys1_tRNA --> 1 LysI_RS_dim_inact + 1 amp + 1 lys1_tRNA_lys	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.81E+05	2.81E+05	0	3.00E+05	299732.5	0	2.46E+05	246432.4
lys1_tRNA1_CHARGb	charging lys1_tRNA (by lysI_RS)	1 LysI_RS_2lys_2amp + 2 lys1_tRNA --> 1 LysI_RS_dim_inact + 2 amp + 2 lys1_tRNA_lys	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.40E+05	1.40E+05	0	1.50E+05	149866.2	0	1.23E+05	123216.2
lys1_tRNA2_CHARGa	charging lys1_tRNA (by lysII_RS)	1 LysII_RS_lys_amp + 1 lys1_tRNA --> 1 LysII_RS_dim_inact + 1 amp + 1 lys1_tRNA_lys	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.81E+05	2.81E+05	0	3.00E+05	299732.5	0	2.46E+05	246432.4
lys1_tRNA2_CHARGb	charging lys1_tRNA (by lysII_RS)	1 LysII_RS_2lys_2amp + 2 lys1_tRNA --> 1 LysII_RS_dim_inact + 2 amp + 2 lys1_tRNA_lys	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.40E+05	1.40E+05	0	1.50E+05	149866.2	0	1.23E+05	123216.2
lysQ_to_lys1	lysQ_to_lys1	1 lysQ_tRNA --> 1 lys1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
lysT_to_lys1	lysT_to_lys1	1 lysT_tRNA --> 1 lys1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
lysV_to_lys1	lysV_to_lys1	1 lysV_tRNA --> 1 lys1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
lysW_to_lys1	lysW_to_lys1	1 lysW_tRNA --> 1 lys1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
lysY_to_lys1	lysY_to_lys1	1 lysY_tRNA --> 1 lys1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
lysZ_to_lys1	lysZ_to_lys1	1 lysZ_tRNA --> 1 lys1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
met1_tRNA_CHARG	charging met1_tRNA	1 Met_RS_2met_2amp + 2 met1_tRNA --> 1 Met_RS_dim_inact + 2 amp + 2 met1_tRNA_met	irreversible	tRNA charging	0.00E+00	1.00E+09	7.18E+03	6.48E+04	5.76E+04	5.28E+03	7.07E+04	65408.41	5.28E+03	5.65E+04	51194.18
metT_to_met1	metT_to_met1	1 metT_tRNA --> 1 met1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
metU_to_met1	metU_to_met1	1 metU_tRNA --> 1 met1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
metV_to_fmet	metV_to_fmet	1 metV_tRNA --> 1 fmet_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
metW_to_fmet	metW_to_fmet	1 metW_tRNA --> 1 fmet_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
metY_to_fmet	metY_to_fmet	1 metY_tRNA --> 1 fmet_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	6.95E+01	69.53628	0	2.22E+01	22.15
metZ_to_fmet	metZ_to_fmet	1 metZ_tRNA --> 1 fmet_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
nadht	transport of nadh	1 nadh <==> 1 nadh[e]	reversible	Transport	-1.00E+09	1.00E+09	-1.86E+03	0	1.86E+03	-8.52E+02	0	851.846	-1.69E+02	0	168.674
nadpht	transport of nadph	1 nadph <==> 1 nadph[e]	reversible	Transport	-1.00E+09	1.00E+09	-8.00E+03	0	8.00E+03	-9.61E+03	-4.18E+01	9564.167	-2.37E+03	-4.18E+01	2326.953
nadpt	transport of nadp	1 nadp <==> 1 nadp[e]	reversible	Transport	-1.00E+09	1.00E+09	0	8.00E+03	8.00E+03	4.18E+01	9.61E+03	9564.167	4.18E+01	2.37E+03	2326.953
nadt	transport of nad	1 nad <==> 1 nad[e]	reversible	Transport	-1.00E+09	1.00E+09	0	1.86E+03	1.86E+03	0	8.52E+02	851.846	0	1.69E+02	168.674
nh3t	transport of nh3	1 nh3 <==> 1 nh3[e]	reversible	Transport	-1.00E+09	1.00E+09	0	5.86E+02	5.86E+02	0	3.55E+01	35.48	0	3.55E+01	35.48
phe1_tRNA_CHARG	charging phe1_tRNA	1 Phe_RS_phe_amp + 1 phe1_tRNA --> 1 Phe_RS_tetra_inact + 1 amp + 1 phe1_tRNA_phe	irreversible	tRNA charging	0.00E+00	1.00E+09	2.17E+04	1.73E+05	1.52E+05	1.60E+04	1.76E+05	159664.48	1.60E+04	1.63E+05	147228.38
pheU_to_phe1	pheU_to_phe1	1 pheU_tRNA --> 1 phe1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
pheV_to_phe1	pheV_to_phe1	1 pheV_tRNA --> 1 phe1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
ppit	transport of ppi	1 ppi <==> 1 ppi[e]	reversible	Transport	-1.00E+09	1.00E+09	1.19E+06	8.43E+06	7.24E+06	8.81E+05	8.44E+06	7556292.8	8.81E+05	8.38E+06	7498028.8
pre_Q1_FORMa	7-aminomethyl-7-deazaguanine formation from 7-cyano-7-deazaguanine by QueF	1 QueF_dim + 3 h + 2 nadph + 1 pre_Q0 <==> 1 pre_Q1_QueF_dim_cplx	reversible	tRNA modification	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.90E+02	789.686	0	8.58E+01	85.794
pre_Q1_FORMb	7-aminomethyl-7-deazaguanine formation from 7-cyano-7-deazaguanine by QueF	1 pre_Q1_QueF_dim_cplx --> 1 QueF_dim_inact + 2 nadp + 1 pre_Q1	irreversible	tRNA modification	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.90E+02	789.686	0	8.58E+01	85.794
pro1_tRNA_CHARGa	charging pro1_tRNA	1 Pro_RS_2pro_2amp + 2 pro1_tRNA --> 1 Pro_RS_dim_inact + 2 amp + 2 pro1_tRNA_pro	irreversible	tRNA charging	0.00E+00	1.00E+09	0	6.88E+04	6.88E+04	0	7.54E+04	75430.08	0	6.39E+04	63854.35
pro1_tRNA_CHARGb	charging pro1_tRNA	1 Pro_RS_pro_amp + 1 pro1_tRNA --> 1 Pro_RS_dim_inact + 1 amp + 1 pro1_tRNA_pro	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.38E+05	1.38E+05	0	1.51E+05	150860.2	0	1.28E+05	127708.7
pro2_tRNA_CHARGa	charging pro2_tRNA	1 Pro_RS_2pro_2amp + 2 pro2_tRNA --> 1 Pro_RS_dim_inact + 2 amp + 2 pro2_tRNA_pro	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.69E+04	2.69E+04	0	3.09E+04	30917.33	0	2.10E+04	20972.82
pro2_tRNA_CHARGb	charging pro2_tRNA	1 Pro_RS_pro_amp + 1 pro2_tRNA --> 1 Pro_RS_dim_inact + 1 amp + 1 pro2_tRNA_pro	irreversible	tRNA charging	0.00E+00	1.00E+09	0	5.39E+04	5.39E+04	0	6.18E+04	61834.66	0	4.19E+04	41945.65
proK_to_pro1	proK_to_pro1	1 proK_tRNA --> 1 pro1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
proL_tRNA_CHARGa	charging proL_tRNA	1 Pro_RS_2pro_2amp + 2 proL_tRNA --> 1 Pro_RS_dim_inact + 2 amp + 2 proL_tRNA_pro	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.93E+04	1.93E+04	0	2.28E+04	22836.58	0	1.40E+04	14028.38
proL_tRNA_CHARGb	charging proL_tRNA	1 Pro_RS_pro_amp + 1 proL_tRNA --> 1 Pro_RS_dim_inact + 1 amp + 1 proL_tRNA_pro	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.86E+04	3.86E+04	0	4.57E+04	45673.17	0	2.81E+04	28056.76
proL_to_pro2	proL_to_pro2	1 proL_tRNA --> 1 pro2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
proM_tRNA_CHARGa	charging proM_tRNA	1 Pro_RS_2pro_2amp + 2 proM_tRNA --> 1 Pro_RS_dim_inact + 2 amp + 2 proM_tRNA_pro	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.62E+04	2.62E+04	0	3.07E+04	30666.14	0	2.22E+04	22229.43
proM_tRNA_CHARGb	charging proM_tRNA	1 Pro_RS_pro_amp + 1 proM_tRNA --> 1 Pro_RS_dim_inact + 1 amp + 1 proM_tRNA_pro	irreversible	tRNA charging	0.00E+00	1.00E+09	0	5.23E+04	5.23E+04	0	6.13E+04	61332.29	0	4.45E+04	44458.87
proM_to_pro1	proM_to_pro1	1 proM_tRNA --> 1 pro1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
proM_to_pro2	proM_to_pro2	1 proM_tRNA --> 1 pro2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
pydx5pt	transport of pydx5p	1 pydx5p <==> 1 pydx5p[e]	reversible	Transport	-1.00E+09	1.00E+09	-1.30E+03	0	1.30E+03	-2.19E+03	0	2188.119	-1.43E+02	0	142.705
rrfA_RENAME	TEMP_rrfA	1 b3855_RNA --> 1 rrfA	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
rrfBa_RENAME	TEMP_rrfBa	1 b3971_RNA --> 1 rrfB	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
rrfBb_RENAME	TEMP_rrfBb	1 b3971_v1_RNA --> 1 rrfB	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
rrfCa_RENAME	TEMP_rrfCa	1 b3759_RNA --> 1 rrfC	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
rrfCb_RENAME	TEMP_rrfCb	1 b3759_v1_RNA --> 1 rrfC	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
rrfDa_RENAME	TEMP_rrfDa	1 b3274_RNA --> 1 rrfD	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
rrfDb_RENAME	TEMP_rrfDb	1 b3274_v1_RNA --> 1 rrfD	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
rrfE_RENAME	TEMP_rrfE	1 b4010_RNA --> 1 rrfE	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
rrfFa_RENAME	TEMP_rrfFa	1 b3272_RNA --> 1 rrfF	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
rrfFb_RENAME	TEMP_rrfFb	1 b3272_v1_RNA --> 1 rrfF	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
rrfGa_RENAME	TEMP_rrfGa	1 b2588_RNA --> 1 rrfG	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
rrfGb_RENAME	TEMP_rrfGb	1 b2588_v1_RNA --> 1 rrfG	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
rrfHa_RENAME	TEMP_rrfHa	1 b0205_RNA --> 1 rrfH	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
rrfHb_RENAME	TEMP_rrfHb	1 b0205_v1_RNA --> 1 rrfH	irreversible	rRNA formation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
sec_tRNA_CHARG1a	charging sec_tRNA	1 Ser_RS_2ser_2amp + 2 selC_tRNA --> 1 Ser_RS_dim_inact + 2 amp + 2 sec_tRNA_ser	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.19E+02	3.19E+02	0	6.85E+00	6.85	0	6.85E+00	6.85
sec_tRNA_CHARG1b	charging sec_tRNA	1 Ser_RS_ser_amp + 1 selC_tRNA --> 1 Ser_RS_dim_inact + 1 amp + 1 sec_tRNA_ser	irreversible	tRNA charging	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
sec_tRNA_CHARG2a	conversion of 5 sec_tRNA_ser to 5 sec_tRNA_sec	1 SelA_deca + 5 sec_tRNA_ser --> 1 5_sec_tRNA_ser_SelA_deca_cplx + 5 h2o	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.28E+02	1.28E+02	0	2.74E+00	2.74	0	2.74E+00	2.74
sec_tRNA_CHARG2b	conversion of 5 sec_tRNA_ser to 5 sec_tRNA_sec	1 5_sec_tRNA_ser_SelA_deca_cplx + 5 h2o + 5 selnp --> 1 SelA_deca_inact + 5 h + 5 pi + 5 sec_tRNA_sec	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.28E+02	1.28E+02	0	2.74E+00	2.74	0	2.74E+00	2.74

sec_tRNA_CHARG3a	conversion of 4 sec_tRNA_ser to 4 sec_tRNA_sec	1 SelA_deca + 4 sec_tRNA_ser --> 1 4_sec_tRNA_ser_SelA_deca_cplx + 4 h2o	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.60E+02	1.60E+02	0	3.43E+00	3.425	0	3.43E+00	3.425
sec_tRNA_CHARG3b	conversion of 4 sec_tRNA_ser to 4 sec_tRNA_sec	1 4_sec_tRNA_ser_SelA_deca_cplx + 4 h2o + 4 selnp --> 1 SelA_deca_inact + 4 h + 4 pi + 4 sec_tRNA_sec	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.60E+02	1.60E+02	0	3.43E+00	3.425	0	3.43E+00	3.425
sec_tRNA_CHARG4a	conversion of 3 sec_tRNA_ser to 3 sec_tRNA_sec	1 SelA_deca + 3 sec_tRNA_ser --> 1 3_sec_tRNA_ser_SelA_deca_cplx + 3 h2o	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.13E+02	2.13E+02	0	4.57E+00	4.566667	0	4.57E+00	4.566667
sec_tRNA_CHARG4b	conversion of 3 sec_tRNA_ser to 3 sec_tRNA_sec	1 3_sec_tRNA_ser_SelA_deca_cplx + 3 h2o + 3 selnp --> 1 SelA_deca_inact + 3 h + 3 pi + 3 sec_tRNA_sec	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.13E+02	2.13E+02	0	4.57E+00	4.566667	0	4.57E+00	4.566667
sec_tRNA_CHARG5a	conversion of 2 sec_tRNA_ser to 2 sec_tRNA_sec	1 SelA_deca + 2 sec_tRNA_ser --> 1 2_sec_tRNA_ser_SelA_deca_cplx + 2 h2o	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.19E+02	3.19E+02	0	6.85E+00	6.85	0	6.85E+00	6.85
sec_tRNA_CHARG5b	conversion of 2 sec_tRNA_ser to 2 sec_tRNA_sec	1 2_sec_tRNA_ser_SelA_deca_cplx + 2 h2o + 2 selnp --> 1 SelA_deca_inact + 2 h + 2 pi + 2 sec_tRNA_sec	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.19E+02	3.19E+02	0	6.85E+00	6.85	0	6.85E+00	6.85
sec_tRNA_CHARG6a	conversion of 1 sec_tRNA_ser to 1 sec_tRNA_sec	1 SelA_deca + 1 sec_tRNA_ser --> 1 1_sec_tRNA_ser_SelA_deca_cplx + 1 h2o	irreversible	tRNA charging	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
sec_tRNA_CHARG6b	conversion of 1 sec_tRNA_ser to 1 sec_tRNA_sec	1 1_sec_tRNA_ser_SelA_deca_cplx + 1 h2o + 1 selnp --> 1 SelA_deca_inact + 1 h + 1 pi + 1 sec_tRNA_sec	irreversible	tRNA charging	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
ser1_tRNA_CHARGa	charging ser1_tRNA	1 Ser_RS_2ser_2amp + 2 ser1_tRNA --> 1 Ser_RS_dim_inact + 2 amp + 2 ser1_tRNA_ser	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.73E+04	2.73E+04	0	2.94E+04	29393.06	0	2.41E+04	24136.89
ser1_tRNA_CHARGb	charging ser1_tRNA	1 Ser_RS_ser_amp + 1 ser1_tRNA --> 1 Ser_RS_dim_inact + 1 amp + 1 ser1_tRNA_ser	irreversible	tRNA charging	0.00E+00	1.00E+09	0	5.45E+04	5.45E+04	0	5.88E+04	58786.13	0	4.83E+04	48273.77
ser2_tRNA_CHARGa	charging ser2_tRNA	1 Ser_RS_2ser_2amp + 2 ser2_tRNA --> 1 Ser_RS_dim_inact + 2 amp + 2 ser2_tRNA_ser	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.59E+04	3.59E+04	0	3.75E+04	37459.52	0	3.26E+04	32571.01
ser2_tRNA_CHARGb	charging ser2_tRNA	1 Ser_RS_ser_amp + 1 ser2_tRNA --> 1 Ser_RS_dim_inact + 1 amp + 1 ser2_tRNA_ser	irreversible	tRNA charging	0.00E+00	1.00E+09	0	7.19E+04	7.19E+04	0	7.49E+04	74919.04	0	6.51E+04	65142.03
ser3_tRNA_CHARGa	charging ser3_tRNA	1 Ser_RS_2ser_2amp + 2 ser3_tRNA --> 1 Ser_RS_dim_inact + 2 amp + 2 ser3_tRNA_ser	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.19E+04	2.19E+04	0	2.55E+04	25471.68	0	1.80E+04	18002.98
ser3_tRNA_CHARGb	charging ser3_tRNA	1 Ser_RS_ser_amp + 1 ser3_tRNA --> 1 Ser_RS_dim_inact + 1 amp + 1 ser3_tRNA_ser	irreversible	tRNA charging	0.00E+00	1.00E+09	0	4.39E+04	4.39E+04	0	5.09E+04	50943.37	0	3.60E+04	36005.97
serT_tRNA_CHARGa	charging serT_tRNA	1 Ser_RS_2ser_2amp + 2 serT_tRNA --> 1 Ser_RS_dim_inact + 2 amp + 2 serT_tRNA_ser	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.70E+04	1.70E+04	0	1.97E+04	19717.82	0	1.41E+04	14092.78
serT_tRNA_CHARGb	charging serT_tRNA	1 Ser_RS_ser_amp + 1 serT_tRNA --> 1 Ser_RS_dim_inact + 1 amp + 1 serT_tRNA_ser	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.41E+04	3.41E+04	0	3.94E+04	39435.64	0	2.82E+04	28185.57
serT_to_ser2	serT_to_ser2	1 serT_tRNA --> 1 ser2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
serT_to_ser3	serT_to_ser3	1 serT_tRNA --> 1 ser3_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
serU_to_ser3	serU_to_ser3	1 serU_tRNA --> 1 ser3_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
serV_tRNA_CHARGa	charging serV_tRNA	1 Ser_RS_2ser_2amp + 2 serV_tRNA --> 1 Ser_RS_dim_inact + 2 amp + 2 serV_tRNA_ser	irreversible	tRNA charging	0.00E+00	1.00E+09	0	5.70E+04	5.70E+04	0	6.20E+04	62013.6	0	5.20E+04	52042.52
serV_tRNA_CHARGb	charging serV_tRNA	1 Ser_RS_ser_amp + 1 serV_tRNA --> 1 Ser_RS_dim_inact + 1 amp + 1 serV_tRNA_ser	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.14E+05	1.14E+05	0	1.24E+05	124027.2	0	1.04E+05	104085
serW_to_ser1	serW_to_ser1	1 serW_tRNA --> 1 ser1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
serW_to_ser2	serW_to_ser2	1 serW_tRNA --> 1 ser2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
serX_to_ser1	serX_to_ser1	1 serX_tRNA --> 1 ser1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
serX_to_ser2	serX_to_ser2	1 serX_tRNA --> 1 ser2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
sink_AcT_EF-TU	sink_AcT_EF-TU	1 AcT_EF-TU <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_AcT_tRNA_pos_34_ac4C	sink_AcT_tRNA_pos_34_ac4C	1 AcT_tRNA_pos_34_ac4C <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_AcpT_tRNA_pos_47_acp3U	sink_AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_DU_23S_2449	sink_DU_23S_2449	1 DU_23S_2449 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_EoR_tRNA_pos34_Q	sink_EoR_tRNA_pos34_Q	1 EoR_tRNA_pos34_Q <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_HyL_tRNA_pos_34_ho5U	sink_HyL_tRNA_pos_34_ho5U	1 HyL_tRNA_pos_34_ho5U <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeST_S12	sink_MeST_S12	1 MeST_S12 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_16S_1402	sink_MeT_16S_1402	1 MeT_16S_1402 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_16S_1407	sink_MeT_16S_1407	1 MeT_16S_1407 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_16S_1516	sink_MeT_16S_1516	1 MeT_16S_1516 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_16S_527	sink_MeT_16S_527	1 MeT_16S_527 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_16S_966	sink_MeT_16S_966	1 MeT_16S_966 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_23S_1618	sink_MeT_23S_1618	1 MeT_23S_1618 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_23S_1835	sink_MeT_23S_1835	1 MeT_23S_1835 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_23S_1962	sink_MeT_23S_1962	1 MeT_23S_1962 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_23S_2030	sink_MeT_23S_2030	1 MeT_23S_2030 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_23S_2069	sink_MeT_23S_2069	1 MeT_23S_2069 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_23S_2445	sink_MeT_23S_2445	1 MeT_23S_2445 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_23S_2498	sink_MeT_23S_2498	1 MeT_23S_2498 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_23S_2503	sink_MeT_23S_2503	1 MeT_23S_2503 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_EF-TU	sink_MeT_EF-TU	1 MeT_EF-TU <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_L16	sink_MeT_L16	1 MeT_L16 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_L33	sink_MeT_L33	1 MeT_L33 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_L7/L12	sink_MeT_L7/L12	1 MeT_L7/L12 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_S11	sink_MeT_S11	1 MeT_S11 <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_tRNA_pos_32_Cm	sink_MeT_tRNA_pos_32_Cm	1 MeT_tRNA_pos_32_Cm <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_tRNA_pos_32_Um	sink_MeT_tRNA_pos_32_Um	1 MeT_tRNA_pos_32_Um <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_tRNA_pos_37_m2A	sink_MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_tRNA_pos_37_m6A	sink_MeT_tRNA_pos_37_m6A	1 MeT_tRNA_pos_37_m6A <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_MeT_tRNA_pos_37_m6t6A	sink_MeT_tRNA_pos_37_m6t6A	1 MeT_tRNA_pos_37_m6t6A <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_RNase_m16	sink_RNase_m16	1 RNase_m16 <==>	reversible	Sinks	-1.00E+09	1.00E+09	-1000000000	0	1.00E+09	-1000000000	0	1000000000	-1000000000	0	1E+09
sink_RNase_m23	sink_RNase_m23	1 RNase_m23 <==>	reversible	Sinks	-1.00E+09	1.00E+09	-1000000000	0	1.00E+09	-1000000000	0	1000000000	-1000000000	0	1E+09
sink_RNase_m5	sink_RNase_m5	1 RNase_m5 <==>	reversible	Sinks	-1.00E+09	1.00E+09	-1000000000	0	1.00E+09	-1000000000	0	1000000000	-1000000000	0	1E+09
sink_Up_tRNA_pos_37_t6A	sink_Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A <==>	reversible	Sinks	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
sink_preQ0	sink_preQ0	1 pre_Q0 <==>	reversible	Sinks	-1.00E+09	1.00E+09	-1.77E+03	0	1.77E+03	-7.90E+02	0	789.686	-8.58E+01	0	85.794
thr1_tRNA_CHARGa	charging thr1_tRNA	1 Thr_RS_2thr_2amp + 2 thr1_tRNA --> 1 Thr_RS_dim_inact + 2 amp + 2 thr1_tRNA_thr	irreversible	tRNA charging	0.00E+00	1.00E+09	0	6.35E+04	6.35E+04	0	6.87E+04	68679.42	0	5.77E+04	57688.46
thr1_tRNA_CHARGb	charging thr1_tRNA	1 Thr_RS_thr_amp + 1 thr1_tRNA --> 1 Thr_RS_dim_inact + 1 amp + 1 thr1_tRNA_thr	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.27E+05	1.27E+05	0	1.37E+05	137358.8	0	1.15E+05	115376.9
thr2_tRNA_CHARGa	charging thr2_tRNA	1 Thr_RS_2thr_2amp + 2 thr2_tRNA --> 1 Thr_RS_dim_inact + 2 amp + 2 thr2_tRNA_thr	irreversible	tRNA charging	0.00E+00	1.00E+09	0	4.23E+04	4.23E+04	0	4.33E+04	43343.43	0	3.90E+04	39021.08
thr2_tRNA_CHARGb	charging thr2_tRNA	1 Thr_RS_thr_amp + 1 thr2_tRNA --> 1 Thr_RS_dim_inact + 1 amp + 1 thr2_tRNA_thr	irreversible	tRNA charging	0.00E+00	1.00E+09	0	8.45E+04	8.45E+04	0	8.67E+04	86686.86	0	7.80E+04	78042.17
thr3_tRNA_CHARGB	charging thr3_tRNA	1 Thr_RS_thr_amp + 1 thr3_tRNA --> 1 Thr_RS_dim_inact + 1 amp + 1 thr3_tRNA_thr	irreversible	tRNA charging	0.00E+00	1.00E+09	0	7.89E+04	7.89E+04	0	8.73E+04	87280.08	0	6.83E+04	68345.4
thr3_tRNA_CHARGa	charging thr3_tRNA	1 Thr_RS_2thr_2amp + 2 thr3_tRNA --> 1 Thr_RS_dim_inact + 2 amp + 2 thr3_tRNA_thr	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.95E+04	3.95E+04	0	4.36E+04	43640.04	0	3.42E+04	34172.7
thrT_to_thr1	thrT_to_thr1	1 thrT_tRNA --> 1 thr1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
thrT_to_thr2	thrT_to_thr2	1 thrT_tRNA --> 1 thr2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
thrU_tRNA_CHARGB	charging thrU_tRNA	1 Thr_RS_thr_amp + 1 thrU_tRNA --> 1 Thr_RS_dim_inact + 1 amp + 1 thrU_tRNA_thr	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.87E+04	3.87E+04	0	4.61E+04	46101.37	0	2.97E+04	29660.2
thrU_tRNA_CHARGa	charging thrU_tRNA	1 Thr_RS_2thr_2amp + 2 thrU_tRNA --> 1 Thr_RS_dim_inact + 2 amp + 2 thrU_tRNA_thr	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.93E+04	1.93E+04	0	2.31E+04	23050.69	0	1.48E+04	14830.1

thrU_to_thr2	thrU_to_thr2	1 thrU_tRNA --> 1 thr2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
thrU_to_thr3	thrU_to_thr3	1 thrU_tRNA --> 1 thr3_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
thrV_to_thr1	thrV_to_thr1	1 thrV_tRNA --> 1 thr1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
thrV_to_thr2	thrV_to_thr2	1 thrV_tRNA --> 1 thr2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
thrW_to_thr3	thrW_to_thr3	1 thrW_tRNA --> 1 thr3_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
tl_elo_b0014_18_rib1	Translation elongation 1 b0014 18 ribosome(s)	11466 EF-G.GTP + 1134 EF-Tu.GTP.ala1-tRNA + 126 EF-Tu.GTP.ala2-tRNA + 450 EF-Tu.GTP.arg1-tRNA + 468 EF-Tu.GTP.asn1-tRNA + 990 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.cysT-tRNA + 630 EF-Tu.GTP.gln1-tRNA + 36 EF-Tu.GTP.gln2-tRNA + 900 EF-Tu.GTP.glu1-tRNA + 828 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyU-tRNA + 144 EF-Tu.GTP.hisR-tRNA + 774 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.ile2-tRNA + 810 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuW-tRNA + 900 EF-Tu.GTP.lys1-tRNA + 252 EF-Tu.GTP.met1-tRNA + 270 EF-Tu.GTP.phe1-tRNA + 342 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 36 EF-Tu.GTP.proM-tRNA + 108 EF-Tu.GTP.ser1-tRNA + 252 EF-Tu.GTP.ser2-tRNA + 90 EF-Tu.GTP.serV-tRNA + 396 EF-Tu.GTP.thr1-tRNA + 324 EF-Tu.GTP.thr2-tRNA + 72 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.trpT-tRNA + 126 EF-Tu.GTP.tyr1-tRNA + 360 EF-Tu.GTP.val1-tRNA + 54 EF-Tu.GTP.val2-tRNA + 432 EF-Tu.GTP.val3-tRNA + 57330 mg2 + 1 rib_ini_b0014_18 --> 1 rib_70_elo1_b0014_18_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_elo_b0014_18_rib2	Translation elongation 2 b0014 18 ribosome(s)	11448 h2o + 1 rib_70_elo1_b0014_18_cplx --> 11448 EF-G.GDP + 11448 EF-Tu.GDP + 1134 ala1_tRNA + 126 ala2_tRNA + 450 arg1_tRNA + 468 asn1_tRNA + 990 asp1_tRNA + 18 cysT_tRNA + 18 fmet_tRNA + 630 gln1_tRNA + 36 gln2_tRNA + 900 glu1_tRNA + 828 gly1_tRNA + 18 glyU_tRNA + 22896 h + 144 hisR_tRNA + 774 ile1_tRNA + 18 ile2_tRNA + 810 leu1_tRNA + 18 leuU_tRNA + 36 leuW_tRNA + 882 lys1_tRNA + 252 met1_tRNA + 57330 mg2 + 270 phe1_tRNA + 22896 pi + 342 pro1_tRNA + 36 pro2_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b0014_18_cplx + 108 ser1_tRNA + 252 ser2_tRNA + 90 serV_tRNA + 396 thr1_tRNA + 324 thr2_tRNA + 72 thr3_tRNA + 18 trpT_tRNA + 126 tyr1_tRNA + 360 val1_tRNA + 54 val2_tRNA + 432 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_elo_b0014_1_rib1	Translation elongation 1 b0014 1 ribosome(s)	637 EF-G.GTP + 63 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 25 EF-Tu.GTP.arg1-tRNA + 26 EF-Tu.GTP.asn1-tRNA + 55 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 35 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 50 EF-Tu.GTP.glu1-tRNA + 46 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 43 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 45 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 50 EF-Tu.GTP.lys1-tRNA + 14 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 19 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 14 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serV-tRNA + 22 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 24 EF-Tu.GTP.val3-tRNA + 3185 mg2 + 1 rib_ini_b0014_1 --> 1 rib_70_elo1_b0014_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_elo_b0014_1_rib2	Translation elongation 2 b0014 1 ribosome(s)	636 h2o + 1 rib_70_elo1_b0014_1_cplx --> 636 EF-G.GDP + 636 EF-Tu.GDP + 63 ala1_tRNA + 7 ala2_tRNA + 25 arg1_tRNA + 26 asn1_tRNA + 55 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 35 gln1_tRNA + 2 gln2_tRNA + 50 glu1_tRNA + 46 gly1_tRNA + 1 glyU_tRNA + 1272 h + 8 hisR_tRNA + 43 ile1_tRNA + 1 ile2_tRNA + 45 leu1_tRNA + 1 leuU_tRNA + 2 leuW_tRNA + 49 lys1_tRNA + 14 met1_tRNA + 3185 mg2 + 15 phe1_tRNA + 1272 pi + 19 pro1_tRNA + 2 pro2_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b0014_1_cplx + 6 ser1_tRNA + 14 ser2_tRNA + 5 serV_tRNA + 22 thr1_tRNA + 18 thr2_tRNA + 4 thr3_tRNA + 1 trpT_tRNA + 7 tyr1_tRNA + 20 val1_tRNA + 3 val2_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_elo_b0014_37_rib1	Translation elongation 1 b0014 37 ribosome(s)	23569 EF-G.GTP + 2331 EF-Tu.GTP.ala1-tRNA + 259 EF-Tu.GTP.ala2-tRNA + 925 EF-Tu.GTP.arg1-tRNA + 962 EF-Tu.GTP.asn1-tRNA + 2035 EF-Tu.GTP.asp1-tRNA + 37 EF-Tu.GTP.cysT-tRNA + 1295 EF-Tu.GTP.gln1-tRNA + 74 EF-Tu.GTP.gln2-tRNA + 1850 EF-Tu.GTP.glu1-tRNA + 1702 EF-Tu.GTP.gly1-tRNA + 37 EF-Tu.GTP.glyU-tRNA + 296 EF-Tu.GTP.hisR-tRNA + 1591 EF-Tu.GTP.ile1-tRNA + 37 EF-Tu.GTP.ile2-tRNA + 1665 EF-Tu.GTP.leu1-tRNA + 37 EF-Tu.GTP.leuU-tRNA + 74 EF-Tu.GTP.leuW-tRNA + 1850 EF-Tu.GTP.lys1-tRNA + 518 EF-Tu.GTP.met1-tRNA + 555 EF-Tu.GTP.phe1-tRNA + 703 EF-Tu.GTP.pro1-tRNA + 74 EF-Tu.GTP.pro2-tRNA + 74 EF-Tu.GTP.proM-tRNA + 222 EF-Tu.GTP.ser1-tRNA + 518 EF-Tu.GTP.ser2-tRNA + 185 EF-Tu.GTP.serV-tRNA + 814 EF-Tu.GTP.thr1-tRNA + 666 EF-Tu.GTP.thr2-tRNA + 148 EF-Tu.GTP.thr3-tRNA + 37 EF-Tu.GTP.trpT-tRNA + 259 EF-Tu.GTP.tyr1-tRNA + 740 EF-Tu.GTP.val1-tRNA + 111 EF-Tu.GTP.val2-tRNA + 888 EF-Tu.GTP.val3-tRNA + 117845 mg2 + 1 rib_ini_b0014_37 --> 1 rib_70_elo1_b0014_37_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_elo_b0014_37_rib2	Translation elongation 2 b0014 37 ribosome(s)	23532 h2o + 1 rib_70_elo1_b0014_37_cplx --> 23532 EF-G.GDP + 23532 EF-Tu.GDP + 2331 ala1_tRNA + 259 ala2_tRNA + 925 arg1_tRNA + 962 asn1_tRNA + 2035 asp1_tRNA + 37 cysT_tRNA + 37 fmet_tRNA + 1295 gln1_tRNA + 74 gln2_tRNA + 1850 glu1_tRNA + 1702 gly1_tRNA + 37 glyU_tRNA + 47064 h + 296 hisR_tRNA + 1591 ile1_tRNA + 37 ile2_tRNA + 1665 leu1_tRNA + 37 leuU_tRNA + 74 leuW_tRNA + 1813 lys1_tRNA + 518 met1_tRNA + 117845 mg2 + 555 phe1_tRNA + 47064 pi + 703 pro1_tRNA + 74 pro2_tRNA + 74 proM_tRNA + 1 rib_70_elo2_b0014_37_cplx + 222 ser1_tRNA + 518 ser2_tRNA + 185 serV_tRNA + 814 thr1_tRNA + 666 thr2_tRNA + 148 thr3_tRNA + 37 trpT_tRNA + 259 tyr1_tRNA + 740 val1_tRNA + 111 val2_tRNA + 888 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861

tl_elo_b0015_11_rib1	Translation elongation 1 b0015 11 ribosome(s)	4125 EF-G.GTP + 264 EF-Tu.GTP.ala1-tRNA + 33 EF-Tu.GTP.ala2-tRNA + 275 EF-Tu.GTP.arg1-tRNA + 11 EF-Tu.GTP.argU-tRNA + 11 EF-Tu.GTP.argW-tRNA + 88 EF-Tu.GTP.asn1-tRNA + 220 EF-Tu.GTP.asp1-tRNA + 110 EF-Tu.GTP.cysT-tRNA + 187 EF-Tu.GTP.gln1-tRNA + 66 EF-Tu.GTP.gln2-tRNA + 341 EF-Tu.GTP.glu1-tRNA + 539 EF-Tu.GTP.gly1-tRNA + 33 EF-Tu.GTP.glyT-tRNA + 11 EF-Tu.GTP.glyU-tRNA + 110 EF-Tu.GTP.hisR-tRNA + 143 EF-Tu.GTP.ile1-tRNA + 165 EF-Tu.GTP.leu1-tRNA + 11 EF-Tu.GTP.leu2-tRNA + 44 EF-Tu.GTP.leuU-tRNA + 11 EF-Tu.GTP.leuW-tRNA + 22 EF-Tu.GTP.leuZ-tRNA + 286 EF-Tu.GTP.lys1-tRNA + 66 EF-Tu.GTP.met1-tRNA + 187 EF-Tu.GTP.phe1-tRNA + 132 EF-Tu.GTP.pro1-tRNA + 11 EF-Tu.GTP.pro2-tRNA + 33 EF-Tu.GTP.proM-tRNA + 22 EF-Tu.GTP.ser1-tRNA + 22 EF-Tu.GTP.ser2-tRNA + 11 EF-Tu.GTP.ser3-tRNA + 11 EF-Tu.GTP.serT-tRNA + 66 EF-Tu.GTP.serV-tRNA + 110 EF-Tu.GTP.thr1-tRNA + 33 EF-Tu.GTP.thr2-tRNA + 22 EF-Tu.GTP.thr3-tRNA + 33 EF-Tu.GTP.thrU-tRNA + 110 EF-Tu.GTP.tyr1-tRNA + 99 EF-Tu.GTP.val1-tRNA + 66 EF-Tu.GTP.val2-tRNA + 110 EF-Tu.GTP.val3-tRNA + 20625 mg2 + 1 rib_ini_b0015_11 --> 1 rib_70_elo1_b0015_11_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_elo_b0015_11_rib2	Translation elongation 2 b0015 11 ribosome(s)	4114 h2o + 1 rib_70_elo1_b0015_11_cplx --> 4114 EF-G.GDP + 4114 EF-Tu.GDP + 264 ala1_tRNA + 33 ala2_tRNA + 264 arg1_tRNA + 11 argU_tRNA + 11 argW_tRNA + 88 asn1_tRNA + 220 asp1_tRNA + 110 cysT_tRNA + 11 fmet_tRNA + 187 gln1_tRNA + 66 gln2_tRNA + 341 glu1_tRNA + 539 gly1_tRNA + 33 glyT_tRNA + 11 glyU_tRNA + 8228 h + 110 hisR_tRNA + 143 ile1_tRNA + 165 leu1_tRNA + 11 leu2_tRNA + 44 leuU_tRNA + 11 leuW_tRNA + 22 leuZ_tRNA + 286 lys1_tRNA + 66 met1_tRNA + 20625 mg2 + 187 phe1_tRNA + 8228 pi + 132 pro1_tRNA + 11 pro2_tRNA + 33 proM_tRNA + 1 rib_70_elo2_b0015_11_cplx + 22 ser1_tRNA + 22 ser2_tRNA + 11 ser3_tRNA + 11 serT_tRNA + 66 serV_tRNA + 110 thr1_tRNA + 33 thr2_tRNA + 22 thr3_tRNA + 33 thrU_tRNA + 110 tyr1_tRNA + 99 val1_tRNA + 66 val2_tRNA + 110 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_elo_b0015_1_rib1	Translation elongation 1 b0015 1 ribosome(s)	375 EF-G.GTP + 24 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 25 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argW-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 20 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.cysT-tRNA + 17 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 31 EF-Tu.GTP.glu1-tRNA + 49 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 13 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 26 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 17 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 1875 mg2 + 1 rib_ini_b0015_1 --> 1 rib_70_elo1_b0015_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_elo_b0015_1_rib2	Translation elongation 2 b0015 1 ribosome(s)	374 h2o + 1 rib_70_elo1_b0015_1_cplx --> 374 EF-G.GDP + 374 EF-Tu.GDP + 24 ala1_tRNA + 3 ala2_tRNA + 24 arg1_tRNA + 1 argU_tRNA + 1 argW_tRNA + 8 asn1_tRNA + 20 asp1_tRNA + 10 cysT_tRNA + 1 fmet_tRNA + 17 gln1_tRNA + 6 gln2_tRNA + 31 glu1_tRNA + 49 gly1_tRNA + 3 glyT_tRNA + 1 glyU_tRNA + 748 h + 10 hisR_tRNA + 13 ile1_tRNA + 15 leu1_tRNA + 1 leu2_tRNA + 4 leuU_tRNA + 1 leuW_tRNA + 2 leuZ_tRNA + 26 lys1_tRNA + 6 met1_tRNA + 1875 mg2 + 17 phe1_tRNA + 748 pi + 12 pro1_tRNA + 1 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b0015_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 6 serV_tRNA + 10 thr1_tRNA + 3 thr2_tRNA + 2 thr3_tRNA + 3 thrU_tRNA + 10 tyr1_tRNA + 9 val1_tRNA + 6 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_elo_b0015_22_rib1	Translation elongation 1 b0015 22 ribosome(s)	8250 EF-G.GTP + 528 EF-Tu.GTP.ala1-tRNA + 66 EF-Tu.GTP.ala2-tRNA + 550 EF-Tu.GTP.arg1-tRNA + 22 EF-Tu.GTP.argU-tRNA + 22 EF-Tu.GTP.argW-tRNA + 176 EF-Tu.GTP.asn1-tRNA + 440 EF-Tu.GTP.asp1-tRNA + 220 EF-Tu.GTP.cysT-tRNA + 374 EF-Tu.GTP.gln1-tRNA + 132 EF-Tu.GTP.gln2-tRNA + 682 EF-Tu.GTP.glu1-tRNA + 1078 EF-Tu.GTP.gly1-tRNA + 66 EF-Tu.GTP.glyT-tRNA + 22 EF-Tu.GTP.glyU-tRNA + 220 EF-Tu.GTP.hisR-tRNA + 286 EF-Tu.GTP.ile1-tRNA + 330 EF-Tu.GTP.leu1-tRNA + 22 EF-Tu.GTP.leu2-tRNA + 88 EF-Tu.GTP.leuU-tRNA + 22 EF-Tu.GTP.leuW-tRNA + 44 EF-Tu.GTP.leuZ-tRNA + 572 EF-Tu.GTP.lys1-tRNA + 132 EF-Tu.GTP.met1-tRNA + 374 EF-Tu.GTP.phe1-tRNA + 264 EF-Tu.GTP.pro1-tRNA + 22 EF-Tu.GTP.pro2-tRNA + 66 EF-Tu.GTP.proM-tRNA + 44 EF-Tu.GTP.ser1-tRNA + 44 EF-Tu.GTP.ser2-tRNA + 22 EF-Tu.GTP.ser3-tRNA + 22 EF-Tu.GTP.serT-tRNA + 132 EF-Tu.GTP.serV-tRNA + 220 EF-Tu.GTP.thr1-tRNA + 66 EF-Tu.GTP.thr2-tRNA + 44 EF-Tu.GTP.thr3-tRNA + 66 EF-Tu.GTP.thrU-tRNA + 220 EF-Tu.GTP.tyr1-tRNA + 198 EF-Tu.GTP.val1-tRNA + 132 EF-Tu.GTP.val2-tRNA + 220 EF-Tu.GTP.val3-tRNA + 41250 mg2 + 1 rib_ini_b0015_22 --> 1 rib_70_elo1_b0015_22_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_elo_b0015_22_rib2	Translation elongation 2 b0015 22 ribosome(s)	8228 h2o + 1 rib_70_elo1_b0015_22_cplx --> 8228 EF-G.GDP + 8228 EF-Tu.GDP + 528 ala1_tRNA + 66 ala2_tRNA + 528 arg1_tRNA + 22 argU_tRNA + 22 argW_tRNA + 176 asn1_tRNA + 440 asp1_tRNA + 220 cysT_tRNA + 22 fmet_tRNA + 374 gln1_tRNA + 132 gln2_tRNA + 682 glu1_tRNA + 1078 gly1_tRNA + 66 glyT_tRNA + 22 glyU_tRNA + 16456 h + 220 hisR_tRNA + 286 ile1_tRNA + 330 leu1_tRNA + 22 leu2_tRNA + 88 leuU_tRNA + 22 leuW_tRNA + 44 leuZ_tRNA + 572 lys1_tRNA + 132 met1_tRNA + 41250 mg2 + 374 phe1_tRNA + 16456 pi + 264 pro1_tRNA + 22 pro2_tRNA + 66 proM_tRNA + 1 rib_70_elo2_b0015_22_cplx + 44 ser1_tRNA + 44 ser2_tRNA + 22 ser3_tRNA + 22 serT_tRNA + 132 serV_tRNA + 220 thr1_tRNA + 66 thr2_tRNA + 44 thr3_tRNA + 66 thrU_tRNA + 220 tyr1_tRNA + 198 val1_tRNA + 132 val2_tRNA + 22 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401

tl_elo_b0023_1_rib1	Translation elongation 1 b0023 1 ribosome(s)	86 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 2 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 3 EF-Tu.GTP.glu1-tRNA + 2 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 1 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 430 mg2 + 1 rib_ini_b0023_1 --> 1 rib_70_elo1_b0023_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b0023_1_rib2	Translation elongation 2 b0023 1 ribosome(s)	85 h2o + 1 rib_70_elo1_b0023_1_cplx --> 85 EF-G.GDP + 85 EF-Tu.GDP + 17 ala1_tRNA + 1 ala2_tRNA + 7 arg1_tRNA + 6 asn1_tRNA + 2 asp1_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 1 gln2_tRNA + 3 glu1_tRNA + 2 gly1_tRNA + 170 h + 3 hisR_tRNA + 7 ile1_tRNA + 3 leu1_tRNA + 14 lys1_tRNA + 3 met1_tRNA + 430 mg2 + 2 phe1_tRNA + 170 pi + 1 pro1_tRNA + 1 rib_70_elo2_b0023_1_cplx + 2 ser2_tRNA + 1 serT_tRNA + 1 serV_tRNA + 2 thr2_tRNA + 1 tyr1_tRNA + 2 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b0023_2_rib1	Translation elongation 1 b0023 2 ribosome(s)	172 EF-G.GTP + 36 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 4 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 14 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 28 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serT-tRNA + 2 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 860 mg2 + 1 rib_ini_b0023_2 --> 1 rib_70_elo1_b0023_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b0023_2_rib2	Translation elongation 2 b0023 2 ribosome(s)	170 h2o + 1 rib_70_elo1_b0023_2_cplx --> 170 EF-G.GDP + 170 EF-Tu.GDP + 34 ala1_tRNA + 2 ala2_tRNA + 14 arg1_tRNA + 12 asn1_tRNA + 4 asp1_tRNA + 2 fmet_tRNA + 8 gln1_tRNA + 2 gln2_tRNA + 6 glu1_tRNA + 4 gly1_tRNA + 340 h + 6 hisR_tRNA + 14 ile1_tRNA + 6 leu1_tRNA + 28 lys1_tRNA + 6 met1_tRNA + 860 mg2 + 4 phe1_tRNA + 340 pi + 2 pro1_tRNA + 1 rib_70_elo2_b0023_2_cplx + 4 ser2_tRNA + 2 serT_tRNA + 2 serV_tRNA + 4 thr2_tRNA + 2 tyr1_tRNA + 4 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b0023_5_rib1	Translation elongation 1 b0023 5 ribosome(s)	430 EF-G.GTP + 90 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 35 EF-Tu.GTP.arg1-tRNA + 30 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 20 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 15 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 35 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 70 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 2150 mg2 + 1 rib_ini_b0023_5 --> 1 rib_70_elo1_b0023_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b0023_5_rib2	Translation elongation 2 b0023 5 ribosome(s)	425 h2o + 1 rib_70_elo1_b0023_5_cplx --> 425 EF-G.GDP + 425 EF-Tu.GDP + 85 ala1_tRNA + 5 ala2_tRNA + 35 arg1_tRNA + 30 asn1_tRNA + 10 asp1_tRNA + 5 fmet_tRNA + 20 gln1_tRNA + 5 gln2_tRNA + 15 glu1_tRNA + 10 gly1_tRNA + 850 h + 15 hisR_tRNA + 35 ile1_tRNA + 15 leu1_tRNA + 70 lys1_tRNA + 15 met1_tRNA + 2150 mg2 + 10 phe1_tRNA + 850 pi + 5 pro1_tRNA + 1 rib_70_elo2_b0023_5_cplx + 10 ser2_tRNA + 5 serT_tRNA + 5 serV_tRNA + 10 thr2_tRNA + 5 tyr1_tRNA + 10 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b0025_18_rib1	Translation elongation 1 b0025 18 ribosome(s)	5616 EF-G.GTP + 360 EF-Tu.GTP.ala1-tRNA + 144 EF-Tu.GTP.ala2-tRNA + 450 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argU-tRNA + 18 EF-Tu.GTP.argW-tRNA + 36 EF-Tu.GTP.argX-tRNA + 144 EF-Tu.GTP.asn1-tRNA + 288 EF-Tu.GTP.asp1-tRNA + 72 EF-Tu.GTP.cysT-tRNA + 180 EF-Tu.GTP.gln1-tRNA + 90 EF-Tu.GTP.gln2-tRNA + 342 EF-Tu.GTP.glu1-tRNA + 378 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 126 EF-Tu.GTP.glyU-tRNA + 144 EF-Tu.GTP.hisR-tRNA + 144 EF-Tu.GTP.ile1-tRNA + 90 EF-Tu.GTP.ile2-tRNA + 342 EF-Tu.GTP.leu1-tRNA + 72 EF-Tu.GTP.leu2-tRNA + 144 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuW-tRNA + 180 EF-Tu.GTP.leuZ-tRNA + 234 EF-Tu.GTP.lys1-tRNA + 72 EF-Tu.GTP.met1-tRNA + 306 EF-Tu.GTP.phe1-tRNA + 162 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proL-tRNA + 36 EF-Tu.GTP.proM-tRNA + 36 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 108 EF-Tu.GTP.serV-tRNA + 108 EF-Tu.GTP.thr1-tRNA + 54 EF-Tu.GTP.thr2-tRNA + 54 EF-Tu.GTP.thr3-tRNA + 36 EF-Tu.GTP.thrU-tRNA + 90 EF-Tu.GTP.tyr1-tRNA + 360 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 90 EF-Tu.GTP.val3-tRNA + 28080 mg2 + 1 rib_ini_b0025_18 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_elo_b0025_18_rib2	Translation elongation 2 b0025 18 ribosome(s)	5598 h2o + 1 rib_70_elo1_b0025_18_cplx --> 5598 EF-G.GDP + 5598 EF-Tu.GDP + 342 ala1_tRNA + 144 ala2_tRNA + 450 arg1_tRNA + 18 argU_tRNA + 18 argW_tRNA + 36 argX_tRNA + 144 asn1_tRNA + 288 asp1_tRNA + 72 cysT_tRNA + 18 fmet_tRNA + 180 gln1_tRNA + 90 gln2_tRNA + 342 glu1_tRNA + 378 gly1_tRNA + 18 glyT_tRNA + 126 glyU_tRNA + 11196 h + 144 hisR_tRNA + 144 ile1_tRNA + 90 ile2_tRNA + 342 leu1_tRNA + 72 leu2_tRNA + 144 leuU_tRNA + 18 leuW_tRNA + 180 leuZ_tRNA + 234 lys1_tRNA + 72 met1_tRNA + 28080 mg2 + 306 phe1_tRNA + 11196 pi + 162 pro1_tRNA + 18 pro2_tRNA + 18 proL_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b0025_18_cplx + 36 ser1_tRNA + 18 ser3_tRNA + 108 serV_tRNA + 108 thr1_tRNA + 54 thr2_tRNA + 54 thr3_tRNA + 36 thrU_tRNA + 90 tyr1_tRNA + 360 val1_tRNA + 18 val2_tRNA + 90 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445

tl_elo_b0025_1_rib1	Translation elongation 1 b0025 1 ribosome(s)	312 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 25 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argW-tRNA + 2 EF-Tu.GTP.argX-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 16 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 19 EF-Tu.GTP.glu1-tRNA + 21 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.ile2-tRNA + 19 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 17 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1560 mg2 + 1 rib_ini_b0025_1 --> 1 rib_70_elo1_b0025_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_elo_b0025_1_rib2	Translation elongation 2 b0025 1 ribosome(s)	311 h2o + 1 rib_70_elo1_b0025_1_cplx --> 311 EF-G.GDP + 311 EF-Tu.GDP + 19 ala1_tRNA + 8 ala2_tRNA + 25 arg1_tRNA + 1 argU_tRNA + 1 argW_tRNA + 2 argX_tRNA + 8 asn1_tRNA + 16 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 10 gln1_tRNA + 5 gln2_tRNA + 19 glu1_tRNA + 21 gly1_tRNA + 1 glyT_tRNA + 7 glyU_tRNA + 622 h + 8 hisR_tRNA + 8 ile1_tRNA + 5 ile2_tRNA + 19 leu1_tRNA + 4 leu2_tRNA + 8 leuU_tRNA + 1 leuW_tRNA + 10 leuZ_tRNA + 13 lys1_tRNA + 4 met1_tRNA + 1560 mg2 + 17 phe1_tRNA + 622 pi + 9 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b0025_1_cplx + 2 ser1_tRNA + 1 ser3_tRNA + 6 serV_tRNA + 6 thr1_tRNA + 3 thr2_tRNA + 3 thr3_tRNA + 2 thrU_tRNA + 5 tyr1_tRNA + 20 val1_tRNA + 1 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_elo_b0025_9_rib1	Translation elongation 1 b0025 9 ribosome(s)	2808 EF-G.GTP + 180 EF-Tu.GTP.ala1-tRNA + 72 EF-Tu.GTP.ala2-tRNA + 225 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argU-tRNA + 9 EF-Tu.GTP.argW-tRNA + 18 EF-Tu.GTP.argX-tRNA + 72 EF-Tu.GTP.asn1-tRNA + 144 EF-Tu.GTP.asp1-tRNA + 36 EF-Tu.GTP.cysT-tRNA + 90 EF-Tu.GTP.gln1-tRNA + 45 EF-Tu.GTP.gln2-tRNA + 171 EF-Tu.GTP.glu1-tRNA + 189 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 63 EF-Tu.GTP.glyU-tRNA + 72 EF-Tu.GTP.hisR-tRNA + 72 EF-Tu.GTP.ile1-tRNA + 45 EF-Tu.GTP.ile2-tRNA + 171 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 72 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuW-tRNA + 90 EF-Tu.GTP.leuZ-tRNA + 117 EF-Tu.GTP.lys1-tRNA + 36 EF-Tu.GTP.met1-tRNA + 153 EF-Tu.GTP.phe1-tRNA + 81 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.proL-tRNA + 18 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser3-tRNA + 54 EF-Tu.GTP.serV-tRNA + 54 EF-Tu.GTP.thr1-tRNA + 27 EF-Tu.GTP.thr2-tRNA + 27 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 45 EF-Tu.GTP.tyr1-tRNA + 180 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 45 EF-Tu.GTP.val3-tRNA + 14040 mg2 + 1 rib_ini_b0025_9 --> 1 rib_70_elo1_b0025_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_elo_b0025_9_rib2	Translation elongation 2 b0025 9 ribosome(s)	2799 h2o + 1 rib_70_elo1_b0025_9_cplx --> 2799 EF-G.GDP + 2799 EF-Tu.GDP + 171 ala1_tRNA + 72 ala2_tRNA + 225 arg1_tRNA + 9 argU_tRNA + 9 argW_tRNA + 18 argX_tRNA + 72 asn1_tRNA + 144 asp1_tRNA + 36 cysT_tRNA + 9 fmet_tRNA + 90 gln1_tRNA + 45 gln2_tRNA + 171 glu1_tRNA + 189 gly1_tRNA + 9 glyT_tRNA + 63 glyU_tRNA + 5598 h + 72 hisR_tRNA + 72 ile1_tRNA + 45 ile2_tRNA + 171 leu1_tRNA + 36 leu2_tRNA + 72 leuU_tRNA + 9 leuW_tRNA + 90 leuZ_tRNA + 117 lys1_tRNA + 36 met1_tRNA + 14040 mg2 + 153 phe1_tRNA + 5598 pi + 81 pro1_tRNA + 9 pro2_tRNA + 9 proL_tRNA + 18 proM_tRNA + 1 rib_70_elo2_b0025_9_cplx + 18 ser1_tRNA + 9 ser3_tRNA + 54 serV_tRNA + 54 thr1_tRNA + 27 thr2_tRNA + 27 thr3_tRNA + 18 thrU_tRNA + 45 tyr1_tRNA + 180 val1_tRNA + 9 val2_tRNA + 45 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_elo_b0026_1_rib1	Translation elongation 1 b0026 1 ribosome(s)	937 EF-G.GTP + 73 EF-Tu.GTP.ala1-tRNA + 19 EF-Tu.GTP.ala2-tRNA + 46 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.asn1-tRNA + 71 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.cysT-tRNA + 27 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 58 EF-Tu.GTP.glu1-tRNA + 70 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 25 EF-Tu.GTP.hisR-tRNA + 46 EF-Tu.GTP.ile1-tRNA + 56 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 61 EF-Tu.GTP.lys1-tRNA + 23 EF-Tu.GTP.met1-tRNA + 31 EF-Tu.GTP.phe1-tRNA + 28 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 13 EF-Tu.GTP.serV-tRNA + 32 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 23 EF-Tu.GTP.trpT-tRNA + 33 EF-Tu.GTP.tyr1-tRNA + 39 EF-Tu.GTP.val1-tRNA + 13 EF-Tu.GTP.val2-tRNA + 22 EF-Tu.GTP.val3-tRNA + 4685 mg2 + 1 rib_ini_b0026_1 --> 1 rib_70_elo1_b0026_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.32E+01	2.32E+01	0	3.96E+01	39.62865	0	1.88E+00	1.8845
tl_elo_b0026_1_rib2	Translation elongation 2 b0026 1 ribosome(s)	936 h2o + 1 rib_70_elo1_b0026_1_cplx --> 936 EF-G.GDP + 936 EF-Tu.GDP + 73 ala1_tRNA + 18 ala2_tRNA + 46 arg1_tRNA + 21 asn1_tRNA + 71 asp1_tRNA + 14 cysT_tRNA + 1 fmet_tRNA + 27 gln1_tRNA + 4 gln2_tRNA + 58 glu1_tRNA + 70 gly1_tRNA + 2 glyT_tRNA + 3 glyU_tRNA + 1872 h + 25 hisR_tRNA + 46 ile1_tRNA + 56 leu1_tRNA + 6 leu2_tRNA + 12 leuU_tRNA + 2 leuW_tRNA + 1 leuZ_tRNA + 61 lys1_tRNA + 23 met1_tRNA + 4685 mg2 + 31 phe1_tRNA + 1872 pi + 28 pro1_tRNA + 7 pro2_tRNA + 1 proL_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b0026_1_cplx + 12 ser1_tRNA + 10 ser2_tRNA + 8 ser3_tRNA + 4 serT_tRNA + 13 serV_tRNA + 32 thr1_tRNA + 7 thr2_tRNA + 6 thr3_tRNA + 2 thrU_tRNA + 23 trpT_tRNA + 33 tyr1_tRNA + 39 val1_tRNA + 13 val2_tRNA + 22 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.32E+01	2.32E+01	0	3.96E+01	39.62865	0	1.88E+00	1.8845

tl_elo_b0026_27_rib1	Translation elongation 1 b0026 27 ribosome(s)	25299 EF-G.GTP + 1971 EF-Tu.GTP.ala1-tRNA + 513 EF-Tu.GTP.ala2-tRNA + 1242 EF-Tu.GTP.arg1-tRNA + 567 EF-Tu.GTP.asn1-tRNA + 1917 EF-Tu.GTP.asp1-tRNA + 378 EF-Tu.GTP.cysT-tRNA + 729 EF-Tu.GTP.gln1-tRNA + 108 EF-Tu.GTP.gln2-tRNA + 1566 EF-Tu.GTP.glu1-tRNA + 1890 EF-Tu.GTP.gly1-tRNA + 54 EF-Tu.GTP.glyT-tRNA + 81 EF-Tu.GTP.glyU-tRNA + 675 EF-Tu.GTP.hisR-tRNA + 1242 EF-Tu.GTP.ile1-tRNA + 1512 EF-Tu.GTP.leu1-tRNA + 162 EF-Tu.GTP.leu2-tRNA + 324 EF-Tu.GTP.leuU-tRNA + 54 EF-Tu.GTP.leuW-tRNA + 27 EF-Tu.GTP.leuZ-tRNA + 1647 EF-Tu.GTP.lys1-tRNA + 621 EF-Tu.GTP.met1-tRNA + 837 EF-Tu.GTP.phe1-tRNA + 756 EF-Tu.GTP.pro1-tRNA + 189 EF-Tu.GTP.pro2-tRNA + 27 EF-Tu.GTP.proL-tRNA + 162 EF-Tu.GTP.proM-tRNA + 324 EF-Tu.GTP.ser1-tRNA + 270 EF-Tu.GTP.ser2-tRNA + 216 EF-Tu.GTP.ser3-tRNA + 108 EF-Tu.GTP.serT-tRNA + 351 EF-Tu.GTP.serV-tRNA + 864 EF-Tu.GTP.thr1-tRNA + 189 EF-Tu.GTP.thr2-tRNA + 162 EF-Tu.GTP.thr3-tRNA + 54 EF-Tu.GTP.thrU-tRNA + 621 EF-Tu.GTP.trpT-tRNA + 891 EF-Tu.GTP.tyr1-tRNA + 1053 EF-Tu.GTP.val1-tRNA + 351 EF-Tu.GTP.val2-tRNA + 594 EF-Tu.GTP.val3-tRNA + 126495 mg2 + 1 rib_ini_b0026_27 --> 1 rib_70_	irreversible	Translation	0.00E+00	1.00E+09	0	2.32E+01	2.32E+01	0	3.96E+01	39.62865	0	1.88E+00	1.8845
tl_elo_b0026_27_rib2	Translation elongation 2 b0026 27 ribosome(s)	25272 h2o + 1 rib_70_elo1_b0026_27_cplx --> 25272 EF-G.GDP + 25272 EF-Tu.GDP + 1971 ala1_tRNA + 486 ala2_tRNA + 1242 arg1_tRNA + 567 asn1_tRNA + 1917 asp1_tRNA + 378 cysT_tRNA + 27 fmet_tRNA + 729 gln1_tRNA + 108 gln2_tRNA + 1566 glu1_tRNA + 1890 gly1_tRNA + 54 glyT_tRNA + 81 glyU_tRNA + 50544 h + 675 hisR_tRNA + 1242 ile1_tRNA + 1512 leu1_tRNA + 162 leu2_tRNA + 324 leuU_tRNA + 54 leuW_tRNA + 27 leuZ_tRNA + 1647 lys1_tRNA + 621 met1_tRNA + 126495 mg2 + 837 phe1_tRNA + 50544 pi + 756 pro1_tRNA + 189 pro2_tRNA + 27 proL_tRNA + 162 proM_tRNA + 1 rib_70_elo2_b0026_27_cplx + 324 ser1_tRNA + 270 ser2_tRNA + 216 ser3_tRNA + 108 serT_tRNA + 351 serV_tRNA + 864 thr1_tRNA + 189 thr2_tRNA + 162 thr3_tRNA + 54 thrU_tRNA + 621 trpT_tRNA + 891 tyr1_tRNA + 1053 val1_tRNA + 351 val2_tRNA + 594 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.32E+01	2.32E+01	0	3.96E+01	39.62865	0	1.88E+00	1.8845
tl_elo_b0026_55_rib1	Translation elongation 1 b0026 55 ribosome(s)	51535 EF-G.GTP + 4015 EF-Tu.GTP.ala1-tRNA + 1045 EF-Tu.GTP.ala2-tRNA + 2530 EF-Tu.GTP.arg1-tRNA + 1155 EF-Tu.GTP.asn1-tRNA + 3905 EF-Tu.GTP.asp1-tRNA + 770 EF-Tu.GTP.cysT-tRNA + 1485 EF-Tu.GTP.gln1-tRNA + 220 EF-Tu.GTP.gln2-tRNA + 3190 EF-Tu.GTP.glu1-tRNA + 3850 EF-Tu.GTP.gly1-tRNA + 110 EF-Tu.GTP.glyT-tRNA + 165 EF-Tu.GTP.glyU-tRNA + 1375 EF-Tu.GTP.hisR-tRNA + 2530 EF-Tu.GTP.ile1-tRNA + 3080 EF-Tu.GTP.leu1-tRNA + 330 EF-Tu.GTP.leu2-tRNA + 660 EF-Tu.GTP.leuU-tRNA + 110 EF-Tu.GTP.leuW-tRNA + 55 EF-Tu.GTP.leuZ-tRNA + 3355 EF-Tu.GTP.lys1-tRNA + 1265 EF-Tu.GTP.met1-tRNA + 1705 EF-Tu.GTP.phe1-tRNA + 1540 EF-Tu.GTP.pro1-tRNA + 385 EF-Tu.GTP.pro2-tRNA + 55 EF-Tu.GTP.proL-tRNA + 330 EF-Tu.GTP.proM-tRNA + 660 EF-Tu.GTP.ser1-tRNA + 550 EF-Tu.GTP.ser2-tRNA + 440 EF-Tu.GTP.ser3-tRNA + 220 EF-Tu.GTP.serT-tRNA + 715 EF-Tu.GTP.serV-tRNA + 1760 EF-Tu.GTP.thr1-tRNA + 385 EF-Tu.GTP.thr2-tRNA + 330 EF-Tu.GTP.thr3-tRNA + 110 EF-Tu.GTP.thrU-tRNA + 1265 EF-Tu.GTP.trpT-tRNA + 1815 EF-Tu.GTP.tyr1-tRNA + 2145 EF-Tu.GTP.val1-tRNA + 715 EF-Tu.GTP.val2-tRNA + 1210 EF-Tu.GTP.val3-tRNA + 257675 mg2 + 1 rib_ini_b0026_55 --> 1 rib_70_	irreversible	Translation	0.00E+00	1.00E+09	0	2.32E+01	2.32E+01	0	3.88E+01	38.78764	0	1.88E+00	1.8845
tl_elo_b0026_55_rib2	Translation elongation 2 b0026 55 ribosome(s)	51480 h2o + 1 rib_70_elo1_b0026_55_cplx --> 51480 EF-G.GDP + 51480 EF-Tu.GDP + 4015 ala1_tRNA + 990 ala2_tRNA + 2530 arg1_tRNA + 1155 asn1_tRNA + 3905 asp1_tRNA + 770 cysT_tRNA + 55 fmet_tRNA + 1485 gln1_tRNA + 220 gln2_tRNA + 3190 glu1_tRNA + 3850 gly1_tRNA + 110 glyT_tRNA + 165 glyU_tRNA + 102960 h + 1375 hisR_tRNA + 2530 ile1_tRNA + 3080 leu1_tRNA + 330 leu2_tRNA + 660 leuU_tRNA + 110 leuW_tRNA + 55 leuZ_tRNA + 3355 lys1_tRNA + 1265 met1_tRNA + 257675 mg2 + 1705 phe1_tRNA + 102960 pi + 1540 pro1_tRNA + 385 pro2_tRNA + 55 proL_tRNA + 330 proM_tRNA + 1 rib_70_elo2_b0026_55_cplx + 660 ser1_tRNA + 550 ser2_tRNA + 440 ser3_tRNA + 220 serT_tRNA + 715 serV_tRNA + 1760 thr1_tRNA + 385 thr2_tRNA + 330 thr3_tRNA + 110 thrU_tRNA + 1265 trpT_tRNA + 1815 tyr1_tRNA + 2145 val1_tRNA + 715 val2_tRNA + 1210 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.32E+01	2.32E+01	0	3.88E+01	38.78764	0	1.88E+00	1.8845
tl_elo_b0027_1_rib1	Translation elongation 1 b0027 1 ribosome(s)	163 EF-G.GTP + 12 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 5 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 1 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 14 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 1 EF-Tu.GTP.val3-tRNA + 815 mg2 + 1 rib_ini_b0027_1 --> 1 rib_70_elo1_b0027_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_elo_b0027_1_rib2	Translation elongation 2 b0027 1 ribosome(s)	162 h2o + 1 rib_70_elo1_b0027_1_cplx --> 162 EF-G.GDP + 162 EF-Tu.GDP + 12 ala1_tRNA + 6 ala2_tRNA + 5 arg1_tRNA + 1 argU_tRNA + 7 asn1_tRNA + 8 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 1 gln2_tRNA + 1 glu1_tRNA + 13 gly1_tRNA + 2 glyU_tRNA + 324 h + 3 hisR_tRNA + 14 ile1_tRNA + 15 leu1_tRNA + 1 leu2_tRNA + 4 leuU_tRNA + 2 leuW_tRNA + 5 lys1_tRNA + 3 met1_tRNA + 815 mg2 + 12 phe1_tRNA + 324 pi + 2 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b0027_1_cplx + 1 ser2_tRNA + 3 ser3_tRNA + 1 serT_tRNA + 5 serV_tRNA + 1 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 6 trpT_tRNA + 6 tyr1_tRNA + 6 val1_tRNA + 5 val2_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645

tl_elo_b0027_4_rib1	Translation elongation 1 b0027 4 ribosome(s)	652 EF-G.GTP + 48 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argU-tRNA + 28 EF-Tu.GTP.asn1-tRNA + 32 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 4 EF-Tu.GTP.glu1-tRNA + 52 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 56 EF-Tu.GTP.ile1-tRNA + 60 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuW-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 48 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 20 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 24 EF-Tu.GTP.tyr1-tRNA + 24 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 3260 mg2 + 1 rib_ini_b0027_4 --> 1 rib_70_elo1_b0027_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_elo_b0027_4_rib2	Translation elongation 2 b0027 4 ribosome(s)	648 h2o + 1 rib_70_elo1_b0027_4_cplx --> 648 EF-G.GDP + 648 EF-Tu.GDP + 48 ala1_tRNA + 24 ala2_tRNA + 20 arg1_tRNA + 4 argU_tRNA + 28 asn1_tRNA + 32 asp1_tRNA + 8 cysT_tRNA + 4 fmet_tRNA + 12 gln1_tRNA + 4 gln2_tRNA + 4 glu1_tRNA + 52 gly1_tRNA + 8 glyU_tRNA + 1296 h + 12 hisR_tRNA + 56 ile1_tRNA + 60 leu1_tRNA + 4 leu2_tRNA + 16 leuU_tRNA + 8 leuW_tRNA + 20 lys1_tRNA + 12 met1_tRNA + 3260 mg2 + 48 phe1_tRNA + 1296 pi + 8 pro1_tRNA + 4 pro2_tRNA + 1 rib_70_elo2_b0027_4_cplx + 4 ser2_tRNA + 12 ser3_tRNA + 4 serT_tRNA + 20 serV_tRNA + 4 thr1_tRNA + 4 thr2_tRNA + 8 thr3_tRNA + 4 thrU_tRNA + 24 trpT_tRNA + 24 tyr1_tRNA + 24 val1_tRNA + 20 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_elo_b0027_9_rib1	Translation elongation 1 b0027 9 ribosome(s)	1467 EF-G.GTP + 108 EF-Tu.GTP.ala1-tRNA + 54 EF-Tu.GTP.ala2-tRNA + 45 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argU-tRNA + 63 EF-Tu.GTP.asn1-tRNA + 72 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.cysT-tRNA + 27 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 9 EF-Tu.GTP.glu1-tRNA + 117 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyU-tRNA + 27 EF-Tu.GTP.hisR-tRNA + 126 EF-Tu.GTP.ile1-tRNA + 135 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 36 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuW-tRNA + 45 EF-Tu.GTP.lys1-tRNA + 27 EF-Tu.GTP.met1-tRNA + 108 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 27 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serT-tRNA + 45 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 54 EF-Tu.GTP.trpT-tRNA + 54 EF-Tu.GTP.tyr1-tRNA + 54 EF-Tu.GTP.val1-tRNA + 45 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 7335 mg2 + 1 rib_ini_b0027_9 --> 1 rib_70_elo1_b0027_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_elo_b0027_9_rib2	Translation elongation 2 b0027 9 ribosome(s)	1458 h2o + 1 rib_70_elo1_b0027_9_cplx --> 1458 EF-G.GDP + 1458 EF-Tu.GDP + 108 ala1_tRNA + 54 ala2_tRNA + 45 arg1_tRNA + 9 argU_tRNA + 63 asn1_tRNA + 72 asp1_tRNA + 18 cysT_tRNA + 9 fmet_tRNA + 27 gln1_tRNA + 9 gln2_tRNA + 9 glu1_tRNA + 117 gly1_tRNA + 18 glyU_tRNA + 2916 h + 27 hisR_tRNA + 126 ile1_tRNA + 135 leu1_tRNA + 9 leu2_tRNA + 36 leuU_tRNA + 18 leuW_tRNA + 45 lys1_tRNA + 27 met1_tRNA + 7335 mg2 + 108 phe1_tRNA + 2916 pi + 18 pro1_tRNA + 9 pro2_tRNA + 1 rib_70_elo2_b0027_9_cplx + 9 ser2_tRNA + 27 ser3_tRNA + 9 serT_tRNA + 45 serV_tRNA + 9 thr1_tRNA + 9 thr2_tRNA + 18 thr3_tRNA + 9 thrU_tRNA + 54 trpT_tRNA + 54 tyr1_tRNA + 54 val1_tRNA + 45 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_elo_b0028_1_rib1	Translation elongation 1 b0028 1 ribosome(s)	148 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 5 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 13 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 740 mg2 + 1 rib_ini_b0028_1 --> 1 rib_70_elo1_b0028_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_elo_b0028_1_rib2	Translation elongation 2 b0028 1 ribosome(s)	147 h2o + 1 rib_70_elo1_b0028_1_cplx --> 147 EF-G.GDP + 147 EF-Tu.GDP + 8 ala1_tRNA + 3 ala2_tRNA + 5 arg1_tRNA + 5 asn1_tRNA + 12 asp1_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 1 gln2_tRNA + 13 glu1_tRNA + 10 gly1_tRNA + 3 glyU_tRNA + 294 h + 4 hisR_tRNA + 8 ile1_tRNA + 10 leu1_tRNA + 2 leu2_tRNA + 3 leuU_tRNA + 1 leuW_tRNA + 4 lys1_tRNA + 4 met1_tRNA + 740 mg2 + 9 phe1_tRNA + 294 pi + 5 pro1_tRNA + 1 pro2_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b0028_1_cplx + 2 ser1_tRNA + 5 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 3 serV_tRNA + 8 thr1_tRNA + 1 thr3_tRNA + 1 tyr1_tRNA + 6 val1_tRNA + 1 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_elo_b0028_4_rib1	Translation elongation 1 b0028 4 ribosome(s)	592 EF-G.GTP + 36 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 48 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 52 EF-Tu.GTP.glu1-tRNA + 40 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyU-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 32 EF-Tu.GTP.ile1-tRNA + 40 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuW-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 16 EF-Tu.GTP.met1-tRNA + 36 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 12 EF-Tu.GTP.serV-tRNA + 32 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 24 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 2960 mg2 + 1 rib_ini_b0028_4 --> 1 rib_70_elo1_b0028_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545

tl_elo_b0028_4_rib2	Translation elongation 2 b0028 4 ribosome(s)	588 h2o + 1 rib_70_elo1_b0028_4_cplx --> 588 EF-G.GDP + 588 EF-Tu.GDP + 32 ala1_tRNA + 12 ala2_tRNA + 20 arg1_tRNA + 20 asn1_tRNA + 48 asp1_tRNA + 4 fmet_tRNA + 12 gln1_tRNA + 4 gln2_tRNA + 52 glu1_tRNA + 40 gly1_tRNA + 12 glyU_tRNA + 1176 h + 16 hisR_tRNA + 32 ile1_tRNA + 40 leu1_tRNA + 8 leu2_tRNA + 12 leuU_tRNA + 4 leuW_tRNA + 16 lys1_tRNA + 16 met1_tRNA + 2960 mg2 + 36 phe1_tRNA + 1176 pi + 20 pro1_tRNA + 4 pro2_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b0028_4_cplx + 8 ser1_tRNA + 20 ser2_tRNA + 4 ser3_tRNA + 4 serT_tRNA + 12 serV_tRNA + 32 thr1_tRNA + 4 thr3_tRNA + 4 tyr1_tRNA + 24 val1_tRNA + 4 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_elo_b0028_8_rib1	Translation elongation 1 b0028 8 ribosome(s)	1184 EF-G.GTP + 72 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 40 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 96 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 104 EF-Tu.GTP.glu1-tRNA + 80 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.glyU-tRNA + 32 EF-Tu.GTP.hisR-tRNA + 64 EF-Tu.GTP.ile1-tRNA + 80 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 24 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuW-tRNA + 32 EF-Tu.GTP.lys1-tRNA + 32 EF-Tu.GTP.met1-tRNA + 72 EF-Tu.GTP.phe1-tRNA + 40 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 16 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser1-tRNA + 40 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serT-tRNA + 24 EF-Tu.GTP.serV-tRNA + 64 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 48 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 16 EF-Tu.GTP.val3-tRNA + 5920 mg2 + 1 rib_ini_b0028_8 --> 1 rib_70_elo1_b0028_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_elo_b0028_8_rib2	Translation elongation 2 b0028 8 ribosome(s)	1176 h2o + 1 rib_70_elo1_b0028_8_cplx --> 1176 EF-G.GDP + 1176 EF-Tu.GDP + 64 ala1_tRNA + 24 ala2_tRNA + 40 arg1_tRNA + 40 asn1_tRNA + 96 asp1_tRNA + 8 fmet_tRNA + 24 gln1_tRNA + 8 gln2_tRNA + 104 glu1_tRNA + 80 gly1_tRNA + 24 glyU_tRNA + 2352 h + 32 hisR_tRNA + 64 ile1_tRNA + 80 leu1_tRNA + 16 leu2_tRNA + 24 leuU_tRNA + 8 leuW_tRNA + 32 lys1_tRNA + 32 met1_tRNA + 5920 mg2 + 72 phe1_tRNA + 2352 pi + 40 pro1_tRNA + 8 pro2_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b0028_8_cplx + 16 ser1_tRNA + 4 ser2_tRNA + 8 ser3_tRNA + 8 serT_tRNA + 24 serV_tRNA + 64 thr1_tRNA + 8 thr3_tRNA + 8 tyr1_tRNA + 48 val1_tRNA + 8 val2_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_elo_b0029_18_rib1	Translation elongation 1 b0029 18 ribosome(s)	5670 EF-G.GTP + 342 EF-Tu.GTP.ala1-tRNA + 198 EF-Tu.GTP.ala2-tRNA + 414 EF-Tu.GTP.arg1-tRNA + 216 EF-Tu.GTP.asn1-tRNA + 342 EF-Tu.GTP.asp1-tRNA + 72 EF-Tu.GTP.cysT-tRNA + 216 EF-Tu.GTP.gln1-tRNA + 522 EF-Tu.GTP.glu1-tRNA + 288 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 90 EF-Tu.GTP.glyU-tRNA + 108 EF-Tu.GTP.hisR-tRNA + 360 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.ile2-tRNA + 270 EF-Tu.GTP.leu1-tRNA + 108 EF-Tu.GTP.leu2-tRNA + 36 EF-Tu.GTP.leuU-tRNA + 252 EF-Tu.GTP.lys1-tRNA + 90 EF-Tu.GTP.met1-tRNA + 144 EF-Tu.GTP.phe1-tRNA + 216 EF-Tu.GTP.pro1-tRNA + 90 EF-Tu.GTP.ser1-tRNA + 54 EF-Tu.GTP.ser2-tRNA + 72 EF-Tu.GTP.ser3-tRNA + 108 EF-Tu.GTP.serV-tRNA + 72 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 90 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 108 EF-Tu.GTP.tyr1-tRNA + 396 EF-Tu.GTP.val1-tRNA + 180 EF-Tu.GTP.val2-tRNA + 90 EF-Tu.GTP.val3-tRNA + 28350 mg2 + 1 rib_ini_b0029_18 --> 1 rib_70_elo1_b0029_18_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_elo_b0029_18_rib2	Translation elongation 2 b0029 18 ribosome(s)	5652 h2o + 1 rib_70_elo1_b0029_18_cplx --> 5652 EF-G.GDP + 5652 EF-Tu.GDP + 342 ala1_tRNA + 198 ala2_tRNA + 414 arg1_tRNA + 216 asn1_tRNA + 324 asp1_tRNA + 72 cysT_tRNA + 18 fmet_tRNA + 216 gln1_tRNA + 522 glu1_tRNA + 288 gly1_tRNA + 18 glyT_tRNA + 90 glyU_tRNA + 11304 h + 108 hisR_tRNA + 360 ile1_tRNA + 18 ile2_tRNA + 270 leu1_tRNA + 108 leu2_tRNA + 36 leuU_tRNA + 252 lys1_tRNA + 90 met1_tRNA + 28350 mg2 + 144 phe1_tRNA + 11304 pi + 216 pro1_tRNA + 1 rib_70_elo2_b0029_18_cplx + 90 ser1_tRNA + 54 ser2_tRNA + 72 ser3_tRNA + 108 serV_tRNA + 72 thr1_tRNA + 36 thr2_tRNA + 90 thr3_tRNA + 18 thrU_tRNA + 36 trpT_tRNA + 108 tyr1_tRNA + 396 val1_tRNA + 180 val2_tRNA + 90 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_elo_b0029_1_rib1	Translation elongation 1 b0029 1 ribosome(s)	315 EF-G.GTP + 19 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.ala2-tRNA + 23 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 19 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 29 EF-Tu.GTP.glu1-tRNA + 16 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 22 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1575 mg2 + 1 rib_ini_b0029_1 --> 1 rib_70_elo1_b0029_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_elo_b0029_1_rib2	Translation elongation 2 b0029 1 ribosome(s)	314 h2o + 1 rib_70_elo1_b0029_1_cplx --> 314 EF-G.GDP + 314 EF-Tu.GDP + 19 ala1_tRNA + 11 ala2_tRNA + 23 arg1_tRNA + 12 asn1_tRNA + 18 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 12 gln1_tRNA + 29 glu1_tRNA + 16 gly1_tRNA + 1 glyT_tRNA + 5 glyU_tRNA + 628 h + 6 hisR_tRNA + 20 ile1_tRNA + 1 ile2_tRNA + 15 leu1_tRNA + 6 leu2_tRNA + 2 leuU_tRNA + 14 lys1_tRNA + 5 met1_tRNA + 1575 mg2 + 8 phe1_tRNA + 628 pi + 12 pro1_tRNA + rib_70_elo2_b0029_1_cplx + 5 ser1_tRNA + 3 ser2_tRNA + 4 ser3_tRNA + 6 serV_tRNA + 4 thr1_tRNA + 2 thr2_tRNA + 5 thr3_tRNA + 1 thrU_tRNA + 2 trpT_tRNA + 6 tyr1_tRNA + 22 val1_tRNA + 10 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145

tl_elo_b0029_9_rib1	Translation elongation 1 b0029 9 ribosome(s)	2835 EF-G.GTP + 171 EF-Tu.GTP.ala1-tRNA + 99 EF-Tu.GTP.ala2-tRNA + 207 EF-Tu.GTP.arg1-tRNA + 108 EF-Tu.GTP.asn1-tRNA + 171 EF-Tu.GTP.asp1-tRNA + 36 EF-Tu.GTP.cysT-tRNA + 108 EF-Tu.GTP.gln1-tRNA + 261 EF-Tu.GTP.glu1-tRNA + 144 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 45 EF-Tu.GTP.glyU-tRNA + 54 EF-Tu.GTP.hisR-tRNA + 180 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.ile2-tRNA + 135 EF-Tu.GTP.leu1-tRNA + 54 EF-Tu.GTP.leu2-tRNA + 18 EF-Tu.GTP.leuU-tRNA + 126 EF-Tu.GTP.lys1-tRNA + 45 EF-Tu.GTP.met1-tRNA + 72 EF-Tu.GTP.phe1-tRNA + 108 EF-Tu.GTP.pro1-tRNA + 45 EF-Tu.GTP.ser1-tRNA + 27 EF-Tu.GTP.ser2-tRNA + 36 EF-Tu.GTP.ser3-tRNA + 54 EF-Tu.GTP.serV-tRNA + 36 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 45 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 18 EF-Tu.GTP.trpT-tRNA + 54 EF-Tu.GTP.tyr1-tRNA + 198 EF-Tu.GTP.val1-tRNA + 90 EF-Tu.GTP.val2-tRNA + 45 EF-Tu.GTP.val3-tRNA + 14175 mg2 + 1 rib_ini_b0029_9 --> 1 rib_70_elo1_b0029_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_elo_b0029_9_rib2	Translation elongation 2 b0029 9 ribosome(s)	2826 h2o + 1 rib_70_elo1_b0029_9_cplx --> 2826 EF-G.GDP + 2826 EF-Tu.GDP + 171 ala1_tRNA + 99 ala2_tRNA + 207 arg1_tRNA + 108 asn1_tRNA + 162 asp1_tRNA + 36 cysT_tRNA + 9 fmet_tRNA + 108 gln1_tRNA + 261 glu1_tRNA + 144 gly1_tRNA + 9 glyT_tRNA + 45 glyU_tRNA + 5652 h + 54 hisR_tRNA + 180 ile1_tRNA + 9 ile2_tRNA + 135 leu1_tRNA + 54 leu2_tRNA + 18 leuU_tRNA + 126 lys1_tRNA + 45 met1_tRNA + 14175 mg2 + 72 phe1_tRNA + 5652 pi + 108 pro1_tRNA + 1 rib_70_elo2_b0029_9_cplx + 45 ser1_tRNA + 27 ser2_tRNA + 36 ser3_tRNA + 54 serV_tRNA + 36 thr1_tRNA + 18 thr2_tRNA + 45 thr3_tRNA + 9 thrU_tRNA + 18 trpT_tRNA + 54 tyr1_tRNA + 198 val1_tRNA + 90 val2_tRNA + 45 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_elo_b0049_16_rib1	Translation elongation 1 b0049 16 ribosome(s)	4464 EF-G.GTP + 256 EF-Tu.GTP.ala1-tRNA + 128 EF-Tu.GTP.ala2-tRNA + 176 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.argU-tRNA + 48 EF-Tu.GTP.argX-tRNA + 128 EF-Tu.GTP.asn1-tRNA + 320 EF-Tu.GTP.asp1-tRNA + 96 EF-Tu.GTP.cysT-tRNA + 80 EF-Tu.GTP.gln1-tRNA + 32 EF-Tu.GTP.gln2-tRNA + 288 EF-Tu.GTP.glu1-tRNA + 272 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 80 EF-Tu.GTP.glyU-tRNA + 112 EF-Tu.GTP.hisR-tRNA + 128 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.ile2-tRNA + 432 EF-Tu.GTP.leu1-tRNA + 48 EF-Tu.GTP.leu2-tRNA + 64 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuW-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 208 EF-Tu.GTP.lys1-tRNA + 80 EF-Tu.GTP.met1-tRNA + 176 EF-Tu.GTP.phe1-tRNA + 176 EF-Tu.GTP.pro1-tRNA + 80 EF-Tu.GTP.pro2-tRNA + 16 EF-Tu.GTP.proL-tRNA + 32 EF-Tu.GTP.proM-tRNA + 32 EF-Tu.GTP.ser1-tRNA + 16 EF-Tu.GTP.ser2-tRNA + 80 EF-Tu.GTP.ser3-tRNA + 16 EF-Tu.GTP.serT-tRNA + 80 EF-Tu.GTP.serV-tRNA + 112 EF-Tu.GTP.thr1-tRNA + 48 EF-Tu.GTP.thr3-tRNA + 48 EF-Tu.GTP.thrU-tRNA + 128 EF-Tu.GTP.trpT-tRNA + 144 EF-Tu.GTP.tyr1-tRNA + 128 EF-Tu.GTP.val1-tRNA + 48 EF-Tu.GTP.val2-tRNA + 32 EF-Tu.GTP.val3-tRNA + 22320 mg2 + 1 rib_ini_b0049_16 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_elo_b0049_16_rib2	Translation elongation 2 b0049 16 ribosome(s)	4448 h2o + 1 rib_70_elo1_b0049_16_cplx --> 4448 EF-G.GDP + 4448 EF-Tu.GDP + 256 ala1_tRNA + 128 ala2_tRNA + 176 arg1_tRNA + 16 argU_tRNA + 48 argX_tRNA + 128 asn1_tRNA + 320 asp1_tRNA + 96 cysT_tRNA + 16 fmet_tRNA + 80 gln1_tRNA + 32 gln2_tRNA + 288 glu1_tRNA + 272 gly1_tRNA + 16 glyT_tRNA + 80 glyU_tRNA + 8896 h + 112 hisR_tRNA + 128 ile1_tRNA + 16 ile2_tRNA + 432 leu1_tRNA + 48 leu2_tRNA + 64 leuU_tRNA + 16 leuW_tRNA + 32 leuZ_tRNA + 208 lys1_tRNA + 80 met1_tRNA + 22320 mg2 + 176 phe1_tRNA + 8896 pi + 176 pro1_tRNA + 80 pro2_tRNA + 16 proL_tRNA + 32 proM_tRNA + 1 rib_70_elo2_b0049_16_cplx + 32 ser1_tRNA + 80 ser3_tRNA + 16 serT_tRNA + 80 serV_tRNA + 112 thr1_tRNA + 48 thr3_tRNA + 48 thrU_tRNA + 128 trpT_tRNA + 144 tyr1_tRNA + 128 val1_tRNA + 48 val2_tRNA + 32 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_elo_b0049_1_rib1	Translation elongation 1 b0049 1 ribosome(s)	279 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 3 EF-Tu.GTP.argX-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 20 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 17 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 27 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 11 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 1395 mg2 + 1 rib_ini_b0049_1 --> 1 rib_70_elo1_b0049_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_elo_b0049_1_rib2	Translation elongation 2 b0049 1 ribosome(s)	278 h2o + 1 rib_70_elo1_b0049_1_cplx --> 278 EF-G.GDP + 278 EF-Tu.GDP + 16 ala1_tRNA + 8 ala2_tRNA + 11 arg1_tRNA + 1 argU_tRNA + 3 argX_tRNA + 8 asn1_tRNA + 20 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 2 gln2_tRNA + 18 glu1_tRNA + 17 gly1_tRNA + 1 glyT_tRNA + 5 glyU_tRNA + 556 h + 7 hisR_tRNA + 8 ile1_tRNA + 1 ile2_tRNA + 27 leu1_tRNA + 3 leu2_tRNA + 4 leuU_tRNA + 1 leuW_tRNA + 2 leuZ_tRNA + 13 lys1_tRNA + 5 met1_tRNA + 1395 mg2 + 11 phe1_tRNA + 556 pi + 11 pro1_tRNA + 5 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b0049_1_cplx + 2 ser1_tRNA + 5 ser3_tRNA + 1 serT_tRNA + 5 serV_tRNA + 7 thr1_tRNA + 3 thr3_tRNA + 3 thrU_tRNA + 8 trpT_tRNA + 9 tyr1_tRNA + 8 val1_tRNA + 3 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498

tl_elo_b0049_8_rib1	Translation elongation 1 b0049 8 ribosome(s)	2232 EF-G.GTP + 128 EF-Tu.GTP.ala1-tRNA + 64 EF-Tu.GTP.ala2-tRNA + 88 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.argU-tRNA + 24 EF-Tu.GTP.argX-tRNA + 64 EF-Tu.GTP.asn1-tRNA + 160 EF-Tu.GTP.asp1-tRNA + 48 EF-Tu.GTP.cysT-tRNA + 40 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.gln2-tRNA + 144 EF-Tu.GTP.glu1-tRNA + 136 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 40 EF-Tu.GTP.glyU-tRNA + 56 EF-Tu.GTP.hisR-tRNA + 64 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.ile2-tRNA + 216 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.leu2-tRNA + 32 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuW-tRNA + 16 EF-Tu.GTP.leuZ-tRNA + 104 EF-Tu.GTP.lys1-tRNA + 40 EF-Tu.GTP.met1-tRNA + 88 EF-Tu.GTP.phe1-tRNA + 88 EF-Tu.GTP.pro1-tRNA + 40 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proL-tRNA + 16 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 40 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serT-tRNA + 40 EF-Tu.GTP.serV-tRNA + 56 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr3-tRNA + 24 EF-Tu.GTP.thrU-tRNA + 64 EF-Tu.GTP.trpT-tRNA + 72 EF-Tu.GTP.tyr1-tRNA + 64 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val2-tRNA + 16 EF-Tu.GTP.val3-tRNA + 11160 mg2 + 1 rib_ini_b0049_8 --> 1 rib_70_elo	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_elo_b0049_8_rib2	Translation elongation 2 b0049 8 ribosome(s)	2224 h2o + 1 rib_70_elo1_b0049_8_cplx --> 2224 EF-G.GDP + 2224 EF-Tu.GDP + 128 ala1_tRNA + 64 ala2_tRNA + 88 arg1_tRNA + 8 argU_tRNA + 24 argX_tRNA + 64 asn1_tRNA + 160 asp1_tRNA + 48 cysT_tRNA + 8 fmet_tRNA + 40 gln1_tRNA + 16 gln2_tRNA + 144 glu1_tRNA + 136 gly1_tRNA + 8 glyT_tRNA + 40 glyU_tRNA + 4448 h + 56 hisR_tRNA + 64 ile1_tRNA + 8 ile2_tRNA + 216 leu1_tRNA + 24 leu2_tRNA + 32 leuU_tRNA + 8 leuW_tRNA + 16 leuZ_tRNA + 104 lys1_tRNA + 40 met1_tRNA + 11160 mg2 + 88 phe1_tRNA + 4448 pi + 88 pro1_tRNA + 40 pro2_tRNA + 8 proL_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b0049_8_cplx + 16 ser1_tRNA + 40 ser3_tRNA + 8 serT_tRNA + 40 serV_tRNA + 56 thr1_tRNA + 24 thr3_tRNA + 24 thrU_tRNA + 64 trpT_tRNA + 72 tyr1_tRNA + 64 val1_tRNA + 24 val2_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_elo_b0050_1_rib1	Translation elongation 1 b0050 1 ribosome(s)	124 EF-G.GTP + 5 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 10 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 3 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 620 mg2 + 1 rib_ini_b0050_1 --> 1 rib_70_elo1_b0050_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_elo_b0050_1_rib2	Translation elongation 2 b0050 1 ribosome(s)	123 h2o + 1 rib_70_elo1_b0050_1_cplx --> 123 EF-G.GDP + 123 EF-Tu.GDP + 5 ala1_tRNA + 1 ala2_tRNA + 7 arg1_tRNA + 6 asn1_tRNA + 3 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 2 gln2_tRNA + 10 glu1_tRNA + 9 gly1_tRNA + 1 glyT_tRNA + 2 glyU_tRNA + 246 h + 1 hisR_tRNA + 11 ile1_tRNA + 1 ile2_tRNA + 3 leu1_tRNA + 2 leu2_tRNA + 3 leuU_tRNA + 2 met1_tRNA + 620 mg2 + 3 phe1_tRNA + 246 pi + 1 pro1_tRNA + 3 pro2_tRNA + 3 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b0050_1_cplx + 1 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 3 serV_tRNA + 7 thr1_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 7 tyr1_tRNA + 5 val1_tRNA + 4 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_elo_b0050_3_rib1	Translation elongation 1 b0050 3 ribosome(s)	372 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 21 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 18 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 30 EF-Tu.GTP.glu1-tRNA + 27 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 33 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 9 EF-Tu.GTP.serV-tRNA + 21 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 21 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1860 mg2 + 1 rib_ini_b0050_3 --> 1 rib_70_elo1_b0050_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_elo_b0050_3_rib2	Translation elongation 2 b0050 3 ribosome(s)	369 h2o + 1 rib_70_elo1_b0050_3_cplx --> 369 EF-G.GDP + 369 EF-Tu.GDP + 15 ala1_tRNA + 3 ala2_tRNA + 21 arg1_tRNA + 18 asn1_tRNA + 9 asp1_tRNA + 3 cysT_tRNA + 3 fmet_tRNA + 18 gln1_tRNA + 6 gln2_tRNA + 30 glu1_tRNA + 27 gly1_tRNA + 3 glyT_tRNA + 6 glyU_tRNA + 738 h + 3 hisR_tRNA + 33 ile1_tRNA + 3 ile2_tRNA + 9 leu1_tRNA + 6 leu2_tRNA + 9 leuU_tRNA + 6 met1_tRNA + 1860 mg2 + 9 phe1_tRNA + 738 pi + 3 pro1_tRNA + 9 pro2_tRNA + 9 proL_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b0050_3_cplx + 3 ser2_tRNA + 3 ser3_tRNA + 3 serT_tRNA + 9 serV_tRNA + 21 thr1_tRNA + 3 thrU_tRNA + 3 trpT_tRNA + 21 tyr1_tRNA + 15 val1_tRNA + 12 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868

tl_elo_b0050_7_rib1	Translation elongation 1 b0050 7 ribosome(s)	868 EF-G.GTP + 35 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 49 EF-Tu.GTP.arg1-tRNA + 42 EF-Tu.GTP.asn1-tRNA + 21 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 42 EF-Tu.GTP.gln1-tRNA + 14 EF-Tu.GTP.gln2-tRNA + 70 EF-Tu.GTP.glu1-tRNA + 63 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyT-tRNA + 14 EF-Tu.GTP.glyU-tRNA + 14 EF-Tu.GTP.hisR-tRNA + 77 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.ile2-tRNA + 21 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leu2-tRNA + 21 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.met1-tRNA + 21 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 21 EF-Tu.GTP.pro2-tRNA + 21 EF-Tu.GTP.proL-tRNA + 14 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.ser3-tRNA + 7 EF-Tu.GTP.serT-tRNA + 21 EF-Tu.GTP.serV-tRNA + 49 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 49 EF-Tu.GTP.tyr1-tRNA + 35 EF-Tu.GTP.val1-tRNA + 28 EF-Tu.GTP.val2-tRNA + 28 EF-Tu.GTP.val3-tRNA + 4340 mg2 + 1 rib_ini_b0050_7 --> 1 rib_70_elo1_b0050_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_elo_b0050_7_rib2	Translation elongation 2 b0050 7 ribosome(s)	861 h2o + 1 rib_70_elo1_b0050_7_cplx --> 861 EF-G.GDP + 861 EF-Tu.GDP + 35 ala1_tRNA + 7 ala2_tRNA + 49 arg1_tRNA + 42 asn1_tRNA + 21 asp1_tRNA + 7 cysT_tRNA + 7 fmet_tRNA + 42 gln1_tRNA + 14 gln2_tRNA + 70 glu1_tRNA + 63 gly1_tRNA + 7 glyT_tRNA + 14 glyU_tRNA + 1722 h + 7 hisR_tRNA + 77 ile1_tRNA + 7 ile2_tRNA + 21 leu1_tRNA + 14 leu2_tRNA + 21 leuU_tRNA + 14 met1_tRNA + 4340 mg2 + 21 phe1_tRNA + 1722 pi + 7 pro1_tRNA + 21 pro2_tRNA + 21 proL_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b0050_7_cplx + 7 ser2_tRNA + 7 ser3_tRNA + 7 serT_tRNA + 21 serV_tRNA + 49 thr1_tRNA + 7 thrU_tRNA + 7 trpT_tRNA + 49 tyr1_tRNA + 35 val1_tRNA + 28 val2_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_elo_b0051_16_rib1	Translation elongation 1 b0051 16 ribosome(s)	4352 EF-G.GTP + 256 EF-Tu.GTP.ala1-tRNA + 128 EF-Tu.GTP.ala2-tRNA + 256 EF-Tu.GTP.arg1-tRNA + 272 EF-Tu.GTP.asn1-tRNA + 176 EF-Tu.GTP.asp1-tRNA + 32 EF-Tu.GTP.cysT-tRNA + 160 EF-Tu.GTP.gln1-tRNA + 96 EF-Tu.GTP.gln2-tRNA + 208 EF-Tu.GTP.glu1-tRNA + 176 EF-Tu.GTP.gly1-tRNA + 32 EF-Tu.GTP.glyT-tRNA + 32 EF-Tu.GTP.glyU-tRNA + 112 EF-Tu.GTP.hisR-tRNA + 208 EF-Tu.GTP.ile1-tRNA + 240 EF-Tu.GTP.leu1-tRNA + 80 EF-Tu.GTP.leu2-tRNA + 48 EF-Tu.GTP.leuU-tRNA + 64 EF-Tu.GTP.leuZ-tRNA + 144 EF-Tu.GTP.lys1-tRNA + 176 EF-Tu.GTP.met1-tRNA + 208 EF-Tu.GTP.phe1-tRNA + 176 EF-Tu.GTP.pro1-tRNA + 64 EF-Tu.GTP.pro2-tRNA + 32 EF-Tu.GTP.proL-tRNA + 48 EF-Tu.GTP.proM-tRNA + 32 EF-Tu.GTP.ser1-tRNA + 32 EF-Tu.GTP.ser2-tRNA + 16 EF-Tu.GTP.serT-tRNA + 128 EF-Tu.GTP.serV-tRNA + 80 EF-Tu.GTP.thr1-tRNA + 16 EF-Tu.GTP.thr2-tRNA + 96 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 128 EF-Tu.GTP.tyr1-tRNA + 176 EF-Tu.GTP.val1-tRNA + 128 EF-Tu.GTP.val2-tRNA + 80 EF-Tu.GTP.val3-tRNA + 21760 mg2 + 1 rib_ini_b0051_16 --> 1 rib_70_elo1_b0051_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_elo_b0051_16_rib2	Translation elongation 2 b0051 16 ribosome(s)	4336 h2o + 1 rib_70_elo1_b0051_16_cplx --> 4336 EF-G.GDP + 4336 EF-Tu.GDP + 256 ala1_tRNA + 128 ala2_tRNA + 256 arg1_tRNA + 272 asn1_tRNA + 176 asp1_tRNA + 32 cysT_tRNA + 16 fmet_tRNA + 160 gln1_tRNA + 96 gln2_tRNA + 208 glu1_tRNA + 176 gly1_tRNA + 32 glyT_tRNA + 32 glyU_tRNA + 8672 h + 112 hisR_tRNA + 208 ile1_tRNA + 240 leu1_tRNA + 80 leu2_tRNA + 48 leuU_tRNA + 64 leuZ_tRNA + 144 lys1_tRNA + 176 met1_tRNA + 21760 mg2 + 208 phe1_tRNA + 8672 pi + 176 pro1_tRNA + 64 pro2_tRNA + 32 proL_tRNA + 48 proM_tRNA + 1 rib_70_elo2_b0051_16_cplx + 32 ser1_tRNA + 32 ser2_tRNA + 16 serT_tRNA + 112 serV_tRNA + 80 thr1_tRNA + 16 thr2_tRNA + 96 thr3_tRNA + 16 thrU_tRNA + 128 tyr1_tRNA + 176 val1_tRNA + 128 val2_tRNA + 80 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_elo_b0051_1_rib1	Translation elongation 1 b0051 1 ribosome(s)	272 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 16 EF-Tu.GTP.arg1-tRNA + 17 EF-Tu.GTP.asn1-tRNA + 11 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 13 EF-Tu.GTP.glu1-tRNA + 11 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 13 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 11 EF-Tu.GTP.met1-tRNA + 13 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 8 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 11 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1360 mg2 + 1 rib_ini_b0051_1 --> 1 rib_70_elo1_b0051_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_elo_b0051_1_rib2	Translation elongation 2 b0051 1 ribosome(s)	271 h2o + 1 rib_70_elo1_b0051_1_cplx --> 271 EF-G.GDP + 271 EF-Tu.GDP + 16 ala1_tRNA + 8 ala2_tRNA + 16 arg1_tRNA + 17 asn1_tRNA + 11 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 10 gln1_tRNA + 6 gln2_tRNA + 13 glu1_tRNA + 11 gly1_tRNA + 2 glyT_tRNA + 2 glyU_tRNA + 542 h + 7 hisR_tRNA + 13 ile1_tRNA + 15 leu1_tRNA + 5 leu2_tRNA + 3 leuU_tRNA + 4 leuZ_tRNA + 9 lys1_tRNA + 11 met1_tRNA + 1360 mg2 + 13 phe1_tRNA + 542 pi + 11 pro1_tRNA + 4 pro2_tRNA + 2 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b0051_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 1 serT_tRNA + 7 serV_tRNA + 5 thr1_tRNA + 1 thr2_tRNA + 6 thr3_tRNA + 1 thrU_tRNA + 8 tyr1_tRNA + 11 val1_tRNA + 8 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948

tl_elo_b0051_8_rib1	Translation elongation 1 b0051 8 ribosome(s)	2176 EF-G.GTP + 128 EF-Tu.GTP.ala1-tRNA + 64 EF-Tu.GTP.ala2-tRNA + 128 EF-Tu.GTP.arg1-tRNA + 136 EF-Tu.GTP.asn1-tRNA + 88 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.cysT-tRNA + 80 EF-Tu.GTP.gln1-tRNA + 48 EF-Tu.GTP.gln2-tRNA + 104 EF-Tu.GTP.glu1-tRNA + 88 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 16 EF-Tu.GTP.glyU-tRNA + 56 EF-Tu.GTP.hisR-tRNA + 104 EF-Tu.GTP.ile1-tRNA + 120 EF-Tu.GTP.leu1-tRNA + 40 EF-Tu.GTP.leu2-tRNA + 24 EF-Tu.GTP.leuU-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 72 EF-Tu.GTP.lys1-tRNA + 88 EF-Tu.GTP.met1-tRNA + 104 EF-Tu.GTP.phe1-tRNA + 88 EF-Tu.GTP.pro1-tRNA + 32 EF-Tu.GTP.pro2-tRNA + 16 EF-Tu.GTP.proL-tRNA + 24 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser1-tRNA + 16 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.serT-tRNA + 64 EF-Tu.GTP.serV-tRNA + 40 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 48 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 64 EF-Tu.GTP.tyr1-tRNA + 88 EF-Tu.GTP.val1-tRNA + 64 EF-Tu.GTP.val2-tRNA + 40 EF-Tu.GTP.val3-tRNA + 10880 mg2 + 1 rib_ini_b0051_8 --> 1 rib_70_elo1_b0051_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_elo_b0051_8_rib2	Translation elongation 2 b0051 8 ribosome(s)	2168 h2o + 1 rib_70_elo1_b0051_8_cplx --> 2168 EF-G.GDP + 2168 EF-Tu.GDP + 128 ala1_tRNA + 64 ala2_tRNA + 128 arg1_tRNA + 136 asn1_tRNA + 88 asp1_tRNA + 16 cysT_tRNA + 8 fmet_tRNA + 80 gln1_tRNA + 48 gln2_tRNA + 104 glu1_tRNA + 88 gly1_tRNA + 16 glyT_tRNA + 16 glyU_tRNA + 4336 h + 56 hisR_tRNA + 104 ile1_tRNA + 120 leu1_tRNA + 40 leu2_tRNA + 24 leuU_tRNA + 32 leuZ_tRNA + 72 lys1_tRNA + 88 met1_tRNA + 10880 mg2 + 104 phe1_tRNA + 4336 pi + 88 pro1_tRNA + 32 pro2_tRNA + 16 proL_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b0051_8_cplx + 16 ser1_tRNA + 16 ser2_tRNA + 8 serT_tRNA + 56 serV_tRNA + 40 thr1_tRNA + 8 thr2_tRNA + 48 thr3_tRNA + 8 thrU_tRNA + 64 tyr1_tRNA + 88 val1_tRNA + 64 val2_tRNA + 40 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_elo_b0052_19_rib1	Translation elongation 1 b0052 19 ribosome(s)	6232 EF-G.GTP + 513 EF-Tu.GTP.ala1-tRNA + 190 EF-Tu.GTP.ala2-tRNA + 228 EF-Tu.GTP.arg1-tRNA + 57 EF-Tu.GTP.argX-tRNA + 228 EF-Tu.GTP.asn1-tRNA + 266 EF-Tu.GTP.asp1-tRNA + 76 EF-Tu.GTP.cysT-tRNA + 152 EF-Tu.GTP.gln1-tRNA + 76 EF-Tu.GTP.gln2-tRNA + 342 EF-Tu.GTP.glu1-tRNA + 418 EF-Tu.GTP.gly1-tRNA + 19 EF-Tu.GTP.glyT-tRNA + 133 EF-Tu.GTP.glyU-tRNA + 209 EF-Tu.GTP.hisR-tRNA + 342 EF-Tu.GTP.ile1-tRNA + 19 EF-Tu.GTP.ile2-tRNA + 304 EF-Tu.GTP.leu1-tRNA + 76 EF-Tu.GTP.leu2-tRNA + 304 EF-Tu.GTP.leuU-tRNA + 57 EF-Tu.GTP.leuW-tRNA + 76 EF-Tu.GTP.leuZ-tRNA + 190 EF-Tu.GTP.lys1-tRNA + 133 EF-Tu.GTP.met1-tRNA + 171 EF-Tu.GTP.phe1-tRNA + 209 EF-Tu.GTP.pro1-tRNA + 133 EF-Tu.GTP.pro2-tRNA + 95 EF-Tu.GTP.proL-tRNA + 38 EF-Tu.GTP.ser1-tRNA + 19 EF-Tu.GTP.ser3-tRNA + 19 EF-Tu.GTP.serT-tRNA + 19 EF-Tu.GTP.serV-tRNA + 228 EF-Tu.GTP.thr1-tRNA + 76 EF-Tu.GTP.thr2-tRNA + 133 EF-Tu.GTP.thr3-tRNA + 57 EF-Tu.GTP.thrU-tRNA + 19 EF-Tu.GTP.trpT-tRNA + 95 EF-Tu.GTP.tyr1-tRNA + 247 EF-Tu.GTP.val1-tRNA + 114 EF-Tu.GTP.val2-tRNA + 152 EF-Tu.GTP.val3-tRNA + 31160 mg2 + 1 rib_ini_b0052_19 --> 1 rib_70_elo1_b0052_19_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708
tl_elo_b0052_19_rib2	Translation elongation 2 b0052 19 ribosome(s)	6213 h2o + 1 rib_70_elo1_b0052_19_cplx --> 6213 EF-G.GDP + 6213 EF-Tu.GDP + 513 ala1_tRNA + 190 ala2_tRNA + 228 arg1_tRNA + 57 argX_tRNA + 228 asn1_tRNA + 266 asp1_tRNA + 76 cysT_tRNA + 19 fmet_tRNA + 152 gln1_tRNA + 57 gln2_tRNA + 342 glu1_tRNA + 418 gly1_tRNA + 19 glyT_tRNA + 133 glyU_tRNA + 12426 h + 209 hisR_tRNA + 342 ile1_tRNA + 19 ile2_tRNA + 304 leu1_tRNA + 76 leu2_tRNA + 304 leuU_tRNA + 57 leuW_tRNA + 76 leuZ_tRNA + 190 lys1_tRNA + 133 met1_tRNA + 31160 mg2 + 171 phe1_tRNA + 12426 pi + 209 pro1_tRNA + 133 pro2_tRNA + 95 proL_tRNA + 1 rib_70_elo2_b0052_19_cplx + 38 ser1_tRNA + 19 ser3_tRNA + 19 serT_tRNA + 19 serV_tRNA + 228 thr1_tRNA + 76 thr2_tRNA + 133 thr3_tRNA + 57 thrU_tRNA + 19 trpT_tRNA + 95 tyr1_tRNA + 247 val1_tRNA + 114 val2_tRNA + 152 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708
tl_elo_b0052_1_rib1	Translation elongation 1 b0052 1 ribosome(s)	328 EF-G.GTP + 27 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argX-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 22 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 1 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 13 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 1640 mg2 + 1 rib_ini_b0052_1 --> 1 rib_70_elo1_b0052_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708
tl_elo_b0052_1_rib2	Translation elongation 2 b0052 1 ribosome(s)	327 h2o + 1 rib_70_elo1_b0052_1_cplx --> 327 EF-G.GDP + 327 EF-Tu.GDP + 27 ala1_tRNA + 10 ala2_tRNA + 12 arg1_tRNA + 3 argX_tRNA + 12 asn1_tRNA + 14 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 3 gln2_tRNA + 18 glu1_tRNA + 22 gly1_tRNA + 1 glyT_tRNA + 7 glyU_tRNA + 654 h + 11 hisR_tRNA + 18 ile1_tRNA + 1 ile2_tRNA + 16 leu1_tRNA + 4 leu2_tRNA + 16 leuU_tRNA + 3 leuW_tRNA + 4 leuZ_tRNA + 10 lys1_tRNA + 7 met1_tRNA + 1640 mg2 + 9 phe1_tRNA + 654 pi + 11 pro1_tRNA + 5 pro2_tRNA + 5 proL_tRNA + 1 rib_70_elo2_b0052_1_cplx + 2 ser1_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 1 serV_tRNA + 12 thr1_tRNA + 4 thr2_tRNA + 7 thr3_tRNA + 3 thrU_tRNA + 1 trpT_tRNA + 5 tyr1_tRNA + 13 val1_tRNA + 6 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708

tl_elo_b0052_9_rib1	Translation elongation 1 b0052 9 ribosome(s)	2952 EF-G.GTP + 243 EF-Tu.GTP.ala1-tRNA + 90 EF-Tu.GTP.ala2-tRNA + 108 EF-Tu.GTP.arg1-tRNA + 27 EF-Tu.GTP.argX-tRNA + 108 EF-Tu.GTP.asn1-tRNA + 126 EF-Tu.GTP.asp1-tRNA + 36 EF-Tu.GTP.cysT-tRNA + 72 EF-Tu.GTP.gln1-tRNA + 36 EF-Tu.GTP.gln2-tRNA + 162 EF-Tu.GTP.glu1-tRNA + 198 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 63 EF-Tu.GTP.glyU-tRNA + 99 EF-Tu.GTP.hisR-tRNA + 162 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.ile2-tRNA + 144 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 144 EF-Tu.GTP.leuU-tRNA + 27 EF-Tu.GTP.leuW-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 90 EF-Tu.GTP.lys1-tRNA + 63 EF-Tu.GTP.met1-tRNA + 81 EF-Tu.GTP.phe1-tRNA + 99 EF-Tu.GTP.pro1-tRNA + 63 EF-Tu.GTP.pro2-tRNA + 45 EF-Tu.GTP.proL-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serT-tRNA + 9 EF-Tu.GTP.serV-tRNA + 108 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 63 EF-Tu.GTP.thr3-tRNA + 27 EF-Tu.GTP.thrU-tRNA + 9 EF-Tu.GTP.trpT-tRNA + 45 EF-Tu.GTP.tyr1-tRNA + 117 EF-Tu.GTP.val1-tRNA + 54 EF-Tu.GTP.val2-tRNA + 72 EF-Tu.GTP.val3-tRNA + 14760 mg2 + 1 rib_ini_b0052_9 --> 1 rib_70_elo1_b0052_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708
tl_elo_b0052_9_rib2	Translation elongation 2 b0052 9 ribosome(s)	2943 h2o + 1 rib_70_elo1_b0052_9_cplx --> 2943 EF-G.GDP + 2943 EF-Tu.GDP + 243 ala1_tRNA + 90 ala2_tRNA + 108 arg1_tRNA + 27 argX_tRNA + 108 asn1_tRNA + 126 asp1_tRNA + 36 cysT_tRNA + 9 fmet_tRNA + 72 gln1_tRNA + 27 gln2_tRNA + 162 glu1_tRNA + 198 gly1_tRNA + 9 glyT_tRNA + 63 glyU_tRNA + 5886 h + 99 hisR_tRNA + 162 ile1_tRNA + 9 ile2_tRNA + 144 leu1_tRNA + 36 leu2_tRNA + 144 leuU_tRNA + 27 leuW_tRNA + 36 leuZ_tRNA + 90 lys1_tRNA + 63 met1_tRNA + 14760 mg2 + 81 phe1_tRNA + 5886 pi + 99 pro1_tRNA + 63 pro2_tRNA + 45 proL_tRNA + 1 rib_70_elo2_b0052_9_cplx + 18 ser1_tRNA + 9 ser3_tRNA + 9 serT_tRNA + 9 serV_tRNA + 108 thr1_tRNA + 36 thr2_tRNA + 63 thr3_tRNA + 27 thrU_tRNA + 9 trpT_tRNA + 45 tyr1_tRNA + 117 val1_tRNA + 54 val2_tRNA + 72 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708
tl_elo_b0053_12_rib1	Translation elongation 1 b0053 12 ribosome(s)	5124 EF-G.GTP + 420 EF-Tu.GTP.ala1-tRNA + 156 EF-Tu.GTP.ala2-tRNA + 288 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argW-tRNA + 324 EF-Tu.GTP.asn1-tRNA + 336 EF-Tu.GTP.asp1-tRNA + 336 EF-Tu.GTP.gln1-tRNA + 72 EF-Tu.GTP.gln2-tRNA + 264 EF-Tu.GTP.glu1-tRNA + 252 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.glyT-tRNA + 24 EF-Tu.GTP.glyU-tRNA + 96 EF-Tu.GTP.hisR-tRNA + 372 EF-Tu.GTP.ile1-tRNA + 336 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.leu2-tRNA + 48 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 276 EF-Tu.GTP.lys1-tRNA + 180 EF-Tu.GTP.met1-tRNA + 120 EF-Tu.GTP.phe1-tRNA + 108 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proL-tRNA + 24 EF-Tu.GTP.proM-tRNA + 36 EF-Tu.GTP.ser1-tRNA + 72 EF-Tu.GTP.ser2-tRNA + 48 EF-Tu.GTP.ser3-tRNA + 12 EF-Tu.GTP.serT-tRNA + 156 EF-Tu.GTP.serV-tRNA + 96 EF-Tu.GTP.thr1-tRNA + 48 EF-Tu.GTP.thr2-tRNA + 48 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.thrU-tRNA + 60 EF-Tu.GTP.trpT-tRNA + 60 EF-Tu.GTP.tyr1-tRNA + 120 EF-Tu.GTP.val1-tRNA + 96 EF-Tu.GTP.val2-tRNA + 84 EF-Tu.GTP.val3-tRNA + 25620 mg2 + 1 rib_ini_b0053_12 --> 1 rib_70_elo1_b0053_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_elo_b0053_12_rib2	Translation elongation 2 b0053 12 ribosome(s)	5112 h2o + 1 rib_70_elo1_b0053_12_cplx --> 5112 EF-G.GDP + 5112 EF-Tu.GDP + 420 ala1_tRNA + 156 ala2_tRNA + 288 arg1_tRNA + 12 argW_tRNA + 312 asn1_tRNA + 336 asp1_tRNA + 12 fmet_tRNA + 336 gln1_tRNA + 72 gln2_tRNA + 264 glu1_tRNA + 252 gly1_tRNA + 36 glyT_tRNA + 24 glyU_tRNA + 10224 h + 96 hisR_tRNA + 372 ile1_tRNA + 336 leu1_tRNA + 24 leu2_tRNA + 48 leuU_tRNA + 36 leuZ_tRNA + 276 lys1_tRNA + 180 met1_tRNA + 25620 mg2 + 120 phe1_tRNA + 10224 pi + 108 pro1_tRNA + 12 pro2_tRNA + 24 proL_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b0053_12_cplx + 36 ser1_tRNA + 72 ser2_tRNA + 48 ser3_tRNA + 12 serT_tRNA + 156 serV_tRNA + 96 thr1_tRNA + 48 thr2_tRNA + 48 thr3_tRNA + 12 thrU_tRNA + 60 trpT_tRNA + 60 tyr1_tRNA + 120 val1_tRNA + 96 val2_tRNA + 84 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_elo_b0053_1_rib1	Translation elongation 1 b0053 1 ribosome(s)	427 EF-G.GTP + 35 EF-Tu.GTP.ala1-tRNA + 13 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 27 EF-Tu.GTP.asn1-tRNA + 28 EF-Tu.GTP.asp1-tRNA + 28 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 22 EF-Tu.GTP.glu1-tRNA + 21 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 31 EF-Tu.GTP.ile1-tRNA + 28 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 23 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 13 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 2135 mg2 + 1 rib_ini_b0053_1 --> 1 rib_70_elo1_b0053_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_elo_b0053_1_rib2	Translation elongation 2 b0053 1 ribosome(s)	426 h2o + 1 rib_70_elo1_b0053_1_cplx --> 426 EF-G.GDP + 426 EF-Tu.GDP + 35 ala1_tRNA + 13 ala2_tRNA + 24 arg1_tRNA + 1 argW_tRNA + 26 asn1_tRNA + 28 asp1_tRNA + 1 fmet_tRNA + 28 gln1_tRNA + 6 gln2_tRNA + 22 glu1_tRNA + 21 gly1_tRNA + 3 glyT_tRNA + 2 glyU_tRNA + 852 h + 8 hisR_tRNA + 31 ile1_tRNA + 28 leu1_tRNA + 2 leu2_tRNA + 4 leuU_tRNA + 3 leuZ_tRNA + 23 lys1_tRNA + 15 met1_tRNA + 2135 mg2 + 10 phe1_tRNA + 852 pi + 9 pro1_tRNA + 1 pro2_tRNA + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b0053_1_cplx + 3 ser1_tRNA + 6 ser2_tRNA + 4 ser3_tRNA + 1 serT_tRNA + 13 serV_tRNA + 8 thr1_tRNA + 4 thr2_tRNA + 4 thr3_tRNA + 1 thrU_tRNA + 5 trpT_tRNA + 5 tyr1_tRNA + 10 val1_tRNA + 8 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528

tl_elo_b0053_25_rib1	Translation elongation 1 b0053 25 ribosome(s)	10675 EF-G.GTP + 875 EF-Tu.GTP.ala1-tRNA + 325 EF-Tu.GTP.ala2-tRNA + 600 EF-Tu.GTP.arg1-tRNA + 25 EF-Tu.GTP.argW-tRNA + 675 EF-Tu.GTP.asn1-tRNA + 700 EF-Tu.GTP.asp1-tRNA + 700 EF-Tu.GTP.gln1-tRNA + 150 EF-Tu.GTP.gln2-tRNA + 550 EF-Tu.GTP.glu1-tRNA + 525 EF-Tu.GTP.gly1-tRNA + 75 EF-Tu.GTP.glyT-tRNA + 50 EF-Tu.GTP.glyU-tRNA + 200 EF-Tu.GTP.hisR-tRNA + 775 EF-Tu.GTP.ile1-tRNA + 700 EF-Tu.GTP.leu1-tRNA + 50 EF-Tu.GTP.leu2-tRNA + 100 EF-Tu.GTP.leuU-tRNA + 75 EF-Tu.GTP.leuZ-tRNA + 575 EF-Tu.GTP.lys1-tRNA + 375 EF-Tu.GTP.met1-tRNA + 250 EF-Tu.GTP.phe1-tRNA + 225 EF-Tu.GTP.pro1-tRNA + 25 EF-Tu.GTP.pro2-tRNA + 50 EF-Tu.GTP.proL-tRNA + 50 EF-Tu.GTP.proM-tRNA + 75 EF-Tu.GTP.ser1-tRNA + 150 EF-Tu.GTP.ser2-tRNA + 100 EF-Tu.GTP.ser3-tRNA + 25 EF-Tu.GTP.serT-tRNA + 325 EF-Tu.GTP.serV-tRNA + 200 EF-Tu.GTP.thr1-tRNA + 100 EF-Tu.GTP.thr2-tRNA + 100 EF-Tu.GTP.thr3-tRNA + 25 EF-Tu.GTP.thrU-tRNA + 125 EF-Tu.GTP.trpT-tRNA + 125 EF-Tu.GTP.tyr1-tRNA + 250 EF-Tu.GTP.val1-tRNA + 200 EF-Tu.GTP.val2-tRNA + 175 EF-Tu.GTP.val3-tRNA + 53375 mg2 + 1 rib_ini_b0053_25 --> 1 rib_70_elo1_b0053_25_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_elo_b0053_25_rib2	Translation elongation 2 b0053 25 ribosome(s)	10650 h2o + 1 rib_70_elo1_b0053_25_cplx --> 10650 EF-G.GDP + 10650 EF-Tu.GDP + 875 ala1_tRNA + 325 ala2_tRNA + 600 arg1_tRNA + 25 argW_tRNA + 650 asn1_tRNA + 700 asp1_tRNA + 25 fmet_tRNA + 700 gln1_tRNA + 150 gln2_tRNA + 550 glu1_tRNA + 525 gly1_tRNA + 75 glyT_tRNA + 50 glyU_tRNA + 21300 h + 200 hisR_tRNA + 775 ile1_tRNA + 700 leu1_tRNA + 50 leu2_tRNA + 100 leuU_tRNA + 75 leuZ_tRNA + 575 lys1_tRNA + 375 met1_tRNA + 53375 mg2 + 250 phe1_tRNA + 21300 pi + 225 pro1_tRNA + 25 pro2_tRNA + 50 proL_tRNA + 50 proM_tRNA + 1 rib_70_elo2_b0053_25_cplx + 75 ser1_tRNA + 150 ser2_tRNA + 100 ser3_tRNA + 25 serT_tRNA + 325 serV_tRNA + 200 thr1_tRNA + 100 thr2_tRNA + 100 thr3_tRNA + 25 thrU_tRNA + 125 trpT_tRNA + 125 tyr1_tRNA + 250 val1_tRNA + 200 val2_tRNA + 175 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_elo_b0058_12_rib1	Translation elongation 1 b0058 12 ribosome(s)	2616 EF-G.GTP + 216 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 156 EF-Tu.GTP.arg1-tRNA + 24 EF-Tu.GTP.argU-tRNA + 12 EF-Tu.GTP.argX-tRNA + 72 EF-Tu.GTP.asn1-tRNA + 120 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.cysT-tRNA + 96 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 192 EF-Tu.GTP.glu1-tRNA + 96 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.glyU-tRNA + 108 EF-Tu.GTP.hisR-tRNA + 96 EF-Tu.GTP.ile1-tRNA + 108 EF-Tu.GTP.leu1-tRNA + 84 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuW-tRNA + 24 EF-Tu.GTP.leuZ-tRNA + 132 EF-Tu.GTP.lys1-tRNA + 96 EF-Tu.GTP.met1-tRNA + 48 EF-Tu.GTP.phe1-tRNA + 120 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proL-tRNA + 72 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serT-tRNA + 48 EF-Tu.GTP.serV-tRNA + 48 EF-Tu.GTP.thr1-tRNA + 72 EF-Tu.GTP.thr3-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 108 EF-Tu.GTP.tyr1-tRNA + 168 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 13080 mg2 + 1 rib_ini_b0058_12 --> 1 rib_70_elo1_b0058_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_elo_b0058_12_rib2	Translation elongation 2 b0058 12 ribosome(s)	2604 h2o + 1 rib_70_elo1_b0058_12_cplx --> 2604 EF-G.GDP + 2604 EF-Tu.GDP + 216 ala1_tRNA + 24 ala2_tRNA + 156 arg1_tRNA + 24 argU_tRNA + 12 argX_tRNA + 72 asn1_tRNA + 120 asp1_tRNA + 24 cysT_tRNA + 12 fmet_tRNA + 96 gln1_tRNA + 12 gln2_tRNA + 192 glu1_tRNA + 96 gly1_tRNA + 36 glyU_tRNA + 5208 h + 108 hisR_tRNA + 96 ile1_tRNA + 108 leu1_tRNA + 84 leu2_tRNA + 12 leuU_tRNA + 12 leuW_tRNA + 24 leuZ_tRNA + 132 lys1_tRNA + 96 met1_tRNA + 13080 mg2 + 36 phe1_tRNA + 5208 pi + 120 pro1_tRNA + 12 pro2_tRNA + 24 proL_tRNA + 72 proM_tRNA + 1 rib_70_elo2_b0058_12_cplx + 12 ser1_tRNA + 24 ser3_tRNA + 24 serT_tRNA + 48 serV_tRNA + 48 thr1_tRNA + 72 thr3_tRNA + 36 trpT_tRNA + 108 tyr1_tRNA + 168 val1_tRNA + 36 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_elo_b0058_1_rib1	Translation elongation 1 b0058 1 ribosome(s)	218 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argX-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 14 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 1 EF-Tu.GTP.val3-tRNA + 1090 mg2 + 1 rib_ini_b0058_1 --> 1 rib_70_elo1_b0058_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_elo_b0058_1_rib2	Translation elongation 2 b0058 1 ribosome(s)	217 h2o + 1 rib_70_elo1_b0058_1_cplx --> 217 EF-G.GDP + 217 EF-Tu.GDP + 18 ala1_tRNA + 2 ala2_tRNA + 13 arg1_tRNA + 2 argU_tRNA + 1 argX_tRNA + 6 asn1_tRNA + 10 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 1 gln2_tRNA + 16 glu1_tRNA + 8 gly1_tRNA + 3 glyU_tRNA + 434 h + 9 hisR_tRNA + 8 ile1_tRNA + 9 leu1_tRNA + 7 leu2_tRNA + 1 leuU_tRNA + 1 leuW_tRNA + 2 leuZ_tRNA + 11 lys1_tRNA + 8 met1_tRNA + 1090 mg2 + 3 phe1_tRNA + 434 pi + 10 pro1_tRNA + 1 pro2_tRNA + 2 proL_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b0058_1_cplx + 1 ser1_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 4 serV_tRNA + 4 thr1_tRNA + 6 thr3_tRNA + 3 trpT_tRNA + 9 tyr1_tRNA + 14 val1_tRNA + 3 val2_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426

tl_elo_b0058_6_rib1	Translation elongation 1 b0058 6 ribosome(s)	1308 EF-G.GTP + 108 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 78 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argU-tRNA + 6 EF-Tu.GTP.argX-tRNA + 36 EF-Tu.GTP.asn1-tRNA + 60 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 48 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 96 EF-Tu.GTP.glu1-tRNA + 48 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyU-tRNA + 54 EF-Tu.GTP.hisR-tRNA + 48 EF-Tu.GTP.ile1-tRNA + 54 EF-Tu.GTP.leu1-tRNA + 42 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.leuW-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 66 EF-Tu.GTP.lys1-tRNA + 48 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 60 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proL-tRNA + 36 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 12 EF-Tu.GTP.serT-tRNA + 24 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.trpT-tRNA + 54 EF-Tu.GTP.tyr1-tRNA + 84 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 6540 mg2 + 1 rib_ini_b0058_6 --> 1 rib_70_elo1_b0058_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_elo_b0058_6_rib2	Translation elongation 2 b0058 6 ribosome(s)	1302 h2o + 1 rib_70_elo1_b0058_6_cplx --> 1302 EF-G.GDP + 1302 EF-Tu.GDP + 108 ala1_tRNA + 12 ala2_tRNA + 78 arg1_tRNA + 12 argU_tRNA + 6 argX_tRNA + 36 asn1_tRNA + 60 asp1_tRNA + 12 cysT_tRNA + 6 fmet_tRNA + 48 gln1_tRNA + 6 gln2_tRNA + 96 glu1_tRNA + 48 gly1_tRNA + 18 glyU_tRNA + 2604 h + 54 hisR_tRNA + 48 ile1_tRNA + 54 leu1_tRNA + 42 leu2_tRNA + 6 leuU_tRNA + 6 leuW_tRNA + 12 leuZ_tRNA + 66 lys1_tRNA + 48 met1_tRNA + 6540 mg2 + 18 phe1_tRNA + 2604 pi + 60 pro1_tRNA + 6 pro2_tRNA + 12 proL_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b0058_6_cplx + 6 ser1_tRNA + 12 ser3_tRNA + 12 serT_tRNA + 24 serV_tRNA + 24 thr1_tRNA + 36 thr3_tRNA + 18 trpT_tRNA + 54 tyr1_tRNA + 84 val1_tRNA + 18 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_elo_b0059_1_rib1	Translation elongation 1 b0059 1 ribosome(s)	967 EF-G.GTP + 56 EF-Tu.GTP.ala1-tRNA + 29 EF-Tu.GTP.ala2-tRNA + 74 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 67 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 49 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 82 EF-Tu.GTP.glu1-tRNA + 45 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 29 EF-Tu.GTP.hisR-tRNA + 50 EF-Tu.GTP.ile1-tRNA + 88 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 13 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 26 EF-Tu.GTP.lys1-tRNA + 23 EF-Tu.GTP.met1-tRNA + 37 EF-Tu.GTP.phe1-tRNA + 27 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 28 EF-Tu.GTP.serV-tRNA + 28 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 19 EF-Tu.GTP.tyr1-tRNA + 37 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 14 EF-Tu.GTP.val3-tRNA + 4835 mg2 + 1 rib_ini_b0059_1 --> 1 rib_70_elo1_b0059_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	6.20E+01	62.00359	0	1.83E+00	1.826
tl_elo_b0059_1_rib2	Translation elongation 2 b0059 1 ribosome(s)	966 h2o + 1 rib_70_elo1_b0059_1_cplx --> 966 EF-G.GDP + 966 EF-Tu.GDP + 56 ala1_tRNA + 29 ala2_tRNA + 74 arg1_tRNA + 40 asn1_tRNA + 67 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 48 gln1_tRNA + 8 gln2_tRNA + 82 glu1_tRNA + 45 gly1_tRNA + 5 glyT_tRNA + 4 glyU_tRNA + 1932 h + 29 hisR_tRNA + 50 ile1_tRNA + 88 leu1_tRNA + 8 leu2_tRNA + 13 leuU_tRNA + 4 leuW_tRNA + 4 leuZ_tRNA + 26 lys1_tRNA + 23 met1_tRNA + 4835 mg2 + 37 phe1_tRNA + 1932 pi + 27 pro1_tRNA + 4 pro2_tRNA + 1 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b0059_1_cplx + 6 ser1_tRNA + 8 ser2_tRNA + 5 ser3_tRNA + 3 serT_tRNA + 28 serV_tRNA + 28 thr1_tRNA + 7 thr2_tRNA + 8 thr3_tRNA + 2 thrU_tRNA + 12 trpT_tRNA + 19 tyr1_tRNA + 37 val1_tRNA + 7 val2_tRNA + 14 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	6.20E+01	62.00359	0	1.83E+00	1.826
tl_elo_b0059_28_rib1	Translation elongation 1 b0059 28 ribosome(s)	27076 EF-G.GTP + 1568 EF-Tu.GTP.ala1-tRNA + 812 EF-Tu.GTP.ala2-tRNA + 2072 EF-Tu.GTP.arg1-tRNA + 1120 EF-Tu.GTP.asn1-tRNA + 1876 EF-Tu.GTP.asp1-tRNA + 168 EF-Tu.GTP.cysT-tRNA + 1372 EF-Tu.GTP.gln1-tRNA + 224 EF-Tu.GTP.gln2-tRNA + 2296 EF-Tu.GTP.glu1-tRNA + 1260 EF-Tu.GTP.gly1-tRNA + 140 EF-Tu.GTP.glyT-tRNA + 112 EF-Tu.GTP.glyU-tRNA + 812 EF-Tu.GTP.hisR-tRNA + 1400 EF-Tu.GTP.ile1-tRNA + 2464 EF-Tu.GTP.leu1-tRNA + 224 EF-Tu.GTP.leu2-tRNA + 364 EF-Tu.GTP.leuU-tRNA + 112 EF-Tu.GTP.leuW-tRNA + 112 EF-Tu.GTP.leuZ-tRNA + 728 EF-Tu.GTP.lys1-tRNA + 644 EF-Tu.GTP.met1-tRNA + 1036 EF-Tu.GTP.phe1-tRNA + 756 EF-Tu.GTP.pro1-tRNA + 112 EF-Tu.GTP.pro2-tRNA + 28 EF-Tu.GTP.proL-tRNA + 112 EF-Tu.GTP.proM-tRNA + 168 EF-Tu.GTP.ser1-tRNA + 224 EF-Tu.GTP.ser2-tRNA + 140 EF-Tu.GTP.ser3-tRNA + 84 EF-Tu.GTP.serT-tRNA + 784 EF-Tu.GTP.serV-tRNA + 784 EF-Tu.GTP.thr1-tRNA + 196 EF-Tu.GTP.thr2-tRNA + 224 EF-Tu.GTP.thr3-tRNA + 56 EF-Tu.GTP.thrU-tRNA + 336 EF-Tu.GTP.trpT-tRNA + 532 EF-Tu.GTP.tyr1-tRNA + 1036 EF-Tu.GTP.val1-tRNA + 196 EF-Tu.GTP.val2-tRNA + 392 EF-Tu.GTP.val3-tRNA + 135380 mg2 + 1 rib_ini_b0059_28 --> 1 rib_70_	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	6.20E+01	62.00359	0	1.83E+00	1.826
tl_elo_b0059_28_rib2	Translation elongation 2 b0059 28 ribosome(s)	27048 h2o + 1 rib_70_elo1_b0059_28_cplx --> 27048 EF-G.GDP + 27048 EF-Tu.GDP + 1568 ala1_tRNA + 812 ala2_tRNA + 2072 arg1_tRNA + 1120 asn1_tRNA + 1876 asp1_tRNA + 168 cysT_tRNA + 28 fmet_tRNA + 1344 gln1_tRNA + 224 gln2_tRNA + 2296 glu1_tRNA + 1260 gly1_tRNA + 140 glyT_tRNA + 112 glyU_tRNA + 54096 h + 812 hisR_tRNA + 1400 ile1_tRNA + 2464 leu1_tRNA + 224 leu2_tRNA + 364 leuU_tRNA + 112 leuW_tRNA + 112 leuZ_tRNA + 728 lys1_tRNA + 644 met1_tRNA + 135380 mg2 + 103 phe1_tRNA + 54096 pi + 756 pro1_tRNA + 112 pro2_tRNA + 28 proL_tRNA + 112 proM_tRNA + 1 rib_70_elo2_b0059_28_cplx + 168 ser1_tRNA + 224 ser2_tRNA + 140 ser3_tRNA + 84 serT_tRNA + 784 serV_tRNA + 784 thr1_tRNA + 196 thr2_tRNA + 224 thr3_tRNA + 56 thrU_tRNA + 336 trpT_tRNA + 532 tyr1_tRNA + 1036 val1_tRNA + 196 val2_tRNA + 392 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	6.20E+01	62.00359	0	1.83E+00	1.826

tl_elo_b0059_56_rib1	Translation elongation 1 b0059 56 ribosome(s)	54152 EF-G.GTP + 3136 EF-Tu.GTP.ala1-tRNA + 1624 EF-Tu.GTP.ala2-tRNA + 4144 EF-Tu.GTP.arg1-tRNA + 2240 EF-Tu.GTP.asn1-tRNA + 3752 EF-Tu.GTP.asp1-tRNA + 336 EF-Tu.GTP.cysT-tRNA + 2744 EF-Tu.GTP.gln1-tRNA + 448 EF-Tu.GTP.gln2-tRNA + 4592 EF-Tu.GTP.glu1-tRNA + 2520 EF-Tu.GTP.gly1-tRNA + 280 EF-Tu.GTP.glyT-tRNA + 224 EF-Tu.GTP.glyU-tRNA + 1624 EF-Tu.GTP.hisR-tRNA + 2800 EF-Tu.GTP.ile1-tRNA + 4928 EF-Tu.GTP.leu1-tRNA + 448 EF-Tu.GTP.leu2-tRNA + 728 EF-Tu.GTP.leuU-tRNA + 224 EF-Tu.GTP.leuW-tRNA + 224 EF-Tu.GTP.leuZ-tRNA + 1456 EF-Tu.GTP.lys1-tRNA + 1288 EF-Tu.GTP.met1-tRNA + 2072 EF-Tu.GTP.phe1-tRNA + 1512 EF-Tu.GTP.pro1-tRNA + 224 EF-Tu.GTP.pro2-tRNA + 56 EF-Tu.GTP.proL-tRNA + 224 EF-Tu.GTP.proM-tRNA + 336 EF-Tu.GTP.ser1-tRNA + 448 EF-Tu.GTP.ser2-tRNA + 280 EF-Tu.GTP.ser3-tRNA + 168 EF-Tu.GTP.serT-tRNA + 1568 EF-Tu.GTP.serV-tRNA + 1568 EF-Tu.GTP.thr1-tRNA + 392 EF-Tu.GTP.thr2-tRNA + 448 EF-Tu.GTP.thr3-tRNA + 112 EF-Tu.GTP.thrU-tRNA + 672 EF-Tu.GTP.trpT-tRNA + 1064 EF-Tu.GTP.tyr1-tRNA + 2072 EF-Tu.GTP.val1-tRNA + 392 EF-Tu.GTP.val2-tRNA + 784 EF-Tu.GTP.val3-tRNA + 270760 mg2 + 1 rib_ini_b0059_56 --> 1 rib_70_	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	4.28E+01	42.78851	0	1.83E+00	1.826
tl_elo_b0059_56_rib2	Translation elongation 2 b0059 56 ribosome(s)	54096 h2o + 1 rib_70_elo1_b0059_56_cplx --> 54096 EF-G.GDP + 54096 EF-Tu.GDP + 3136 ala1_tRNA + 1624 ala2_tRNA + 4144 arg1_tRNA + 2240 asn1_tRNA + 3752 asp1_tRNA + 336 cysT_tRNA + 56 fmet_tRNA + 2688 gln1_tRNA + 448 gln2_tRNA + 4592 glu1_tRNA + 2520 gly1_tRNA + 280 glyT_tRNA + 224 glyU_tRNA + 108192 h + 1624 hisR_tRNA + 2800 ile1_tRNA + 4928 leu1_tRNA + 448 leu2_tRNA + 728 leuU_tRNA + 224 leuW_tRNA + 224 leuZ_tRNA + 1456 lys1_tRNA + 1288 met1_tRNA + 270760 mg2 + 2072 phe1_tRNA + 108192 pi + 1512 pro1_tRNA + 224 pro2_tRNA + 56 proL_tRNA + 224 proM_tRNA + 1 rib_70_elo2_b0059_56_cplx + 336 ser1_tRNA + 448 ser2_tRNA + 280 ser3_tRNA + 168 serT_tRNA + 1568 serV_tRNA + 1568 thr1_tRNA + 392 thr2_tRNA + 448 thr3_tRNA + 112 thrU_tRNA + 672 trpT_tRNA + 1064 tyr1_tRNA + 2072 val1_tRNA + 392 val2_tRNA + 784 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	4.28E+01	42.78851	0	1.83E+00	1.826
tl_elo_b0144_18_rib1	Translation elongation 1 b0144 18 ribosome(s)	5526 EF-G.GTP + 342 EF-Tu.GTP.ala1-tRNA + 198 EF-Tu.GTP.ala2-tRNA + 306 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argW-tRNA + 72 EF-Tu.GTP.argX-tRNA + 126 EF-Tu.GTP.asn1-tRNA + 324 EF-Tu.GTP.asp1-tRNA + 72 EF-Tu.GTP.cysT-tRNA + 234 EF-Tu.GTP.gln1-tRNA + 180 EF-Tu.GTP.gln2-tRNA + 270 EF-Tu.GTP.glu1-tRNA + 288 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.glyT-tRNA + 54 EF-Tu.GTP.glyU-tRNA + 270 EF-Tu.GTP.hisR-tRNA + 324 EF-Tu.GTP.ile1-tRNA + 36 EF-Tu.GTP.ile2-tRNA + 234 EF-Tu.GTP.leu1-tRNA + 90 EF-Tu.GTP.leu2-tRNA + 198 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuW-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 126 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 216 EF-Tu.GTP.phe1-tRNA + 108 EF-Tu.GTP.pro1-tRNA + 72 EF-Tu.GTP.pro2-tRNA + 54 EF-Tu.GTP.proL-tRNA + 90 EF-Tu.GTP.proM-tRNA + 36 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 54 EF-Tu.GTP.ser3-tRNA + 72 EF-Tu.GTP.serT-tRNA + 72 EF-Tu.GTP.serV-tRNA + 36 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 36 EF-Tu.GTP.thr3-tRNA + 90 EF-Tu.GTP.thrU-tRNA + 126 EF-Tu.GTP.trpT-tRNA + 198 EF-Tu.GTP.tyr1-tRNA + 180 EF-Tu.GTP.val1-tRNA + 54 EF-Tu.GTP.val2-tRNA + 90 EF-Tu.GTP.val3-tRNA + 27630 mg2 + 1 rib_	irreversible	Translation	0.00E+00	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353
tl_elo_b0144_18_rib2	Translation elongation 2 b0144 18 ribosome(s)	5508 h2o + 1 rib_70_elo1_b0144_18_cplx --> 5508 EF-G.GDP + 5508 EF-Tu.GDP + 342 ala1_tRNA + 198 ala2_tRNA + 306 arg1_tRNA + 18 argW_tRNA + 72 argX_tRNA + 126 asn1_tRNA + 324 asp1_tRNA + 54 cysT_tRNA + 18 fmet_tRNA + 234 gln1_tRNA + 180 gln2_tRNA + 270 glu1_tRNA + 288 gly1_tRNA + 36 glyT_tRNA + 54 glyU_tRNA + 11016 h + 270 hisR_tRNA + 324 ile1_tRNA + 36 ile2_tRNA + 234 leu1_tRNA + 90 leu2_tRNA + 198 leuU_tRNA + 36 leuW_tRNA + 18 leuZ_tRNA + 126 lys1_tRNA + 18 met1_tRNA + 27630 mg2 + 216 phe1_tRNA + 11016 pi + 108 pro1_tRNA + 72 pro2_tRNA + 54 proL_tRNA + 90 proM_tRNA + 1 rib_70_elo2_b0144_18_cplx + 36 ser1_tRNA + 36 ser2_tRNA + 54 ser3_tRNA + 72 serT_tRNA + 72 serV_tRNA + 36 thr1_tRNA + 36 thr2_tRNA + 36 thr3_tRNA + 90 thrU_tRNA + 126 trpT_tRNA + 198 tyr1_tRNA + 180 val1_tRNA + 54 val2_tRNA + 90 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353
tl_elo_b0144_1_rib1	Translation elongation 1 b0144 1 ribosome(s)	307 EF-G.GTP + 19 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.ala2-tRNA + 17 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 4 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 13 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 15 EF-Tu.GTP.glu1-tRNA + 16 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 11 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1535 mg2 + 1 rib_ini_b0144_1 -->	irreversible	Translation	0.00E+00	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353
tl_elo_b0144_1_rib2	Translation elongation 2 b0144 1 ribosome(s)	306 h2o + 1 rib_70_elo1_b0144_1_cplx --> 306 EF-G.GDP + 306 EF-Tu.GDP + 19 ala1_tRNA + 11 ala2_tRNA + 17 arg1_tRNA + 1 argW_tRNA + 4 argX_tRNA + 7 asn1_tRNA + 18 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 13 gln1_tRNA + 10 gln2_tRNA + 15 glu1_tRNA + 16 gly1_tRNA + 2 glyT_tRNA + 3 glyU_tRNA + 612 h + 15 hisR_tRNA + 18 ile1_tRNA + 2 ile2_tRNA + 13 leu1_tRNA + 5 leu2_tRNA + 11 leuU_tRNA + 2 leuW_tRNA + 1 leuZ_tRNA + 7 lys1_tRNA + 1 met1_tRNA + 1535 mg2 + 12 phe1_tRNA + 612 pi + 6 pro1_tRNA + 4 pro2_tRNA + 3 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b0144_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 3 ser3_tRNA + 4 serT_tRNA + 4 serV_tRNA + 2 thr1_tRNA + 2 thr2_tRNA + 2 thr3_tRNA + 5 thrU_tRNA + 7 trpT_tRNA + 11 tyr1_tRNA + 10 val1_tRNA + 3 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353

tl_elo_b0144_9_rib1	Translation elongation 1 b0144 9 ribosome(s)	2763 EF-G.GTP + 171 EF-Tu.GTP.ala1-tRNA + 99 EF-Tu.GTP.ala2-tRNA + 153 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argW-tRNA + 36 EF-Tu.GTP.argX-tRNA + 63 EF-Tu.GTP.asn1-tRNA + 162 EF-Tu.GTP.asp1-tRNA + 36 EF-Tu.GTP.cysT-tRNA + 117 EF-Tu.GTP.gln1-tRNA + 90 EF-Tu.GTP.gln2-tRNA + 135 EF-Tu.GTP.glu1-tRNA + 144 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 27 EF-Tu.GTP.glyU-tRNA + 135 EF-Tu.GTP.hisR-tRNA + 162 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.ile2-tRNA + 117 EF-Tu.GTP.leu1-tRNA + 45 EF-Tu.GTP.leu2-tRNA + 99 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuW-tRNA + 9 EF-Tu.GTP.leuZ-tRNA + 63 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 108 EF-Tu.GTP.phe1-tRNA + 54 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 27 EF-Tu.GTP.proL-tRNA + 45 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 27 EF-Tu.GTP.ser3-tRNA + 36 EF-Tu.GTP.serT-tRNA + 36 EF-Tu.GTP.serV-tRNA + 18 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.thr3-tRNA + 45 EF-Tu.GTP.thrU-tRNA + 63 EF-Tu.GTP.trpT-tRNA + 99 EF-Tu.GTP.tyr1-tRNA + 90 EF-Tu.GTP.val1-tRNA + 27 EF-Tu.GTP.val2-tRNA + 45 EF-Tu.GTP.val3	irreversible	Translation	0.00E+00	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353
tl_elo_b0144_9_rib2	Translation elongation 2 b0144 9 ribosome(s)	2754 h2o + 1 rib_70_elo1_b0144_9_cplx --> 2754 EF-G.GDP + 2754 EF-Tu.GDP + 171 ala1_tRNA + 99 ala2_tRNA + 153 arg1_tRNA + 9 argW_tRNA + 36 argX_tRNA + 63 asn1_tRNA + 162 asp1_tRNA + 27 cysT_tRNA + 9 fmet_tRNA + 117 gln1_tRNA + 90 gln2_tRNA + 135 glu1_tRNA + 144 gly1_tRNA + 18 glyT_tRNA + 27 glyU_tRNA + 5508 h + 135 hisR_tRNA + 162 ile1_tRNA + 18 ile2_tRNA + 117 leu1_tRNA + 45 leu2_tRNA + 99 leuU_tRNA + 18 leuW_tRNA + 9 leuZ_tRNA + 63 lys1_tRNA + 9 met1_tRNA + 13815 mg2 + 108 phe1_tRNA + 5508 pi + 54 pro1_tRNA + 36 pro2_tRNA + 27 proL_tRNA + 45 proM_tRNA + 1 rib_70_elo2_b0144_9_cplx + 18 ser1_tRNA + 18 ser2_tRNA + 27 ser3_tRNA + 36 serT_tRNA + 36 serV_tRNA + 18 thr1_tRNA + 18 thr2_tRNA + 18 thr3_tRNA + 45 thrU_tRNA + 63 trpT_tRNA + 99 tyr1_tRNA + 90 val1_tRNA + 27 val2_tRNA + 45 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353
tl_elo_b0166_16_rib1	Translation elongation 1 b0166 16 ribosome(s)	4368 EF-G.GTP + 304 EF-Tu.GTP.ala1-tRNA + 80 EF-Tu.GTP.ala2-tRNA + 256 EF-Tu.GTP.arg1-tRNA + 192 EF-Tu.GTP.asn1-tRNA + 224 EF-Tu.GTP.asp1-tRNA + 48 EF-Tu.GTP.cysT-tRNA + 192 EF-Tu.GTP.gln1-tRNA + 304 EF-Tu.GTP.glu1-tRNA + 368 EF-Tu.GTP.gly1-tRNA + 48 EF-Tu.GTP.glyU-tRNA + 48 EF-Tu.GTP.hisR-tRNA + 352 EF-Tu.GTP.ile1-tRNA + 160 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 48 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuZ-tRNA + 208 EF-Tu.GTP.lys1-tRNA + 64 EF-Tu.GTP.met1-tRNA + 128 EF-Tu.GTP.phe1-tRNA + 80 EF-Tu.GTP.pro1-tRNA + 64 EF-Tu.GTP.proM-tRNA + 64 EF-Tu.GTP.ser1-tRNA + 80 EF-Tu.GTP.ser2-tRNA + 32 EF-Tu.GTP.serT-tRNA + 48 EF-Tu.GTP.serV-tRNA + 176 EF-Tu.GTP.thr1-tRNA + 16 EF-Tu.GTP.thr2-tRNA + 32 EF-Tu.GTP.thr3-tRNA + 48 EF-Tu.GTP.trpT-tRNA + 144 EF-Tu.GTP.tyr1-tRNA + 256 EF-Tu.GTP.val1-tRNA + 96 EF-Tu.GTP.val2-tRNA + 176 EF-Tu.GTP.val3-tRNA + 21840 mg2 + 1 rib_ini_b0166_16 --> 1 rib_70_elo1_b0166_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_elo_b0166_16_rib2	Translation elongation 2 b0166 16 ribosome(s)	4352 h2o + 1 rib_70_elo1_b0166_16_cplx --> 4352 EF-G.GDP + 4352 EF-Tu.GDP + 304 ala1_tRNA + 80 ala2_tRNA + 256 arg1_tRNA + 192 asn1_tRNA + 208 asp1_tRNA + 48 cysT_tRNA + 16 fmet_tRNA + 192 gln1_tRNA + 304 glu1_tRNA + 368 gly1_tRNA + 48 glyU_tRNA + 8704 h + 48 hisR_tRNA + 352 ile1_tRNA + 160 leu1_tRNA + 16 leu2_tRNA + 48 leuU_tRNA + 16 leuZ_tRNA + 208 lys1_tRNA + 64 met1_tRNA + 21840 mg2 + 128 phe1_tRNA + 8704 pi + 80 pro1_tRNA + 64 proM_tRNA + 1 rib_70_elo2_b0166_16_cplx + 64 ser1_tRNA + 80 ser2_tRNA + 32 serT_tRNA + 48 serV_tRNA + 176 thr1_tRNA + 16 thr2_tRNA + 32 thr3_tRNA + 48 trpT_tRNA + 144 tyr1_tRNA + 256 val1_tRNA + 96 val2_tRNA + 176 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_elo_b0166_1_rib1	Translation elongation 1 b0166 1 ribosome(s)	273 EF-G.GTP + 19 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 16 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 19 EF-Tu.GTP.glu1-tRNA + 23 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 22 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 16 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 11 EF-Tu.GTP.val3-tRNA + 1365 mg2 + 1 rib_ini_b0166_1 --> 1 rib_70_elo1_b0166_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_elo_b0166_1_rib2	Translation elongation 2 b0166 1 ribosome(s)	272 h2o + 1 rib_70_elo1_b0166_1_cplx --> 272 EF-G.GDP + 272 EF-Tu.GDP + 19 ala1_tRNA + 5 ala2_tRNA + 16 arg1_tRNA + 12 asn1_tRNA + 13 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 12 gln1_tRNA + 19 glu1_tRNA + 23 gly1_tRNA + 3 glyU_tRNA + 544 h + 3 hisR_tRNA + 22 ile1_tRNA + 10 leu1_tRNA + 1 leu2_tRNA + 3 leuU_tRNA + 1 leuZ_tRNA + 13 lys1_tRNA + 4 met1_tRNA + 1365 mg2 + 8 phe1_tRNA + 544 pi + 5 pro1_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b0166_1_cplx + 4 ser1_tRNA + 5 ser2_tRNA + 2 serT_tRNA + 3 serV_tRNA + 11 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 3 trpT_tRNA + 9 tyr1_tRNA + 16 val1_tRNA + 6 val2_tRNA + 11 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997

tl_elo_b0166_8_rib1	Translation elongation 1 b0166 8 ribosome(s)	2184 EF-G.GTP + 152 EF-Tu.GTP.ala1-tRNA + 40 EF-Tu.GTP.ala2-tRNA + 128 EF-Tu.GTP.arg1-tRNA + 96 EF-Tu.GTP.asn1-tRNA + 112 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.cysT-tRNA + 96 EF-Tu.GTP.gln1-tRNA + 152 EF-Tu.GTP.glu1-tRNA + 184 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.glyU-tRNA + 24 EF-Tu.GTP.hisR-tRNA + 176 EF-Tu.GTP.ile1-tRNA + 80 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 24 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 104 EF-Tu.GTP.lys1-tRNA + 32 EF-Tu.GTP.met1-tRNA + 64 EF-Tu.GTP.phe1-tRNA + 40 EF-Tu.GTP.pro1-tRNA + 32 EF-Tu.GTP.proM-tRNA + 32 EF-Tu.GTP.ser1-tRNA + 40 EF-Tu.GTP.ser2-tRNA + 16 EF-Tu.GTP.serT-tRNA + 24 EF-Tu.GTP.serV-tRNA + 88 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 16 EF-Tu.GTP.thr3-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 72 EF-Tu.GTP.tyr1-tRNA + 128 EF-Tu.GTP.val1-tRNA + 48 EF-Tu.GTP.val2-tRNA + 88 EF-Tu.GTP.val3-tRNA + 10920 mg2 + 1 rib_ini_b0166_8 --> 1 rib_70_elo1_b0166_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_elo_b0166_8_rib2	Translation elongation 2 b0166 8 ribosome(s)	2176 h2o + 1 rib_70_elo1_b0166_8_cplx --> 2176 EF-G.GDP + 2176 EF-Tu.GDP + 152 ala1_tRNA + 40 ala2_tRNA + 128 arg1_tRNA + 96 asn1_tRNA + 104 asp1_tRNA + 24 cysT_tRNA + 8 fmet_tRNA + 96 gln1_tRNA + 152 glu1_tRNA + 184 gly1_tRNA + 24 glyU_tRNA + 4352 h + 24 hisR_tRNA + 176 ile1_tRNA + 80 leu1_tRNA + 8 leu2_tRNA + 24 leuU_tRNA + 8 leuZ_tRNA + 104 lys1_tRNA + 32 met1_tRNA + 10920 mg2 + 64 phe1_tRNA + 4352 pi + 40 pro1_tRNA + 32 proM_tRNA + 1 rib_70_elo2_b0166_8_cplx + 32 ser1_tRNA + 4 ser2_tRNA + 16 serT_tRNA + 24 serV_tRNA + 88 thr1_tRNA + 8 thr2_tRNA + 16 thr3_tRNA + 24 trpT_tRNA + 72 tyr1_tRNA + 128 val1_tRNA + 48 val2_tRNA + 88 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_elo_b0167_1_rib1	Translation elongation 1 b0167 1 ribosome(s)	889 EF-G.GTP + 31 EF-Tu.GTP.ala1-tRNA + 34 EF-Tu.GTP.ala2-tRNA + 70 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argX-tRNA + 28 EF-Tu.GTP.asn1-tRNA + 52 EF-Tu.GTP.asp1-tRNA + 9 EF-Tu.GTP.cysT-tRNA + 32 EF-Tu.GTP.gln1-tRNA + 22 EF-Tu.GTP.gln2-tRNA + 62 EF-Tu.GTP.glu1-tRNA + 29 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 9 EF-Tu.GTP.glyU-tRNA + 38 EF-Tu.GTP.hisR-tRNA + 43 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 57 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leu2-tRNA + 24 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.leuW-tRNA + 21 EF-Tu.GTP.leuZ-tRNA + 22 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 38 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serT-tRNA + 25 EF-Tu.GTP.serV-tRNA + 23 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 16 EF-Tu.GTP.trpT-tRNA + 16 EF-Tu.GTP.tyr1-tRNA + 22 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 4445 mg2 + 1 rib_ini_b0167_1 --> 1 rib_70_elo1	irreversible	Translation	0.00E+00	1.00E+09	0	2.95E+01	2.95E+01	0	5.06E+01	50.5931	0	2.20E+00	2.197
tl_elo_b0167_1_rib2	Translation elongation 2 b0167 1 ribosome(s)	888 h2o + 1 rib_70_elo1_b0167_1_cplx --> 888 EF-G.GDP + 888 EF-Tu.GDP + 31 ala1_tRNA + 34 ala2_tRNA + 70 arg1_tRNA + 7 argX_tRNA + 28 asn1_tRNA + 52 asp1_tRNA + 9 cysT_tRNA + 1 fmet_tRNA + 32 gln1_tRNA + 22 gln2_tRNA + 62 glu1_tRNA + 29 gly1_tRNA + 8 glyT_tRNA + 8 glyU_tRNA + 1776 h + 38 hisR_tRNA + 43 ile1_tRNA + 3 ile2_tRNA + 57 leu1_tRNA + 14 leu2_tRNA + 24 leuU_tRNA + 6 leuW_tRNA + 21 leuZ_tRNA + 22 lys1_tRNA + 18 met1_tRNA + 4445 mg2 + 38 phe1_tRNA + 1776 pi + 18 pro1_tRNA + 4 pro2_tRNA + 8 proL_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b0167_1_cplx + 5 ser1_tRNA + 1 ser2_tRNA + 6 ser3_tRNA + 5 serT_tRNA + 25 serV_tRNA + 23 thr1_tRNA + 7 thr2_tRNA + 12 thr3_tRNA + 6 thrU_tRNA + 16 trpT_tRNA + 16 tyr1_tRNA + 22 val1_tRNA + 20 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.95E+01	2.95E+01	0	5.06E+01	50.5931	0	2.20E+00	2.197
tl_elo_b0167_26_rib1	Translation elongation 1 b0167 26 ribosome(s)	23114 EF-G.GTP + 806 EF-Tu.GTP.ala1-tRNA + 884 EF-Tu.GTP.ala2-tRNA + 1820 EF-Tu.GTP.arg1-tRNA + 182 EF-Tu.GTP.argX-tRNA + 728 EF-Tu.GTP.asn1-tRNA + 1352 EF-Tu.GTP.asp1-tRNA + 234 EF-Tu.GTP.cysT-tRNA + 832 EF-Tu.GTP.gln1-tRNA + 572 EF-Tu.GTP.gln2-tRNA + 1612 EF-Tu.GTP.glu1-tRNA + 754 EF-Tu.GTP.gly1-tRNA + 208 EF-Tu.GTP.glyT-tRNA + 234 EF-Tu.GTP.glyU-tRNA + 988 EF-Tu.GTP.hisR-tRNA + 1118 EF-Tu.GTP.ile1-tRNA + 78 EF-Tu.GTP.ile2-tRNA + 1482 EF-Tu.GTP.leu1-tRNA + 364 EF-Tu.GTP.leu2-tRNA + 624 EF-Tu.GTP.leuU-tRNA + 156 EF-Tu.GTP.leuW-tRNA + 546 EF-Tu.GTP.leuZ-tRNA + 572 EF-Tu.GTP.lys1-tRNA + 468 EF-Tu.GTP.met1-tRNA + 988 EF-Tu.GTP.phe1-tRNA + 468 EF-Tu.GTP.pro1-tRNA + 104 EF-Tu.GTP.pro2-tRNA + 208 EF-Tu.GTP.proL-tRNA + 260 EF-Tu.GTP.proM-tRNA + 130 EF-Tu.GTP.ser1-tRNA + 26 EF-Tu.GTP.ser2-tRNA + 156 EF-Tu.GTP.ser3-tRNA + 130 EF-Tu.GTP.serT-tRNA + 650 EF-Tu.GTP.serV-tRNA + 598 EF-Tu.GTP.thr1-tRNA + 182 EF-Tu.GTP.thr2-tRNA + 312 EF-Tu.GTP.thr3-tRNA + 156 EF-Tu.GTP.thrU-tRNA + 416 EF-Tu.GTP.trpT-tRNA + 416 EF-Tu.GTP.tyr1-tRNA + 572 EF-Tu.GTP.val1-tRNA + 520 EF-Tu.GTP.val2-tRNA + 208 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	2.95E+01	2.95E+01	0	5.06E+01	50.5931	0	2.20E+00	2.197
tl_elo_b0167_26_rib2	Translation elongation 2 b0167 26 ribosome(s)	23088 h2o + 1 rib_70_elo1_b0167_26_cplx --> 23088 EF-G.GDP + 23088 EF-Tu.GDP + 806 ala1_tRNA + 884 ala2_tRNA + 1820 arg1_tRNA + 182 argX_tRNA + 728 asn1_tRNA + 1352 asp1_tRNA + 234 cysT_tRNA + 26 fmet_tRNA + 832 gln1_tRNA + 572 gln2_tRNA + 1612 glu1_tRNA + 754 gly1_tRNA + 208 glyT_tRNA + 208 glyU_tRNA + 46176 h + 988 hisR_tRNA + 1118 ile1_tRNA + 78 ile2_tRNA + 1482 leu1_tRNA + 364 leu2_tRNA + 624 leuU_tRNA + 156 leuW_tRNA + 546 leuZ_tRNA + 572 lys1_tRNA + 468 met1_tRNA + 115570 mg2 + 988 phe1_tRNA + 46176 pi + 468 pro1_tRNA + 104 pro2_tRNA + 208 proL_tRNA + 260 proM_tRNA + rib_70_elo2_b0167_26_cplx + 130 ser1_tRNA + 26 ser2_tRNA + 156 ser3_tRNA + 130 serT_tRNA + 650 serV_tRNA + 598 thr1_tRNA + 182 thr2_tRNA + 312 thr3_tRNA + 156 thrU_tRNA + 416 trpT_tRNA + 416 tyr1_tRNA + 572 val1_tRNA + 520 val2_tRNA + 208 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.95E+01	2.95E+01	0	5.06E+01	50.5931	0	2.20E+00	2.197

tl_elo_b0167_52_rib1	Translation elongation 1 b0167 52 ribosome(s)	46228 EF-G.GTP + 1612 EF-Tu.GTP.ala1-tRNA + 1768 EF-Tu.GTP.ala2-tRNA + 3640 EF-Tu.GTP.arg1-tRNA + 364 EF-Tu.GTP.argX-tRNA + 1456 EF-Tu.GTP.asn1-tRNA + 2704 EF-Tu.GTP.asp1-tRNA + 468 EF-Tu.GTP.cysT-tRNA + 1664 EF-Tu.GTP.gln1-tRNA + 1144 EF-Tu.GTP.gln2-tRNA + 3224 EF-Tu.GTP.glu1-tRNA + 1508 EF-Tu.GTP.gly1-tRNA + 416 EF-Tu.GTP.glyT-tRNA + 468 EF-Tu.GTP.glyU-tRNA + 1976 EF-Tu.GTP.hisR-tRNA + 2236 EF-Tu.GTP.ile1-tRNA + 156 EF-Tu.GTP.ile2-tRNA + 2964 EF-Tu.GTP.leu1-tRNA + 728 EF-Tu.GTP.leu2-tRNA + 1248 EF-Tu.GTP.leuU-tRNA + 312 EF-Tu.GTP.leuW-tRNA + 1092 EF-Tu.GTP.leuZ-tRNA + 1144 EF-Tu.GTP.lys1-tRNA + 936 EF-Tu.GTP.met1-tRNA + 1976 EF-Tu.GTP.phe1-tRNA + 936 EF-Tu.GTP.pro1-tRNA + 208 EF-Tu.GTP.pro2-tRNA + 416 EF-Tu.GTP.proL-tRNA + 520 EF-Tu.GTP.proM-tRNA + 260 EF-Tu.GTP.ser1-tRNA + 52 EF-Tu.GTP.ser2-tRNA + 312 EF-Tu.GTP.ser3-tRNA + 260 EF-Tu.GTP.serT-tRNA + 1300 EF-Tu.GTP.serV-tRNA + 1196 EF-Tu.GTP.thr1-tRNA + 364 EF-Tu.GTP.thr2-tRNA + 624 EF-Tu.GTP.thr3-tRNA + 312 EF-Tu.GTP.thrU-tRNA + 832 EF-Tu.GTP.trpT-tRNA + 832 EF-Tu.GTP.tyr1-tRNA + 1144 EF-Tu.GTP.val1-tRNA + 1040 EF-Tu.GTP.val2-tRNA + 416 EF-Tu.GTP.v	irreversible	Translation	0.00E+00	1.00E+09	0	2.95E+01	2.95E+01	0	3.83E+01	38.28969	0	2.20E+00	2.197
tl_elo_b0167_52_rib2	Translation elongation 2 b0167 52 ribosome(s)	46176 h2o + 1 rib_70_elo1_b0167_52_cplx --> 46176 EF-G.GDP + 46176 EF-Tu.GDP + 1612 ala1_tRNA + 1768 ala2_tRNA + 3640 arg1_tRNA + 364 argX_tRNA + 1456 asn1_tRNA + 2704 asp1_tRNA + 468 cysT_tRNA + 52 fmet_tRNA + 1664 gln1_tRNA + 1144 gln2_tRNA + 3224 glu1_tRNA + 1508 gly1_tRNA + 416 glyT_tRNA + 416 glyU_tRNA + 92352 h + 1976 hisR_tRNA + 2236 ile1_tRNA + 156 ile2_tRNA + 2964 leu1_tRNA + 728 leu2_tRNA + 1248 leuU_tRNA + 312 leuW_tRNA + 1092 leuZ_tRNA + 1144 lys1_tRNA + 936 met1_tRNA + 231140 mg2 + 1976 phe1_tRNA + 92352 pi + 936 pro1_tRNA + 208 pro2_tRNA + 416 proL_tRNA + 520 proM_tRNA + 1 rib_70_elo2_b0167_52_cplx + 260 ser1_tRNA + 52 ser2_tRNA + 312 ser3_tRNA + 260 serT_tRNA + 1300 serV_tRNA + 1196 thr1_tRNA + 364 thr2_tRNA + 624 thr3_tRNA + 312 thrU_tRNA + 832 trpT_tRNA + 832 tyr1_tRNA + 1144 val1_tRNA + 1040 val2_tRNA + 416 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.95E+01	2.95E+01	0	3.83E+01	38.28969	0	2.20E+00	2.197
tl_elo_b0168_15_rib1	Translation elongation 1 b0168 15 ribosome(s)	3945 EF-G.GTP + 180 EF-Tu.GTP.ala1-tRNA + 30 EF-Tu.GTP.ala2-tRNA + 195 EF-Tu.GTP.arg1-tRNA + 120 EF-Tu.GTP.asn1-tRNA + 255 EF-Tu.GTP.asp1-tRNA + 105 EF-Tu.GTP.cysT-tRNA + 30 EF-Tu.GTP.gln1-tRNA + 45 EF-Tu.GTP.gln2-tRNA + 330 EF-Tu.GTP.glu1-tRNA + 300 EF-Tu.GTP.gly1-tRNA + 15 EF-Tu.GTP.glyT-tRNA + 15 EF-Tu.GTP.glyU-tRNA + 135 EF-Tu.GTP.hisR-tRNA + 375 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.ile2-tRNA + 180 EF-Tu.GTP.leu1-tRNA + 15 EF-Tu.GTP.leu2-tRNA + 15 EF-Tu.GTP.leuU-tRNA + 30 EF-Tu.GTP.leuW-tRNA + 270 EF-Tu.GTP.lys1-tRNA + 120 EF-Tu.GTP.met1-tRNA + 90 EF-Tu.GTP.phe1-tRNA + 105 EF-Tu.GTP.pro1-tRNA + 15 EF-Tu.GTP.pro2-tRNA + 45 EF-Tu.GTP.proM-tRNA + 45 EF-Tu.GTP.ser1-tRNA + 45 EF-Tu.GTP.ser2-tRNA + 30 EF-Tu.GTP.ser3-tRNA + 15 EF-Tu.GTP.serT-tRNA + 45 EF-Tu.GTP.serV-tRNA + 150 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 60 EF-Tu.GTP.thr3-tRNA + 15 EF-Tu.GTP.trpT-tRNA + 120 EF-Tu.GTP.tyr1-tRNA + 150 EF-Tu.GTP.val1-tRNA + 120 EF-Tu.GTP.val2-tRNA + 90 EF-Tu.GTP.val3-tRNA + 19725 mg2 + 1 rib_ini_b0168_15 --> 1 rib_70_elo1_b0168_15_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_elo_b0168_15_rib2	Translation elongation 2 b0168 15 ribosome(s)	3930 h2o + 1 rib_70_elo1_b0168_15_cplx --> 3930 EF-G.GDP + 3930 EF-Tu.GDP + 180 ala1_tRNA + 30 ala2_tRNA + 195 arg1_tRNA + 120 asn1_tRNA + 255 asp1_tRNA + 105 cysT_tRNA + 15 fmet_tRNA + 30 gln1_tRNA + 45 gln2_tRNA + 315 glu1_tRNA + 300 gly1_tRNA + 15 glyT_tRNA + 15 glyU_tRNA + 7860 h + 135 hisR_tRNA + 375 ile1_tRNA + 15 ile2_tRNA + 180 leu1_tRNA + 15 leu2_tRNA + 15 leuU_tRNA + 30 leuW_tRNA + 270 lys1_tRNA + 120 met1_tRNA + 19725 mg2 + 90 phe1_tRNA + 7860 pi + 105 pro1_tRNA + 15 pro2_tRNA + 45 proM_tRNA + 1 rib_70_elo2_b0168_15_cplx + 45 ser1_tRNA + 45 ser2_tRNA + 30 ser3_tRNA + 15 serT_tRNA + 45 serV_tRNA + 150 thr1_tRNA + 30 thr2_tRNA + 60 thr3_tRNA + 15 trpT_tRNA + 120 tyr1_tRNA + 150 val1_tRNA + 120 val2_tRNA + 90 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_elo_b0168_1_rib1	Translation elongation 1 b0168 1 ribosome(s)	263 EF-G.GTP + 12 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 17 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 22 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 25 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 18 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1315 mg2 + 1 rib_ini_b0168_1 --> 1 rib_70_elo1_b0168_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_elo_b0168_1_rib2	Translation elongation 2 b0168 1 ribosome(s)	262 h2o + 1 rib_70_elo1_b0168_1_cplx --> 262 EF-G.GDP + 262 EF-Tu.GDP + 12 ala1_tRNA + 2 ala2_tRNA + 13 arg1_tRNA + 8 asn1_tRNA + 17 asp1_tRNA + 7 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 3 gln2_tRNA + 21 glu1_tRNA + 20 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 524 h + 9 hisR_tRNA + 25 ile1_tRNA + 1 ile2_tRNA + 12 leu1_tRNA + 1 leu2_tRNA + 1 leuU_tRNA + 2 leuW_tRNA + 18 lys1_tRNA + 8 met1_tRNA + 1315 mg2 + 6 phe1_tRNA + 524 pi + 7 pro1_tRNA + 1 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b0168_1_cplx + 3 ser1_tRNA + 3 ser2_tRNA + 2 ser3_tRNA + 1 serT_tRNA + 3 serV_tRNA + 10 thr1_tRNA + 2 thr2_tRNA + 4 thr3_tRNA + 1 trpT_tRNA + 8 tyr1_tRNA + 10 val1_tRNA + 8 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917

tl_elo_b0168_7_rib1	Translation elongation 1 b0168 7 ribosome(s)	1841 EF-G.GTP + 84 EF-Tu.GTP.ala1-tRNA + 14 EF-Tu.GTP.ala2-tRNA + 91 EF-Tu.GTP.arg1-tRNA + 56 EF-Tu.GTP.asn1-tRNA + 119 EF-Tu.GTP.asp1-tRNA + 49 EF-Tu.GTP.cysT-tRNA + 14 EF-Tu.GTP.gln1-tRNA + 21 EF-Tu.GTP.gln2-tRNA + 154 EF-Tu.GTP.glu1-tRNA + 140 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyT-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 63 EF-Tu.GTP.hisR-tRNA + 175 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.ile2-tRNA + 84 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.leuW-tRNA + 126 EF-Tu.GTP.lys1-tRNA + 56 EF-Tu.GTP.met1-tRNA + 42 EF-Tu.GTP.phe1-tRNA + 49 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 21 EF-Tu.GTP.proM-tRNA + 21 EF-Tu.GTP.ser1-tRNA + 21 EF-Tu.GTP.ser2-tRNA + 14 EF-Tu.GTP.ser3-tRNA + 7 EF-Tu.GTP.serT-tRNA + 21 EF-Tu.GTP.serV-tRNA + 70 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 28 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 56 EF-Tu.GTP.tyr1-tRNA + 70 EF-Tu.GTP.val1-tRNA + 56 EF-Tu.GTP.val2-tRNA + 42 EF-Tu.GTP.val3-tRNA + 9205 mg2 + 1 rib_ini_b0168_7 --> 1 rib_70_elo1_b0168_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_elo_b0168_7_rib2	Translation elongation 2 b0168 7 ribosome(s)	1834 h2o + 1 rib_70_elo1_b0168_7_cplx --> 1834 EF-G.GDP + 1834 EF-Tu.GDP + 84 ala1_tRNA + 14 ala2_tRNA + 91 arg1_tRNA + 56 asn1_tRNA + 119 asp1_tRNA + 49 cysT_tRNA + 7 fmet_tRNA + 14 gln1_tRNA + 21 gln2_tRNA + 147 glu1_tRNA + 140 gly1_tRNA + 7 glyT_tRNA + 7 glyU_tRNA + 3668 h + 63 hisR_tRNA + 175 ile1_tRNA + 7 ile2_tRNA + 84 leu1_tRNA + 7 leu2_tRNA + 7 leuU_tRNA + 14 leuW_tRNA + 126 lys1_tRNA + 56 met1_tRNA + 9205 mg2 + 42 phe1_tRNA + 3668 pi + 49 pro1_tRNA + 7 pro2_tRNA + 21 proM_tRNA + 1 rib_70_elo2_b0168_7_cplx + 21 ser1_tRNA + 2 ser2_tRNA + 14 ser3_tRNA + 7 serT_tRNA + 21 serV_tRNA + 70 thr1_tRNA + 14 thr2_tRNA + 28 thr3_tRNA + 7 trpT_tRNA + 56 tyr1_tRNA + 70 val1_tRNA + 56 val2_tRNA + 42 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_elo_b0169_14_rib1	Translation elongation 1 b0169 14 ribosome(s)	3360 EF-G.GTP + 350 EF-Tu.GTP.ala1-tRNA + 182 EF-Tu.GTP.arg1-tRNA + 168 EF-Tu.GTP.asn1-tRNA + 238 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.cysT-tRNA + 98 EF-Tu.GTP.gln1-tRNA + 224 EF-Tu.GTP.glu1-tRNA + 238 EF-Tu.GTP.gly1-tRNA + 84 EF-Tu.GTP.hisR-tRNA + 196 EF-Tu.GTP.ile1-tRNA + 252 EF-Tu.GTP.leu1-tRNA + 42 EF-Tu.GTP.leuU-tRNA + 266 EF-Tu.GTP.lys1-tRNA + 98 EF-Tu.GTP.met1-tRNA + 168 EF-Tu.GTP.phe1-tRNA + 98 EF-Tu.GTP.pro1-tRNA + 42 EF-Tu.GTP.ser1-tRNA + 56 EF-Tu.GTP.ser2-tRNA + 56 EF-Tu.GTP.serV-tRNA + 84 EF-Tu.GTP.thr1-tRNA + 98 EF-Tu.GTP.thr2-tRNA + 42 EF-Tu.GTP.trpT-tRNA + 28 EF-Tu.GTP.tyr1-tRNA + 112 EF-Tu.GTP.val1-tRNA + 126 EF-Tu.GTP.val3-tRNA + 16800 mg2 + 1 rib_ini_b0169_14 --> 1 rib_70_elo1_b0169_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+00	8.04E+00	0	5.92E+00	5.92	0	5.92E+00	5.92
tl_elo_b0169_14_rib2	Translation elongation 2 b0169 14 ribosome(s)	3346 h2o + 1 rib_70_elo1_b0169_14_cplx --> 3346 EF-G.GDP + 3346 EF-Tu.GDP + 350 ala1_tRNA + 182 arg1_tRNA + 168 asn1_tRNA + 238 asp1_tRNA + 14 cysT_tRNA + 14 fmet_tRNA + 98 gln1_tRNA + 210 glu1_tRNA + 238 gly1_tRNA + 6692 h + 84 hisR_tRNA + 196 ile1_tRNA + 252 leu1_tRNA + 42 leuU_tRNA + 266 lys1_tRNA + 98 met1_tRNA + 16800 mg2 + 168 phe1_tRNA + 6692 pi + 98 pro1_tRNA + 1 rib_70_elo2_b0169_14_cplx + 42 ser1_tRNA + 56 ser2_tRNA + 56 serV_tRNA + 84 thr1_tRNA + 98 thr2_tRNA + 42 trpT_tRNA + 28 tyr1_tRNA + 112 val1_tRNA + 126 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+00	8.04E+00	0	5.92E+00	5.92	0	5.92E+00	5.92
tl_elo_b0169_1_rib1	Translation elongation 1 b0169 1 ribosome(s)	240 EF-G.GTP + 25 EF-Tu.GTP.ala1-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 17 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 17 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 14 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 19 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val3-tRNA + 1200 mg2 + 1 rib_ini_b0169_1 --> 1 rib_70_elo1_b0169_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.76E+01	8.76E+01	0	8.29E+01	82.88	0	1.83E+01	18.284
tl_elo_b0169_1_rib2	Translation elongation 2 b0169 1 ribosome(s)	239 h2o + 1 rib_70_elo1_b0169_1_cplx --> 239 EF-G.GDP + 239 EF-Tu.GDP + 25 ala1_tRNA + 13 arg1_tRNA + 12 asn1_tRNA + 17 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 15 glu1_tRNA + 17 gly1_tRNA + 478 h + 6 hisR_tRNA + 14 ile1_tRNA + 18 leu1_tRNA + 3 leuU_tRNA + 19 lys1_tRNA + 7 met1_tRNA + 1200 mg2 + 12 phe1_tRNA + 478 pi + 7 pro1_tRNA + 1 rib_70_elo2_b0169_1_cplx + 3 ser1_tRNA + 4 ser2_tRNA + 4 serV_tRNA + 6 thr1_tRNA + 7 thr2_tRNA + 3 trpT_tRNA + 2 tyr1_tRNA + 8 val1_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.76E+01	8.76E+01	0	8.29E+01	82.88	0	1.83E+01	18.284
tl_elo_b0169_7_rib1	Translation elongation 1 b0169 7 ribosome(s)	1680 EF-G.GTP + 175 EF-Tu.GTP.ala1-tRNA + 91 EF-Tu.GTP.arg1-tRNA + 84 EF-Tu.GTP.asn1-tRNA + 119 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 49 EF-Tu.GTP.gln1-tRNA + 112 EF-Tu.GTP.glu1-tRNA + 119 EF-Tu.GTP.gly1-tRNA + 42 EF-Tu.GTP.hisR-tRNA + 98 EF-Tu.GTP.ile1-tRNA + 126 EF-Tu.GTP.leu1-tRNA + 21 EF-Tu.GTP.leuU-tRNA + 133 EF-Tu.GTP.lys1-tRNA + 49 EF-Tu.GTP.met1-tRNA + 84 EF-Tu.GTP.phe1-tRNA + 49 EF-Tu.GTP.pro1-tRNA + 21 EF-Tu.GTP.ser1-tRNA + 28 EF-Tu.GTP.ser2-tRNA + 28 EF-Tu.GTP.serV-tRNA + 42 EF-Tu.GTP.thr1-tRNA + 49 EF-Tu.GTP.thr2-tRNA + 21 EF-Tu.GTP.trpT-tRNA + 14 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 63 EF-Tu.GTP.val3-tRNA + 8400 mg2 + 1 rib_ini_b0169_7 --> 1 rib_70_elo1_b0169_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_elo_b0169_7_rib2	Translation elongation 2 b0169 7 ribosome(s)	1673 h2o + 1 rib_70_elo1_b0169_7_cplx --> 1673 EF-G.GDP + 1673 EF-Tu.GDP + 175 ala1_tRNA + 91 arg1_tRNA + 84 asn1_tRNA + 119 asp1_tRNA + 7 cysT_tRNA + 7 fmet_tRNA + 49 gln1_tRNA + 105 glu1_tRNA + 119 gly1_tRNA + 3346 h + 42 hisR_tRNA + 98 ile1_tRNA + 126 leu1_tRNA + 21 leuU_tRNA + 133 lys1_tRNA + 49 met1_tRNA + 8400 mg2 + 84 phe1_tRNA + 3346 pi + 49 pro1_tRNA + 1 rib_70_elo2_b0169_7_cplx + 21 ser1_tRNA + 28 ser2_tRNA + 28 serV_tRNA + 42 thr1_tRNA + 49 thr2_tRNA + 21 trpT_tRNA + 14 tyr1_tRNA + 56 val1_tRNA + 63 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84

tl_elo_b0170_16_rib1	Translation elongation 1 b0170 16 ribosome(s)	4512 EF-G.GTP + 624 EF-Tu.GTP.ala1-tRNA + 144 EF-Tu.GTP.arg1-tRNA + 128 EF-Tu.GTP.asn1-tRNA + 224 EF-Tu.GTP.asp1-tRNA + 32 EF-Tu.GTP.cysT-tRNA + 160 EF-Tu.GTP.gln1-tRNA + 512 EF-Tu.GTP.glu1-tRNA + 384 EF-Tu.GTP.gly1-tRNA + 64 EF-Tu.GTP.hisR-tRNA + 304 EF-Tu.GTP.ile1-tRNA + 256 EF-Tu.GTP.leu1-tRNA + 448 EF-Tu.GTP.lys1-tRNA + 144 EF-Tu.GTP.met1-tRNA + 160 EF-Tu.GTP.phe1-tRNA + 48 EF-Tu.GTP.pro1-tRNA + 32 EF-Tu.GTP.proM-tRNA + 64 EF-Tu.GTP.ser1-tRNA + 64 EF-Tu.GTP.ser2-tRNA + 32 EF-Tu.GTP.serV-tRNA + 64 EF-Tu.GTP.thr1-tRNA + 112 EF-Tu.GTP.thr2-tRNA + 48 EF-Tu.GTP.tyr1-tRNA + 144 EF-Tu.GTP.val1-tRNA + 320 EF-Tu.GTP.val3-tRNA + 22560 mg2 + 1 rib_ini_b0170_16 --> 1 rib_70_elo1_b0170_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_elo_b0170_16_rib2	Translation elongation 2 b0170 16 ribosome(s)	4496 h2o + 1 rib_70_elo1_b0170_16_cplx --> 4496 EF-G.GDP + 4496 EF-Tu.GDP + 624 ala1_tRNA + 144 arg1_tRNA + 128 asn1_tRNA + 224 asp1_tRNA + 32 cysT_tRNA + 16 fmet_tRNA + 160 gln1_tRNA + 512 glu1_tRNA + 384 gly1_tRNA + 8992 h + 64 hisR_tRNA + 304 ile1_tRNA + 256 leu1_tRNA + 448 lys1_tRNA + 144 met1_tRNA + 22560 mg2 + 160 phe1_tRNA + 8992 pi + 48 pro1_tRNA + 32 proM_tRNA + 1 rib_70_elo2_b0170_16_cplx + 64 ser1_tRNA + 48 ser2_tRNA + 32 serV_tRNA + 64 thr1_tRNA + 112 thr2_tRNA + 48 tyr1_tRNA + 144 val1_tRNA + 320 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_elo_b0170_1_rib1	Translation elongation 1 b0170 1 ribosome(s)	282 EF-G.GTP + 39 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 32 EF-Tu.GTP.glu1-tRNA + 24 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 19 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 28 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val3-tRNA + 1410 mg2 + 1 rib_ini_b0170_1 --> 1 rib_70_elo1_b0170_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_elo_b0170_1_rib2	Translation elongation 2 b0170 1 ribosome(s)	281 h2o + 1 rib_70_elo1_b0170_1_cplx --> 281 EF-G.GDP + 281 EF-Tu.GDP + 39 ala1_tRNA + 9 arg1_tRNA + 8 asn1_tRNA + 14 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 10 gln1_tRNA + 32 glu1_tRNA + 24 gly1_tRNA + 562 h + 4 hisR_tRNA + 19 ile1_tRNA + 16 leu1_tRNA + 28 lys1_tRNA + 9 met1_tRNA + 1410 mg2 + 10 phe1_tRNA + 562 pi + 3 pro1_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b0170_1_cplx + 4 ser1_tRNA + 3 ser2_tRNA + 2 serV_tRNA + 4 thr1_tRNA + 7 thr2_tRNA + 3 tyr1_tRNA + 9 val1_tRNA + 20 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_elo_b0170_8_rib1	Translation elongation 1 b0170 8 ribosome(s)	2256 EF-G.GTP + 312 EF-Tu.GTP.ala1-tRNA + 72 EF-Tu.GTP.arg1-tRNA + 64 EF-Tu.GTP.asn1-tRNA + 112 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.cysT-tRNA + 80 EF-Tu.GTP.gln1-tRNA + 256 EF-Tu.GTP.glu1-tRNA + 192 EF-Tu.GTP.gly1-tRNA + 32 EF-Tu.GTP.hisR-tRNA + 152 EF-Tu.GTP.ile1-tRNA + 128 EF-Tu.GTP.leu1-tRNA + 224 EF-Tu.GTP.lys1-tRNA + 72 EF-Tu.GTP.met1-tRNA + 80 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.proM-tRNA + 32 EF-Tu.GTP.ser1-tRNA + 32 EF-Tu.GTP.ser2-tRNA + 16 EF-Tu.GTP.serV-tRNA + 32 EF-Tu.GTP.thr1-tRNA + 56 EF-Tu.GTP.thr2-tRNA + 24 EF-Tu.GTP.tyr1-tRNA + 72 EF-Tu.GTP.val1-tRNA + 160 EF-Tu.GTP.val3-tRNA + 11280 mg2 + 1 rib_ini_b0170_8 --> 1 rib_70_elo1_b0170_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_elo_b0170_8_rib2	Translation elongation 2 b0170 8 ribosome(s)	2248 h2o + 1 rib_70_elo1_b0170_8_cplx --> 2248 EF-G.GDP + 2248 EF-Tu.GDP + 312 ala1_tRNA + 72 arg1_tRNA + 64 asn1_tRNA + 112 asp1_tRNA + 16 cysT_tRNA + 8 fmet_tRNA + 80 gln1_tRNA + 256 glu1_tRNA + 192 gly1_tRNA + 4496 h + 32 hisR_tRNA + 152 ile1_tRNA + 128 leu1_tRNA + 224 lys1_tRNA + 72 met1_tRNA + 11280 mg2 + 80 phe1_tRNA + 4496 pi + 24 pro1_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b0170_8_cplx + 32 ser1_tRNA + 24 ser2_tRNA + 16 serV_tRNA + 32 thr1_tRNA + 56 thr2_tRNA + 24 tyr1_tRNA + 72 val1_tRNA + 160 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_elo_b0172_10_rib1	Translation elongation 1 b0172 10 ribosome(s)	1840 EF-G.GTP + 180 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 160 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argU-tRNA + 50 EF-Tu.GTP.asn1-tRNA + 190 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.cysT-tRNA + 40 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 140 EF-Tu.GTP.glu1-tRNA + 60 EF-Tu.GTP.gly1-tRNA + 110 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.ile2-tRNA + 130 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 160 EF-Tu.GTP.lys1-tRNA + 40 EF-Tu.GTP.met1-tRNA + 30 EF-Tu.GTP.phe1-tRNA + 70 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.proL-tRNA + 20 EF-Tu.GTP.ser1-tRNA + 40 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.serT-tRNA + 60 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 50 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.thrU-tRNA + 20 EF-Tu.GTP.tyr1-tRNA + 100 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 40 EF-Tu.GTP.val3-tRNA + 9200 mg2 + 1 rib_ini_b0172_10 --> 1 rib_70_elo1_b0172_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599
tl_elo_b0172_10_rib2	Translation elongation 2 b0172 10 ribosome(s)	1830 h2o + 1 rib_70_elo1_b0172_10_cplx --> 1830 EF-G.GDP + 1830 EF-Tu.GDP + 180 ala1_tRNA + 10 ala2_tRNA + 160 arg1_tRNA + 10 argU_tRNA + 50 asn1_tRNA + 190 asp1_tRNA + 10 cysT_tRNA + 10 fmet_tRNA + 40 gln1_tRNA + 20 gln2_tRNA + 140 glu1_tRNA + 60 gly1_tRNA + 3660 h + 110 ile1_tRNA + 10 ile2_tRNA + 130 leu1_tRNA + 10 leu2_tRNA + 10 leuU_tRNA + 160 lys1_tRNA + 40 met1_tRNA + 9200 mg2 + 20 phe1_tRNA + 3660 pi + 70 pro1_tRNA + 10 proL_tRNA + 1 rib_70_elo2_b0172_10_cplx + 20 ser1_tRNA + 40 ser2_tRNA + 10 serT_tRNA + 60 serV_tRNA + 20 thr1_tRNA + 10 thr2_tRNA + 50 thr3_tRNA + 10 thrU_tRNA + 20 tyr1_tRNA + 100 val1_tRNA + 10 val2_tRNA + 40 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599

tl_elo_b0172_1_rib1	Translation elongation 1 b0172 1 ribosome(s)	184 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 16 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 19 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 920 mg2 + 1 rib_ini_b0172_1 --> 1 rib_70_elo1_b0172_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599
tl_elo_b0172_1_rib2	Translation elongation 2 b0172 1 ribosome(s)	183 h2o + 1 rib_70_elo1_b0172_1_cplx --> 183 EF-G.GDP + 183 EF-Tu.GDP + 18 ala1_tRNA + 1 ala2_tRNA + 16 arg1_tRNA + 1 argU_tRNA + 5 asn1_tRNA + 19 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 2 gln2_tRNA + 14 glu1_tRNA + 6 gly1_tRNA + 366 h + 11 ile1_tRNA + 1 ile2_tRNA + 13 leu1_tRNA + leu2_tRNA + 1 leuU_tRNA + 16 lys1_tRNA + 4 met1_tRNA + 920 mg2 + 2 phe1_tRNA + 366 pi + 7 pro1_tRNA + 1 proL_tRNA + 1 rib_70_elo2_b0172_1_cplx + 2 ser1_tRNA + 4 ser2_tRNA + 1 serT_tRNA + 6 serV_tRNA + 2 thr1_tRNA + 1 thr2_tRNA + 5 thr3_tRNA + 1 thrU_tRNA + 2 tyr1_tRNA + 10 val1_tRNA + 1 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599
tl_elo_b0172_5_rib1	Translation elongation 1 b0172 5 ribosome(s)	920 EF-G.GTP + 90 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 80 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argU-tRNA + 25 EF-Tu.GTP.asn1-tRNA + 95 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 20 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 70 EF-Tu.GTP.glu1-tRNA + 30 EF-Tu.GTP.gly1-tRNA + 55 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.ile2-tRNA + 65 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 80 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 35 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serT-tRNA + 30 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 25 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 50 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 20 EF-Tu.GTP.val3-tRNA + 4600 mg2 + 1 rib_ini_b0172_5 --> 1 rib_70_elo1_b0172_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599
tl_elo_b0172_5_rib2	Translation elongation 2 b0172 5 ribosome(s)	915 h2o + 1 rib_70_elo1_b0172_5_cplx --> 915 EF-G.GDP + 915 EF-Tu.GDP + 90 ala1_tRNA + 5 ala2_tRNA + 80 arg1_tRNA + 5 argU_tRNA + 25 asn1_tRNA + 95 asp1_tRNA + 5 cysT_tRNA + 5 fmet_tRNA + 20 gln1_tRNA + 10 gln2_tRNA + 70 glu1_tRNA + 30 gly1_tRNA + 1830 h + 55 ile1_tRNA + 5 ile2_tRNA + 65 leu1_tRNA + 5 leu2_tRNA + 5 leuU_tRNA + 80 lys1_tRNA + 20 met1_tRNA + 460 mg2 + 10 phe1_tRNA + 1830 pi + 35 pro1_tRNA + 5 proL_tRNA + 1 rib_70_elo2_b0172_5_cplx + 10 ser1_tRNA + 20 ser2_tRNA + 5 serT_tRNA + 30 serV_tRNA + 10 thr1_tRNA + 5 thr2_tRNA + 25 thr3_tRNA + 5 thrU_tRNA + 10 tyr1_tRNA + 50 val1_tRNA + 5 val2_tRNA + 20 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599
tl_elo_b0188_12_rib1	Translation elongation 1 b0188 12 ribosome(s)	5172 EF-G.GTP + 408 EF-Tu.GTP.ala1-tRNA + 168 EF-Tu.GTP.ala2-tRNA + 348 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argU-tRNA + 12 EF-Tu.GTP.argW-tRNA + 60 EF-Tu.GTP.argX-tRNA + 132 EF-Tu.GTP.asn1-tRNA + 216 EF-Tu.GTP.asp1-tRNA + 72 EF-Tu.GTP.cysT-tRNA + 252 EF-Tu.GTP.gln1-tRNA + 156 EF-Tu.GTP.gln2-tRNA + 324 EF-Tu.GTP.glu1-tRNA + 180 EF-Tu.GTP.gly1-tRNA + 72 EF-Tu.GTP.glyT-tRNA + 108 EF-Tu.GTP.glyU-tRNA + 108 EF-Tu.GTP.hisR-tRNA + 192 EF-Tu.GTP.ile1-tRNA + 336 EF-Tu.GTP.leu1-tRNA + 96 EF-Tu.GTP.leu2-tRNA + 168 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuW-tRNA + 72 EF-Tu.GTP.leuZ-tRNA + 84 EF-Tu.GTP.lys1-tRNA + 48 EF-Tu.GTP.met1-tRNA + 132 EF-Tu.GTP.phe1-tRNA + 156 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proL-tRNA + 36 EF-Tu.GTP.proM-tRNA + 36 EF-Tu.GTP.ser1-tRNA + 48 EF-Tu.GTP.ser3-tRNA + 36 EF-Tu.GTP.serT-tRNA + 144 EF-Tu.GTP.serV-tRNA + 84 EF-Tu.GTP.thr1-tRNA + 144 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.thrU-tRNA + 180 EF-Tu.GTP.trpT-tRNA + 60 EF-Tu.GTP.tyr1-tRNA + 252 EF-Tu.GTP.val1-tRNA + 108 EF-Tu.GTP.val2-tRNA + 24 EF-Tu.GTP.val3-tRNA + 25860 mg2 + 1 rib_ini_b0188_12 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.71E+02	170.9685	0	3.84E+00	3.836
tl_elo_b0188_12_rib2	Translation elongation 2 b0188 12 ribosome(s)	5160 h2o + 1 rib_70_elo1_b0188_12_cplx --> 5160 EF-G.GDP + 5160 EF-Tu.GDP + 408 ala1_tRNA + 168 ala2_tRNA + 348 arg1_tRNA + 12 argU_tRNA + 12 argW_tRNA + 60 argX_tRNA + 132 asn1_tRNA + 216 asp1_tRNA + 72 cysT_tRNA + 12 fmet_tRNA + 252 gln1_tRNA + 156 gln2_tRNA + 324 glu1_tRNA + 180 gly1_tRNA + 72 glyT_tRNA + 108 glyU_tRNA + 10320 h + 108 hisR_tRNA + 192 ile1_tRNA + 336 leu1_tRNA + 96 leu2_tRNA + 168 leuU_tRNA + 36 leuW_tRNA + 72 leuZ_tRNA + 84 lys1_tRNA + 48 met1_tRNA + 25860 mg2 + 132 phe1_tRNA + 10320 pi + 156 pro1_tRNA + 36 pro2_tRNA + 24 proL_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b0188_12_cplx + 36 ser1_tRNA + 48 ser3_tRNA + 36 serT_tRNA + 132 serV_tRNA + 84 thr1_tRNA + 144 thr3_tRNA + 12 thrU_tRNA + 180 trpT_tRNA + 60 tyr1_tRNA + 252 val1_tRNA + 108 val2_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.71E+02	170.9685	0	3.84E+00	3.836

tl_elo_b0188_1_rib1	Translation elongation 1 b0188 1 ribosome(s)	431 EF-G.GTP + 34 EF-Tu.GTP.ala1-tRNA + 14 EF-Tu.GTP.ala2-tRNA + 29 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argW-tRNA + 5 EF-Tu.GTP.argX-tRNA + 11 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 21 EF-Tu.GTP.gln1-tRNA + 13 EF-Tu.GTP.gln2-tRNA + 27 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyT-tRNA + 9 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 28 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 14 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuW-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 11 EF-Tu.GTP.phe1-tRNA + 13 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 12 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 15 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 21 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 2155 mg2 + 1 rib_ini_b0188_1 --> 1 rib_70_elo1_b0188_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.71E+02	170.9685	0	3.84E+00	3.836
tl_elo_b0188_1_rib2	Translation elongation 2 b0188 1 ribosome(s)	430 h2o + 1 rib_70_elo1_b0188_1_cplx --> 430 EF-G.GDP + 430 EF-Tu.GDP + 34 ala1_tRNA + 14 ala2_tRNA + 29 arg1_tRNA + 1 argU_tRNA + 1 argW_tRNA + 5 argX_tRNA + 11 asn1_tRNA + 18 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 21 gln1_tRNA + 13 gln2_tRNA + 27 glu1_tRNA + 15 gly1_tRNA + 6 glyT_tRNA + 9 glyU_tRNA + 860 h + 9 hisR_tRNA + 16 ile1_tRNA + 28 leu1_tRNA + 8 leu2_tRNA + 14 leuU_tRNA + 3 leuW_tRNA + 6 leuZ_tRNA + 7 lys1_tRNA + 4 met1_tRNA + 2155 mg2 + 11 phe1_tRNA + 860 pi + 13 pro1_tRNA + 3 pro2_tRNA + 2 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b0188_1_cplx + 3 ser1_tRNA + 4 ser3_tRNA + 3 serT_tRNA + 11 serV_tRNA + 7 thr1_tRNA + 12 thr3_tRNA + 1 thrU_tRNA + 15 trpT_tRNA + 5 tyr1_tRNA + 21 val1_tRNA + 9 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.71E+02	170.9685	0	3.84E+00	3.836
tl_elo_b0188_25_rib1	Translation elongation 1 b0188 25 ribosome(s)	10775 EF-G.GTP + 850 EF-Tu.GTP.ala1-tRNA + 350 EF-Tu.GTP.ala2-tRNA + 725 EF-Tu.GTP.arg1-tRNA + 25 EF-Tu.GTP.argU-tRNA + 25 EF-Tu.GTP.argW-tRNA + 125 EF-Tu.GTP.argX-tRNA + 275 EF-Tu.GTP.asn1-tRNA + 450 EF-Tu.GTP.asp1-tRNA + 150 EF-Tu.GTP.cysT-tRNA + 525 EF-Tu.GTP.gln1-tRNA + 325 EF-Tu.GTP.gln2-tRNA + 675 EF-Tu.GTP.glu1-tRNA + 375 EF-Tu.GTP.gly1-tRNA + 150 EF-Tu.GTP.glyT-tRNA + 225 EF-Tu.GTP.glyU-tRNA + 225 EF-Tu.GTP.hisR-tRNA + 400 EF-Tu.GTP.ile1-tRNA + 700 EF-Tu.GTP.leu1-tRNA + 200 EF-Tu.GTP.leu2-tRNA + 350 EF-Tu.GTP.leuU-tRNA + 75 EF-Tu.GTP.leuW-tRNA + 150 EF-Tu.GTP.leuZ-tRNA + 175 EF-Tu.GTP.lys1-tRNA + 100 EF-Tu.GTP.met1-tRNA + 275 EF-Tu.GTP.phe1-tRNA + 325 EF-Tu.GTP.pro1-tRNA + 75 EF-Tu.GTP.pro2-tRNA + 50 EF-Tu.GTP.proL-tRNA + 75 EF-Tu.GTP.proM-tRNA + 75 EF-Tu.GTP.ser1-tRNA + 100 EF-Tu.GTP.ser3-tRNA + 75 EF-Tu.GTP.serT-tRNA + 300 EF-Tu.GTP.serV-tRNA + 175 EF-Tu.GTP.thr1-tRNA + 300 EF-Tu.GTP.thr3-tRNA + 25 EF-Tu.GTP.thrU-tRNA + 375 EF-Tu.GTP.trpT-tRNA + 125 EF-Tu.GTP.tyr1-tRNA + 525 EF-Tu.GTP.val1-tRNA + 225 EF-Tu.GTP.val2-tRNA + 50 EF-Tu.GTP.val3-tRNA + 53875 mg2 + 1 rib_	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.32E+02	131.6329	0	3.84E+00	3.836
tl_elo_b0188_25_rib2	Translation elongation 2 b0188 25 ribosome(s)	10750 h2o + 1 rib_70_elo1_b0188_25_cplx --> 10750 EF-G.GDP + 10750 EF-Tu.GDP + 850 ala1_tRNA + 350 ala2_tRNA + 725 arg1_tRNA + 25 argU_tRNA + 25 argW_tRNA + 125 argX_tRNA + 275 asn1_tRNA + 450 asp1_tRNA + 150 cysT_tRNA + 25 fmet_tRNA + 525 gln1_tRNA + 325 gln2_tRNA + 675 glu1_tRNA + 375 gly1_tRNA + 150 glyT_tRNA + 225 glyU_tRNA + 21500 h + 225 hisR_tRNA + 400 ile1_tRNA + 700 leu1_tRNA + 200 leu2_tRNA + 350 leuU_tRNA + 75 leuW_tRNA + 150 leuZ_tRNA + 175 lys1_tRNA + 100 met1_tRNA + 53875 mg2 + 275 phe1_tRNA + 21500 pi + 325 pro1_tRNA + 75 pro2_tRNA + 50 proL_tRNA + 75 proM_tRNA + 1 rib_70_elo2_b0188_25_cplx + 75 ser1_tRNA + 100 ser3_tRNA + 75 serT_tRNA + 275 serV_tRNA + 175 thr1_tRNA + 300 thr3_tRNA + 25 thrU_tRNA + 375 trpT_tRNA + 125 tyr1_tRNA + 525 val1_tRNA + 225 val2_tRNA + 50 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.32E+02	131.6329	0	3.84E+00	3.836
tl_elo_b0194_16_rib1	Translation elongation 1 b0194 16 ribosome(s)	9136 EF-G.GTP + 608 EF-Tu.GTP.ala1-tRNA + 208 EF-Tu.GTP.ala2-tRNA + 544 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.argW-tRNA + 304 EF-Tu.GTP.asn1-tRNA + 544 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.cysT-tRNA + 336 EF-Tu.GTP.gln1-tRNA + 96 EF-Tu.GTP.gln2-tRNA + 768 EF-Tu.GTP.glu1-tRNA + 592 EF-Tu.GTP.gly1-tRNA + 64 EF-Tu.GTP.glyU-tRNA + 144 EF-Tu.GTP.hisR-tRNA + 576 EF-Tu.GTP.ile1-tRNA + 640 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 96 EF-Tu.GTP.leuU-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 448 EF-Tu.GTP.lys1-tRNA + 256 EF-Tu.GTP.met1-tRNA + 320 EF-Tu.GTP.phe1-tRNA + 368 EF-Tu.GTP.pro1-tRNA + 32 EF-Tu.GTP.pro2-tRNA + 48 EF-Tu.GTP.proM-tRNA + 128 EF-Tu.GTP.ser1-tRNA + 96 EF-Tu.GTP.ser2-tRNA + 16 EF-Tu.GTP.ser3-tRNA + 16 EF-Tu.GTP.serT-tRNA + 224 EF-Tu.GTP.serV-tRNA + 192 EF-Tu.GTP.thr1-tRNA + 144 EF-Tu.GTP.thr2-tRNA + 80 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 80 EF-Tu.GTP.trpT-tRNA + 288 EF-Tu.GTP.tyr1-tRNA + 448 EF-Tu.GTP.val1-tRNA + 80 EF-Tu.GTP.val2-tRNA + 256 EF-Tu.GTP.val3-tRNA + 45680 mg2 + 1 rib_ini_b0194_16 --> 1 rib_70_elo1_b0194_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.54E+01	7.54E+01	0	1.31E+02	130.5277	0	3.47E+00	3.467
tl_elo_b0194_16_rib2	Translation elongation 2 b0194 16 ribosome(s)	9120 h2o + 1 rib_70_elo1_b0194_16_cplx --> 9120 EF-G.GDP + 9120 EF-Tu.GDP + 608 ala1_tRNA + 208 ala2_tRNA + 544 arg1_tRNA + 16 argW_tRNA + 304 asn1_tRNA + 544 asp1_tRNA + 16 cysT_tRNA + 16 fmet_tRNA + 336 gln1_tRNA + 96 gln2_tRNA + 768 glu1_tRNA + 576 gly1_tRNA + 64 glyU_tRNA + 18240 h + 144 hisR_tRNA + 576 ile1_tRNA + 640 leu1_tRNA + 16 leu2_tRNA + 96 leuU_tRNA + 32 leuZ_tRNA + 448 lys1_tRNA + 256 met1_tRNA + 45680 mg2 + 320 phe1_tRNA + 18240 pi + 368 pro1_tRNA + 32 pro2_tRNA + 48 proM_tRNA + 1 rib_70_elo2_b0194_16_cplx + 128 ser1_tRNA + 96 ser2_tRNA + 16 ser3_tRNA + 16 serT_tRNA + 224 serV_tRNA + 192 thr1_tRNA + 144 thr2_tRNA + 80 thr3_tRNA + 16 thrU_tRNA + 80 trpT_tRNA + 288 tyr1_tRNA + 448 val1_tRNA + 80 val2_tRNA + 256 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.54E+01	7.54E+01	0	1.31E+02	130.5277	0	3.47E+00	3.467

tl_elo_b0194_1_rib1	Translation elongation 1 b0194 1 ribosome(s)	571 EF-G.GTP + 38 EF-Tu.GTP.ala1-tRNA + 13 EF-Tu.GTP.ala2-tRNA + 34 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 19 EF-Tu.GTP.asn1-tRNA + 34 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 21 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 48 EF-Tu.GTP.glu1-tRNA + 37 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 36 EF-Tu.GTP.ile1-tRNA + 40 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 28 EF-Tu.GTP.lys1-tRNA + 16 EF-Tu.GTP.met1-tRNA + 20 EF-Tu.GTP.phe1-tRNA + 23 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 14 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 28 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 16 EF-Tu.GTP.val3-tRNA + 2855 mg2 + 1 rib_ini_b0194_1 --> 1 rib_70_elo1_b0194_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.54E+01	7.54E+01	0	1.31E+02	130.5277	0	3.47E+00	3.467
tl_elo_b0194_1_rib2	Translation elongation 2 b0194 1 ribosome(s)	570 h2o + 1 rib_70_elo1_b0194_1_cplx --> 570 EF-G.GDP + 570 EF-Tu.GDP + 38 ala1_tRNA + 13 ala2_tRNA + 34 arg1_tRNA + 1 argW_tRNA + 19 asn1_tRNA + 34 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 21 gln1_tRNA + 6 gln2_tRNA + 48 glu1_tRNA + 36 gly1_tRNA + 4 glyU_tRNA + 1140 h + 9 hisR_tRNA + 36 ile1_tRNA + 40 leu1_tRNA + 1 leu2_tRNA + 6 leuU_tRNA + 2 leuZ_tRNA + 28 lys1_tRNA + 16 met1_tRNA + 2855 mg2 + 20 phe1_tRNA + 1140 pi + 23 pro1_tRNA + 2 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b0194_1_cplx + 8 ser1_tRNA + 6 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 14 serV_tRNA + 12 thr1_tRNA + 9 thr2_tRNA + 5 thr3_tRNA + 1 thrU_tRNA + 5 trpT_tRNA + 18 tyr1_tRNA + 28 val1_tRNA + 5 val2_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.54E+01	7.54E+01	0	1.31E+02	130.5277	0	3.47E+00	3.467
tl_elo_b0194_33_rib1	Translation elongation 1 b0194 33 ribosome(s)	18843 EF-G.GTP + 1254 EF-Tu.GTP.ala1-tRNA + 429 EF-Tu.GTP.ala2-tRNA + 1122 EF-Tu.GTP.arg1-tRNA + 33 EF-Tu.GTP.argW-tRNA + 627 EF-Tu.GTP.asn1-tRNA + 1122 EF-Tu.GTP.asp1-tRNA + 33 EF-Tu.GTP.cysT-tRNA + 693 EF-Tu.GTP.gln1-tRNA + 198 EF-Tu.GTP.gln2-tRNA + 1584 EF-Tu.GTP.glu1-tRNA + 1221 EF-Tu.GTP.gly1-tRNA + 132 EF-Tu.GTP.glyU-tRNA + 297 EF-Tu.GTP.hisR-tRNA + 1188 EF-Tu.GTP.ile1-tRNA + 1320 EF-Tu.GTP.leu1-tRNA + 33 EF-Tu.GTP.leu2-tRNA + 198 EF-Tu.GTP.leuU-tRNA + 66 EF-Tu.GTP.leuZ-tRNA + 924 EF-Tu.GTP.lys1-tRNA + 528 EF-Tu.GTP.met1-tRNA + 660 EF-Tu.GTP.phe1-tRNA + 759 EF-Tu.GTP.pro1-tRNA + 66 EF-Tu.GTP.pro2-tRNA + 99 EF-Tu.GTP.proM-tRNA + 264 EF-Tu.GTP.ser1-tRNA + 198 EF-Tu.GTP.ser2-tRNA + 33 EF-Tu.GTP.ser3-tRNA + 33 EF-Tu.GTP.serT-tRNA + 462 EF-Tu.GTP.serV-tRNA + 396 EF-Tu.GTP.thr1-tRNA + 297 EF-Tu.GTP.thr2-tRNA + 165 EF-Tu.GTP.thr3-tRNA + 33 EF-Tu.GTP.thrU-tRNA + 165 EF-Tu.GTP.trpT-tRNA + 594 EF-Tu.GTP.tyr1-tRNA + 924 EF-Tu.GTP.val1-tRNA + 165 EF-Tu.GTP.val2-tRNA + 528 EF-Tu.GTP.val3-tRNA + 94215 mg2 + 1 rib_ini_b0194_33 --> 1 rib_70_elo1_b0194_33_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.54E+01	7.54E+01	0	1.24E+02	124.4591	0	3.47E+00	3.467
tl_elo_b0194_33_rib2	Translation elongation 2 b0194 33 ribosome(s)	18810 h2o + 1 rib_70_elo1_b0194_33_cplx --> 18810 EF-G.GDP + 18810 EF-Tu.GDP + 1254 ala1_tRNA + 429 ala2_tRNA + 1122 arg1_tRNA + 33 argW_tRNA + 627 asn1_tRNA + 1122 asp1_tRNA + 33 cysT_tRNA + 33 fmet_tRNA + 693 gln1_tRNA + 198 gln2_tRNA + 1584 glu1_tRNA + 1188 gly1_tRNA + 132 glyU_tRNA + 37620 h + 297 hisR_tRNA + 1188 ile1_tRNA + 1320 leu1_tRNA + 33 leu2_tRNA + 198 leuU_tRNA + 66 leuZ_tRNA + 924 lys1_tRNA + 528 met1_tRNA + 94215 mg2 + 660 phe1_tRNA + 37620 pi + 759 pro1_tRNA + 66 pro2_tRNA + 99 proM_tRNA + 1 rib_70_elo2_b0194_33_cplx + 264 ser1_tRNA + 198 ser2_tRNA + 33 ser3_tRNA + 33 serT_tRNA + 462 serV_tRNA + 396 thr1_tRNA + 297 thr2_tRNA + 165 thr3_tRNA + 33 thrU_tRNA + 165 trpT_tRNA + 594 tyr1_tRNA + 924 val1_tRNA + 165 val2_tRNA + 528 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.54E+01	7.54E+01	0	1.24E+02	124.4591	0	3.47E+00	3.467
tl_elo_b0405_10_rib1	Translation elongation 1 b0405 10 ribosome(s)	3550 EF-G.GTP + 290 EF-Tu.GTP.ala1-tRNA + 80 EF-Tu.GTP.ala2-tRNA + 180 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.argX-tRNA + 120 EF-Tu.GTP.asn1-tRNA + 250 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.cysT-tRNA + 50 EF-Tu.GTP.gln1-tRNA + 30 EF-Tu.GTP.gln2-tRNA + 260 EF-Tu.GTP.glu1-tRNA + 190 EF-Tu.GTP.gly1-tRNA + 30 EF-Tu.GTP.glyU-tRNA + 110 EF-Tu.GTP.hisR-tRNA + 180 EF-Tu.GTP.ile1-tRNA + 200 EF-Tu.GTP.leu1-tRNA + 50 EF-Tu.GTP.leu2-tRNA + 80 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 140 EF-Tu.GTP.lys1-tRNA + 90 EF-Tu.GTP.met1-tRNA + 190 EF-Tu.GTP.phe1-tRNA + 130 EF-Tu.GTP.pro1-tRNA + 30 EF-Tu.GTP.pro2-tRNA + 30 EF-Tu.GTP.proL-tRNA + 20 EF-Tu.GTP.proM-tRNA + 20 EF-Tu.GTP.ser1-tRNA + 70 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serT-tRNA + 80 EF-Tu.GTP.serV-tRNA + 110 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr2-tRNA + 60 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.thrU-tRNA + 120 EF-Tu.GTP.tyr1-tRNA + 150 EF-Tu.GTP.val1-tRNA + 40 EF-Tu.GTP.val2-tRNA + 80 EF-Tu.GTP.val3-tRNA + 17750 mg2 + 1 rib_ini_b0405_10 --> 1 rib_70_elo1_b0405_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_elo_b0405_10_rib2	Translation elongation 2 b0405 10 ribosome(s)	3540 h2o + 1 rib_70_elo1_b0405_10_cplx --> 3540 EF-G.GDP + 3540 EF-Tu.GDP + 290 ala1_tRNA + 80 ala2_tRNA + 180 arg1_tRNA + 20 argX_tRNA + 120 asn1_tRNA + 250 asp1_tRNA + 10 cysT_tRNA + 10 fmet_tRNA + 50 gln1_tRNA + 30 gln2_tRNA + 250 glu1_tRNA + 190 gly1_tRNA + 30 glyU_tRNA + 7080 h + 110 hisR_tRNA + 180 ile1_tRNA + 200 leu1_tRNA + 50 leu2_tRNA + 80 leuU_tRNA + 20 leuZ_tRNA + 140 lys1_tRNA + 90 met1_tRNA + 17750 mg2 + 190 phe1_tRNA + 7080 pi + 130 pro1_tRNA + 30 pro2_tRNA + 30 proL_tRNA + 20 proM_tRNA + 1 rib_70_elo2_b0405_10_cplx + 20 ser1_tRNA + 70 ser3_tRNA + 10 serT_tRNA + 80 serV_tRNA + 110 thr1_tRNA + 20 thr2_tRNA + 60 thr3_tRNA + 10 thrU_tRNA + 120 tyr1_tRNA + 150 val1_tRNA + 40 val2_tRNA + 80 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739

tl_elo_b0405_1_rib1	Translation elongation 1 b0405 1 ribosome(s)	355 EF-G.GTP + 29 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 25 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 26 EF-Tu.GTP.glu1-tRNA + 19 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 19 EF-Tu.GTP.phe1-tRNA + 13 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 8 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 1775 mg2 + 1 rib_ini_b0405_1 --> 1 rib_70_elo1_b0405_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_elo_b0405_1_rib2	Translation elongation 2 b0405 1 ribosome(s)	354 h2o + 1 rib_70_elo1_b0405_1_cplx --> 354 EF-G.GDP + 354 EF-Tu.GDP + 29 ala1_tRNA + 8 ala2_tRNA + 18 arg1_tRNA + 2 argX_tRNA + 12 asn1_tRNA + 25 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 3 gln2_tRNA + 25 glu1_tRNA + 19 gly1_tRNA + 3 glyU_tRNA + 708 h + 11 hisR_tRNA + 18 ile1_tRNA + 20 leu1_tRNA + 5 leu2_tRNA + 8 leuU_tRNA + 2 leuZ_tRNA + 14 lys1_tRNA + 9 met1_tRNA + 1775 mg2 + 19 phe1_tRNA + 708 pi + 13 pro1_tRNA + 3 pro2_tRNA + 3 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b0405_1_cplx + 2 ser1_tRNA + 7 ser3_tRNA + 1 serT_tRNA + 8 serV_tRNA + 11 thr1_tRNA + 2 thr2_tRNA + 6 thr3_tRNA + 1 thrU_tRNA + 12 tyr1_tRNA + 15 val1_tRNA + 4 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_elo_b0405_20_rib1	Translation elongation 1 b0405 20 ribosome(s)	7100 EF-G.GTP + 580 EF-Tu.GTP.ala1-tRNA + 160 EF-Tu.GTP.ala2-tRNA + 360 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.argX-tRNA + 240 EF-Tu.GTP.asn1-tRNA + 500 EF-Tu.GTP.asp1-tRNA + 20 EF-Tu.GTP.cysT-tRNA + 100 EF-Tu.GTP.gln1-tRNA + 60 EF-Tu.GTP.gln2-tRNA + 520 EF-Tu.GTP.glu1-tRNA + 380 EF-Tu.GTP.gly1-tRNA + 60 EF-Tu.GTP.glyU-tRNA + 220 EF-Tu.GTP.hisR-tRNA + 360 EF-Tu.GTP.ile1-tRNA + 400 EF-Tu.GTP.leu1-tRNA + 100 EF-Tu.GTP.leu2-tRNA + 160 EF-Tu.GTP.leuU-tRNA + 40 EF-Tu.GTP.leuZ-tRNA + 280 EF-Tu.GTP.lys1-tRNA + 180 EF-Tu.GTP.met1-tRNA + 380 EF-Tu.GTP.phe1-tRNA + 260 EF-Tu.GTP.pro1-tRNA + 60 EF-Tu.GTP.pro2-tRNA + 60 EF-Tu.GTP.proL-tRNA + 40 EF-Tu.GTP.proM-tRNA + 40 EF-Tu.GTP.ser1-tRNA + 140 EF-Tu.GTP.ser3-tRNA + 20 EF-Tu.GTP.serT-tRNA + 160 EF-Tu.GTP.serV-tRNA + 220 EF-Tu.GTP.thr1-tRNA + 40 EF-Tu.GTP.thr2-tRNA + 120 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.thrU-tRNA + 240 EF-Tu.GTP.tyr1-tRNA + 300 EF-Tu.GTP.val1-tRNA + 80 EF-Tu.GTP.val2-tRNA + 160 EF-Tu.GTP.val3-tRNA + 35500 mg2 + 1 rib_ini_b0405_20 --> 1 rib_70_elo1_b0405_20_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_elo_b0405_20_rib2	Translation elongation 2 b0405 20 ribosome(s)	7080 h2o + 1 rib_70_elo1_b0405_20_cplx --> 7080 EF-G.GDP + 7080 EF-Tu.GDP + 580 ala1_tRNA + 160 ala2_tRNA + 360 arg1_tRNA + 40 argX_tRNA + 240 asn1_tRNA + 500 asp1_tRNA + 20 cysT_tRNA + 20 fmet_tRNA + 100 gln1_tRNA + 60 gln2_tRNA + 500 glu1_tRNA + 380 gly1_tRNA + 60 glyU_tRNA + 14160 h + 220 hisR_tRNA + 360 ile1_tRNA + 400 leu1_tRNA + 100 leu2_tRNA + 160 leuU_tRNA + 40 leuZ_tRNA + 280 lys1_tRNA + 180 met1_tRNA + 35500 mg2 + 380 phe1_tRNA + 14160 pi + 260 pro1_tRNA + 60 pro2_tRNA + 60 proL_tRNA + 40 proM_tRNA + 1 rib_70_elo2_b0405_20_cplx + 40 ser1_tRNA + 140 ser3_tRNA + 20 serT_tRNA + 160 serV_tRNA + 220 thr1_tRNA + 40 thr2_tRNA + 120 thr3_tRNA + 20 thrU_tRNA + 240 tyr1_tRNA + 300 val1_tRNA + 80 val2_tRNA + 160 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_elo_b0406_11_rib1	Translation elongation 1 b0406 11 ribosome(s)	4114 EF-G.GTP + 165 EF-Tu.GTP.ala1-tRNA + 22 EF-Tu.GTP.ala2-tRNA + 330 EF-Tu.GTP.arg1-tRNA + 143 EF-Tu.GTP.asn1-tRNA + 341 EF-Tu.GTP.asp1-tRNA + 88 EF-Tu.GTP.cysT-tRNA + 99 EF-Tu.GTP.gln1-tRNA + 22 EF-Tu.GTP.gln2-tRNA + 253 EF-Tu.GTP.glu1-tRNA + 363 EF-Tu.GTP.gly1-tRNA + 11 EF-Tu.GTP.glyT-tRNA + 33 EF-Tu.GTP.glyU-tRNA + 110 EF-Tu.GTP.hisR-tRNA + 231 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.ile2-tRNA + 143 EF-Tu.GTP.leu1-tRNA + 44 EF-Tu.GTP.leu2-tRNA + 110 EF-Tu.GTP.leuU-tRNA + 44 EF-Tu.GTP.leuZ-tRNA + 198 EF-Tu.GTP.lys1-tRNA + 143 EF-Tu.GTP.met1-tRNA + 187 EF-Tu.GTP.phe1-tRNA + 110 EF-Tu.GTP.pro1-tRNA + 66 EF-Tu.GTP.pro2-tRNA + 44 EF-Tu.GTP.proM-tRNA + 22 EF-Tu.GTP.ser1-tRNA + 22 EF-Tu.GTP.ser2-tRNA + 11 EF-Tu.GTP.ser3-tRNA + 22 EF-Tu.GTP.serT-tRNA + 66 EF-Tu.GTP.serV-tRNA + 121 EF-Tu.GTP.thr1-tRNA + 33 EF-Tu.GTP.thr2-tRNA + 33 EF-Tu.GTP.thr3-tRNA + 44 EF-Tu.GTP.trpT-tRNA + 154 EF-Tu.GTP.tyr1-tRNA + 154 EF-Tu.GTP.val1-tRNA + 44 EF-Tu.GTP.val2-tRNA + 77 EF-Tu.GTP.val3-tRNA + 20570 mg2 + 1 rib_ini_b0406_11 --> 1 rib_70_elo1_b0406_11_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_elo_b0406_11_rib2	Translation elongation 2 b0406 11 ribosome(s)	4103 h2o + 1 rib_70_elo1_b0406_11_cplx --> 4103 EF-G.GDP + 4103 EF-Tu.GDP + 165 ala1_tRNA + 22 ala2_tRNA + 330 arg1_tRNA + 143 asn1_tRNA + 330 asp1_tRNA + 88 cysT_tRNA + 11 fmet_tRNA + 99 gln1_tRNA + 22 gln2_tRNA + 253 glu1_tRNA + 363 gly1_tRNA + 11 glyT_tRNA + 33 glyU_tRNA + 8206 h + 110 hisR_tRNA + 231 ile1_tRNA + 11 ile2_tRNA + 143 leu1_tRNA + 44 leu2_tRNA + 110 leuU_tRNA + 44 leuZ_tRNA + 198 lys1_tRNA + 143 met1_tRNA + 20570 mg2 + 187 phe1_tRNA + 8206 pi + 110 pro1_tRNA + 66 pro2_tRNA + 44 proM_tRNA + 1 rib_70_elo2_b0406_11_cplx + 22 ser1_tRNA + 22 ser2_tRNA + 11 ser3_tRNA + 22 serT_tRNA + 66 serV_tRNA + 121 thr1_tRNA + 33 thr2_tRNA + 33 thr3_tRNA + 44 trpT_tRNA + 154 tyr1_tRNA + 154 val1_tRNA + 44 val2_tRNA + 77 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176

tl_elo_b0406_1_rib1	Translation elongation 1 b0406 1 ribosome(s)	374 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 30 EF-Tu.GTP.arg1-tRNA + 13 EF-Tu.GTP.asn1-tRNA + 31 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 9 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 23 EF-Tu.GTP.glu1-tRNA + 33 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 18 EF-Tu.GTP.lys1-tRNA + 13 EF-Tu.GTP.met1-tRNA + 17 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 14 EF-Tu.GTP.tyr1-tRNA + 14 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 1870 mg2 + 1 rib_ini_b0406_1 --> 1 rib_70_elo1_b0406_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_elo_b0406_1_rib2	Translation elongation 2 b0406 1 ribosome(s)	373 h2o + 1 rib_70_elo1_b0406_1_cplx --> 373 EF-G.GDP + 373 EF-Tu.GDP + 15 ala1_tRNA + 2 ala2_tRNA + 30 arg1_tRNA + 13 asn1_tRNA + 30 asp1_tRNA + 8 cysT_tRNA + 1 fmet_tRNA + 9 gln1_tRNA + 2 gln2_tRNA + 23 glu1_tRNA + 33 gly1_tRNA + 1 glyT_tRNA + 3 glyU_tRNA + 746 h + 10 hisR_tRNA + 21 ile1_tRNA + 1 ile2_tRNA + 13 leu1_tRNA + 4 leu2_tRNA + 10 leuU_tRNA + 4 leuZ_tRNA + 18 lys1_tRNA + 13 met1_tRNA + 1870 mg2 + 17 phe1_tRNA + 746 pi + 10 pro1_tRNA + 6 pro2_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b0406_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 6 serV_tRNA + 11 thr1_tRNA + 3 thr2_tRNA + 3 thr3_tRNA + 4 trpT_tRNA + 14 tyr1_tRNA + 14 val1_tRNA + 4 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_elo_b0406_22_rib1	Translation elongation 1 b0406 22 ribosome(s)	8228 EF-G.GTP + 330 EF-Tu.GTP.ala1-tRNA + 44 EF-Tu.GTP.ala2-tRNA + 660 EF-Tu.GTP.arg1-tRNA + 286 EF-Tu.GTP.asn1-tRNA + 682 EF-Tu.GTP.asp1-tRNA + 176 EF-Tu.GTP.cysT-tRNA + 198 EF-Tu.GTP.gln1-tRNA + 44 EF-Tu.GTP.gln2-tRNA + 506 EF-Tu.GTP.glu1-tRNA + 726 EF-Tu.GTP.gly1-tRNA + 22 EF-Tu.GTP.glyT-tRNA + 66 EF-Tu.GTP.glyU-tRNA + 220 EF-Tu.GTP.hisR-tRNA + 462 EF-Tu.GTP.ile1-tRNA + 22 EF-Tu.GTP.ile2-tRNA + 286 EF-Tu.GTP.leu1-tRNA + 88 EF-Tu.GTP.leu2-tRNA + 220 EF-Tu.GTP.leuU-tRNA + 88 EF-Tu.GTP.leuZ-tRNA + 396 EF-Tu.GTP.lys1-tRNA + 286 EF-Tu.GTP.met1-tRNA + 374 EF-Tu.GTP.phe1-tRNA + 220 EF-Tu.GTP.pro1-tRNA + 132 EF-Tu.GTP.pro2-tRNA + 88 EF-Tu.GTP.proM-tRNA + 44 EF-Tu.GTP.ser1-tRNA + 44 EF-Tu.GTP.ser2-tRNA + 22 EF-Tu.GTP.ser3-tRNA + 44 EF-Tu.GTP.serT-tRNA + 132 EF-Tu.GTP.serV-tRNA + 242 EF-Tu.GTP.thr1-tRNA + 66 EF-Tu.GTP.thr2-tRNA + 66 EF-Tu.GTP.thr3-tRNA + 88 EF-Tu.GTP.trpT-tRNA + 308 EF-Tu.GTP.tyr1-tRNA + 308 EF-Tu.GTP.val1-tRNA + 88 EF-Tu.GTP.val2-tRNA + 154 EF-Tu.GTP.val3-tRNA + 41140 mg2 + 1 rib_ini_b0406_22 --> 1 rib_70_elo1_b0406_22_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_elo_b0406_22_rib2	Translation elongation 2 b0406 22 ribosome(s)	8206 h2o + 1 rib_70_elo1_b0406_22_cplx --> 8206 EF-G.GDP + 8206 EF-Tu.GDP + 330 ala1_tRNA + 44 ala2_tRNA + 660 arg1_tRNA + 286 asn1_tRNA + 660 asp1_tRNA + 176 cysT_tRNA + 22 fmet_tRNA + 198 gln1_tRNA + 44 gln2_tRNA + 506 glu1_tRNA + 726 gly1_tRNA + 22 glyT_tRNA + 66 glyU_tRNA + 16412 h + 220 hisR_tRNA + 462 ile1_tRNA + 22 ile2_tRNA + 286 leu1_tRNA + 88 leu2_tRNA + 220 leuU_tRNA + 88 leuZ_tRNA + 396 lys1_tRNA + 28 met1_tRNA + 41140 mg2 + 374 phe1_tRNA + 16412 pi + 220 pro1_tRNA + 132 pro2_tRNA + 88 proM_tRNA + 1 rib_70_elo2_b0406_22_cplx + 44 ser1_tRNA + 44 ser2_tRNA + 22 ser3_tRNA + 44 serT_tRNA + 132 serV_tRNA + 242 thr1_tRNA + 66 thr2_tRNA + 66 thr3_tRNA + 88 trpT_tRNA + 308 tyr1_tRNA + 308 val1_tRNA + 88 val2_tRNA + 154 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_elo_b0407_1_rib1	Translation elongation 1 b0407 1 ribosome(s)	109 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 4 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 4 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 545 mg2 + 1 rib_ini_b0407_1 --> 1 rib_70_elo1_b0407_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_elo_b0407_1_rib2	Translation elongation 2 b0407 1 ribosome(s)	108 h2o + 1 rib_70_elo1_b0407_1_cplx --> 108 EF-G.GDP + 108 EF-Tu.GDP + 10 ala1_tRNA + 2 ala2_tRNA + 4 arg1_tRNA + 3 asn1_tRNA + 5 asp1_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 1 gln2_tRNA + 4 glu1_tRNA + 9 gly1_tRNA + 216 h + 1 hisR_tRNA + 8 ile1_tRNA + 8 leu1_tRNA + 2 leu2_tRNA + 9 lys1_tRNA + 5 met1_tRNA + 545 mg2 + 6 phe1_tRNA + 216 pi + 3 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b0407_1_cplx + 1 ser1_tRNA + 2 ser2_tRNA + 2 serV_tRNA + 4 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 2 tyr1_tRNA + 7 val1_tRNA + 1 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_elo_b0407_3_rib1	Translation elongation 1 b0407 3 ribosome(s)	327 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 27 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 24 EF-Tu.GTP.ile1-tRNA + 27 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 27 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 18 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 21 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 1635 mg2 + 1 rib_ini_b0407_3 --> 1 rib_70_elo1_b0407_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996

tl_elo_b0407_3_rib2	Translation elongation 2 b0407 3 ribosome(s)	324 h2o + 1 rib_70_elo1_b0407_3_cplx --> 324 EF-G.GDP + 324 EF-Tu.GDP + 30 ala1_tRNA + 6 ala2_tRNA + 12 arg1_tRNA + 9 asn1_tRNA + 15 asp1_tRNA + 3 fmet_tRNA + 6 gln1_tRNA + 3 gln2_tRNA + 12 glu1_tRNA + 27 gly1_tRNA + 648 h + 3 hisR_tRNA + 24 ile1_tRNA + 24 leu1_tRNA + 6 leu2_tRNA + 27 lys1_tRNA + 15 met1_tRNA + 1635 mg2 + 18 phe1_tRNA + 648 pi + 9 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b0407_3_cplx + 3 ser1_tRNA + 6 ser2_tRNA + 6 serV_tRNA + 12 thr1_tRNA + 3 thr2_tRNA + 6 thr3_tRNA + 6 tyr1_tRNA + 21 val1_tRNA + 3 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_elo_b0407_6_rib1	Translation elongation 1 b0407 6 ribosome(s)	654 EF-G.GTP + 60 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 30 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 54 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 48 EF-Tu.GTP.ile1-tRNA + 54 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 54 EF-Tu.GTP.lys1-tRNA + 30 EF-Tu.GTP.met1-tRNA + 36 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 42 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 18 EF-Tu.GTP.val3-tRNA + 3270 mg2 + 1 rib_ini_b0407_6 --> 1 rib_70_elo1_b0407_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_elo_b0407_6_rib2	Translation elongation 2 b0407 6 ribosome(s)	648 h2o + 1 rib_70_elo1_b0407_6_cplx --> 648 EF-G.GDP + 648 EF-Tu.GDP + 60 ala1_tRNA + 12 ala2_tRNA + 24 arg1_tRNA + 18 asn1_tRNA + 30 asp1_tRNA + 6 fmet_tRNA + 12 gln1_tRNA + 6 gln2_tRNA + 24 glu1_tRNA + 54 gly1_tRNA + 1296 h + 6 hisR_tRNA + 48 ile1_tRNA + 48 leu1_tRNA + 12 leu2_tRNA + 54 lys1_tRNA + 30 met1_tRNA + 3270 mg2 + 36 phe1_tRNA + 1296 pi + 18 pro1_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b0407_6_cplx + 6 ser1_tRNA + 12 ser2_tRNA + 12 serV_tRNA + 24 thr1_tRNA + 6 thr2_tRNA + 12 thr3_tRNA + 12 tyr1_tRNA + 42 val1_tRNA + 6 val2_tRNA + 18 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_elo_b0413_1_rib1	Translation elongation 1 b0413 1 ribosome(s)	148 EF-G.GTP + 4 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 17 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 11 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 740 mg2 + 1 rib_ini_b0413_1 --> 1 rib_70_elo1_b0413_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_elo_b0413_1_rib2	Translation elongation 2 b0413 1 ribosome(s)	147 h2o + 1 rib_70_elo1_b0413_1_cplx --> 147 EF-G.GDP + 147 EF-Tu.GDP + 4 ala1_tRNA + 4 ala2_tRNA + 14 arg1_tRNA + 2 argX_tRNA + 5 asn1_tRNA + 7 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 1 gln2_tRNA + 17 glu1_tRNA + 5 gly1_tRNA + 1 glyT_tRNA + 294 h + 2 hisR_tRNA + 7 ile1_tRNA + 7 leu1_tRNA + 2 leu2_tRNA + 2 leuU_tRNA + 10 lys1_tRNA + 5 met1_tRNA + 740 mg2 + 8 phe1_tRNA + 294 pi + 4 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b0413_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 5 serV_tRNA + 3 thr1_tRNA + 1 thr2_tRNA + 2 tyr1_tRNA + 11 val1_tRNA + 3 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_elo_b0413_4_rib1	Translation elongation 1 b0413 4 ribosome(s)	592 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 16 EF-Tu.GTP.ala2-tRNA + 56 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.argX-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 32 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 68 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 28 EF-Tu.GTP.ile1-tRNA + 28 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 40 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 32 EF-Tu.GTP.phe1-tRNA + 16 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 20 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 44 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 2960 mg2 + 1 rib_ini_b0413_4 --> 1 rib_70_elo1_b0413_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_elo_b0413_4_rib2	Translation elongation 2 b0413 4 ribosome(s)	588 h2o + 1 rib_70_elo1_b0413_4_cplx --> 588 EF-G.GDP + 588 EF-Tu.GDP + 16 ala1_tRNA + 16 ala2_tRNA + 56 arg1_tRNA + 8 argX_tRNA + 20 asn1_tRNA + 28 asp1_tRNA + 16 cysT_tRNA + 4 fmet_tRNA + 8 gln1_tRNA + 4 gln2_tRNA + 68 glu1_tRNA + 20 gly1_tRNA + 4 glyT_tRNA + 1176 h + 8 hisR_tRNA + 28 ile1_tRNA + 28 leu1_tRNA + 8 leu2_tRNA + 8 leuU_tRNA + 40 lys1_tRNA + 20 met1_tRNA + 2960 mg2 + 32 phe1_tRNA + 1176 pi + 16 pro1_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b0413_4_cplx + 8 ser1_tRNA + 8 ser2_tRNA + 4 ser3_tRNA + 4 serT_tRNA + 20 serV_tRNA + 12 thr1_tRNA + 4 thr2_tRNA + 8 tyr1_tRNA + 44 val1_tRNA + 12 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_elo_b0413_8_rib1	Translation elongation 1 b0413 8 ribosome(s)	1184 EF-G.GTP + 32 EF-Tu.GTP.ala1-tRNA + 32 EF-Tu.GTP.ala2-tRNA + 112 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.argX-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 64 EF-Tu.GTP.asp1-tRNA + 32 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 136 EF-Tu.GTP.glu1-tRNA + 40 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 56 EF-Tu.GTP.ile1-tRNA + 56 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 80 EF-Tu.GTP.lys1-tRNA + 40 EF-Tu.GTP.met1-tRNA + 64 EF-Tu.GTP.phe1-tRNA + 32 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser1-tRNA + 16 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serT-tRNA + 40 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 16 EF-Tu.GTP.tyr1-tRNA + 88 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val2-tRNA + 16 EF-Tu.GTP.val3-tRNA + 5920 mg2 + 1 rib_ini_b0413_8 --> 1 rib_70_elo1_b0413_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313

tl_elo_b0413_8_rib2	Translation elongation 2 b0413 8 ribosome(s)	1176 h2o + 1 rib_70_elo1_b0413_8_cplx --> 1176 EF-G.GDP + 1176 EF-Tu.GDP + 32 ala1_tRNA + 32 ala2_tRNA + 112 arg1_tRNA + 16 argX_tRNA + 40 asn1_tRNA + 56 asp1_tRNA + 32 cysT_tRNA + 8 fmet_tRNA + 16 gln1_tRNA + 8 gln2_tRNA + 136 glu1_tRNA + 40 gly1_tRNA + 8 glyT_tRNA + 2352 h + 16 hisR_tRNA + 56 ile1_tRNA + 56 leu1_tRNA + 16 leu2_tRNA + 16 leuU_tRNA + 80 lys1_tRNA + 40 met1_tRNA + 5920 mg2 + 64 phe1_tRNA + 2352 pi + 32 pro1_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b0413_8_cplx + 16 ser1_tRNA + 16 ser2_tRNA + 8 ser3_tRNA + 8 serT_tRNA + 40 serV_tRNA + 24 thr1_tRNA + 8 thr2_tRNA + 16 tyr1_tRNA + 88 val1_tRNA + 24 val2_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_elo_b0414_10_rib1	Translation elongation 1 b0414 10 ribosome(s)	3660 EF-G.GTP + 260 EF-Tu.GTP.ala1-tRNA + 120 EF-Tu.GTP.ala2-tRNA + 220 EF-Tu.GTP.arg1-tRNA + 30 EF-Tu.GTP.argX-tRNA + 70 EF-Tu.GTP.asn1-tRNA + 170 EF-Tu.GTP.asp1-tRNA + 60 EF-Tu.GTP.cysT-tRNA + 130 EF-Tu.GTP.gln1-tRNA + 140 EF-Tu.GTP.gln2-tRNA + 210 EF-Tu.GTP.glu1-tRNA + 230 EF-Tu.GTP.gly1-tRNA + 30 EF-Tu.GTP.glyT-tRNA + 40 EF-Tu.GTP.glyU-tRNA + 130 EF-Tu.GTP.hisR-tRNA + 150 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.ile2-tRNA + 150 EF-Tu.GTP.leu1-tRNA + 40 EF-Tu.GTP.leu2-tRNA + 100 EF-Tu.GTP.leuU-tRNA + 30 EF-Tu.GTP.leuW-tRNA + 80 EF-Tu.GTP.leuZ-tRNA + 130 EF-Tu.GTP.lys1-tRNA + 90 EF-Tu.GTP.met1-tRNA + 60 EF-Tu.GTP.phe1-tRNA + 80 EF-Tu.GTP.pro1-tRNA + 40 EF-Tu.GTP.pro2-tRNA + 50 EF-Tu.GTP.proL-tRNA + 50 EF-Tu.GTP.proM-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 30 EF-Tu.GTP.ser3-tRNA + 110 EF-Tu.GTP.serV-tRNA + 60 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr2-tRNA + 100 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.thrU-tRNA + 50 EF-Tu.GTP.trpT-tRNA + 80 EF-Tu.GTP.tyr1-tRNA + 150 EF-Tu.GTP.val1-tRNA + 90 EF-Tu.GTP.val2-tRNA + 30 EF-Tu.GTP.val3-tRNA + 18300 mg2 + 1 rib_ini_b0414_10 --> 1 rib_70_elo1_b0414_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113
tl_elo_b0414_10_rib2	Translation elongation 2 b0414 10 ribosome(s)	3650 h2o + 1 rib_70_elo1_b0414_10_cplx --> 3650 EF-G.GDP + 3650 EF-Tu.GDP + 250 ala1_tRNA + 120 ala2_tRNA + 220 arg1_tRNA + 30 argX_tRNA + 70 asn1_tRNA + 170 asp1_tRNA + 60 cysT_tRNA + 10 fmet_tRNA + 130 gln1_tRNA + 140 gln2_tRNA + 210 glu1_tRNA + 230 gly1_tRNA + 30 glyT_tRNA + 40 glyU_tRNA + 7300 h + 130 hisR_tRNA + 150 ile1_tRNA + 20 ile2_tRNA + 150 leu1_tRNA + 40 leu2_tRNA + 100 leuU_tRNA + 30 leuW_tRNA + 80 leuZ_tRNA + 130 lys1_tRNA + 90 met1_tRNA + 18300 mg2 + 60 phe1_tRNA + 7300 pi + 80 pro1_tRNA + 40 pro2_tRNA + 50 proL_tRNA + 50 proM_tRNA + 1 rib_70_elo2_b0414_10_cplx + 20 ser2_tRNA + 30 ser3_tRNA + 110 serV_tRNA + 60 thr1_tRNA + 20 thr2_tRNA + 100 thr3_tRNA + 10 thrU_tRNA + 50 trpT_tRNA + 80 tyr1_tRNA + 150 val1_tRNA + 90 val2_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113
tl_elo_b0414_1_rib1	Translation elongation 1 b0414 1 ribosome(s)	366 EF-G.GTP + 26 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 22 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 17 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 13 EF-Tu.GTP.gln1-tRNA + 14 EF-Tu.GTP.gln2-tRNA + 21 EF-Tu.GTP.glu1-tRNA + 23 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 13 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuW-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 11 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 1830 mg2 + 1 rib_ini_b0414_1 --> 1 rib_70_elo1_b0414_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113
tl_elo_b0414_1_rib2	Translation elongation 2 b0414 1 ribosome(s)	365 h2o + 1 rib_70_elo1_b0414_1_cplx --> 365 EF-G.GDP + 365 EF-Tu.GDP + 25 ala1_tRNA + 12 ala2_tRNA + 22 arg1_tRNA + 3 argX_tRNA + 7 asn1_tRNA + 17 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 13 gln1_tRNA + 14 gln2_tRNA + 21 glu1_tRNA + 23 gly1_tRNA + 3 glyT_tRNA + 4 glyU_tRNA + 730 h + 13 hisR_tRNA + 15 ile1_tRNA + 2 ile2_tRNA + 15 leu1_tRNA + 4 leu2_tRNA + 10 leuU_tRNA + 3 leuW_tRNA + 8 leuZ_tRNA + 13 lys1_tRNA + 9 met1_tRNA + 1830 mg2 + 6 phe1_tRNA + 730 pi + 8 pro1_tRNA + 4 pro2_tRNA + 5 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b0414_1_cplx + 2 ser2_tRNA + 3 ser3_tRNA + 11 serV_tRNA + 6 thr1_tRNA + 2 thr2_tRNA + 10 thr3_tRNA + 1 thrU_tRNA + 5 trpT_tRNA + 8 tyr1_tRNA + 15 val1_tRNA + 9 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113
tl_elo_b0414_21_rib1	Translation elongation 1 b0414 21 ribosome(s)	7686 EF-G.GTP + 546 EF-Tu.GTP.ala1-tRNA + 252 EF-Tu.GTP.ala2-tRNA + 462 EF-Tu.GTP.arg1-tRNA + 63 EF-Tu.GTP.argX-tRNA + 147 EF-Tu.GTP.asn1-tRNA + 357 EF-Tu.GTP.asp1-tRNA + 126 EF-Tu.GTP.cysT-tRNA + 273 EF-Tu.GTP.gln1-tRNA + 294 EF-Tu.GTP.gln2-tRNA + 441 EF-Tu.GTP.glu1-tRNA + 483 EF-Tu.GTP.gly1-tRNA + 63 EF-Tu.GTP.glyT-tRNA + 84 EF-Tu.GTP.glyU-tRNA + 273 EF-Tu.GTP.hisR-tRNA + 315 EF-Tu.GTP.ile1-tRNA + 42 EF-Tu.GTP.ile2-tRNA + 315 EF-Tu.GTP.leu1-tRNA + 84 EF-Tu.GTP.leu2-tRNA + 210 EF-Tu.GTP.leuU-tRNA + 63 EF-Tu.GTP.leuW-tRNA + 168 EF-Tu.GTP.leuZ-tRNA + 273 EF-Tu.GTP.lys1-tRNA + 189 EF-Tu.GTP.met1-tRNA + 126 EF-Tu.GTP.phe1-tRNA + 168 EF-Tu.GTP.pro1-tRNA + 84 EF-Tu.GTP.pro2-tRNA + 105 EF-Tu.GTP.proL-tRNA + 105 EF-Tu.GTP.proM-tRNA + 42 EF-Tu.GTP.ser2-tRNA + 63 EF-Tu.GTP.ser3-tRNA + 231 EF-Tu.GTP.serV-tRNA + 126 EF-Tu.GTP.thr1-tRNA + 42 EF-Tu.GTP.thr2-tRNA + 210 EF-Tu.GTP.thr3-tRNA + 21 EF-Tu.GTP.thrU-tRNA + 105 EF-Tu.GTP.trpT-tRNA + 168 EF-Tu.GTP.tyr1-tRNA + 315 EF-Tu.GTP.val1-tRNA + 189 EF-Tu.GTP.val2-tRNA + 63 EF-Tu.GTP.val3-tRNA + 38430 mg2 + 1 rib_ini_b0414_21 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113

tl_elo_b0414_21_rib2	Translation elongation 2 b0414 21 ribosome(s)	7665 h2o + 1 rib_70_elo1_b0414_21_cplx --> 7665 EF-G.GDP + 7665 EF-Tu.GDP + 525 ala1_tRNA + 252 ala2_tRNA + 462 arg1_tRNA + 63 argX_tRNA + 147 asn1_tRNA + 357 asp1_tRNA + 126 cysT_tRNA + 21 fmet_tRNA + 273 gln1_tRNA + 294 gln2_tRNA + 441 glu1_tRNA + 483 gly1_tRNA + 63 glyT_tRNA + 84 glyU_tRNA + 15330 h + 273 hisR_tRNA + 315 ile1_tRNA + 42 ile2_tRNA + 315 leu1_tRNA + 84 leu2_tRNA + 210 leuU_tRNA + 63 leuW_tRNA + 168 leuZ_tRNA + 273 lys1_tRNA + 189 met1_tRNA + 38430 mg2 + 126 phe1_tRNA + 15330 pi + 168 pro1_tRNA + 84 pro2_tRNA + 105 proL_tRNA + 105 proM_tRNA + 1 rib_70_elo2_b0414_21_cplx + 42 ser2_tRNA + 63 ser3_tRNA + 231 serV_tRNA + 126 thr1_tRNA + 42 thr2_tRNA + 210 thr3_tRNA + 21 thrU_tRNA + 105 trpT_tRNA + 168 tyr1_tRNA + 315 val1_tRNA + 189 val2_tRNA + 63 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113
tl_elo_b0415_1_rib1	Translation elongation 1 b0415 1 ribosome(s)	155 EF-G.GTP + 23 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 5 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 11 EF-Tu.GTP.glu1-tRNA + 14 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 775 mg2 + 1 rib_ini_b0415_1 --> 1 rib_70_elo1_b0415_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913
tl_elo_b0415_1_rib2	Translation elongation 2 b0415 1 ribosome(s)	154 h2o + 1 rib_70_elo1_b0415_1_cplx --> 154 EF-G.GDP + 154 EF-Tu.GDP + 23 ala1_tRNA + 5 ala2_tRNA + 5 arg1_tRNA + 9 asn1_tRNA + 6 asp1_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 1 gln2_tRNA + 11 glu1_tRNA + 14 gly1_tRNA + 1 glyU_tRNA + 308 h + 2 hisR_tRNA + 15 ile1_tRNA + 10 leu1_tRNA + 1 leu2_tRNA + 1 leuU_tRNA + 8 lys1_tRNA + 1 met1_tRNA + 775 mg2 + 4 phe1_tRNA + 308 pi + 3 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b0415_1_cplx + 4 serV_tRNA + 7 thr1_tRNA + 2 thr2_tRNA + 1 thr3_tRNA + 1 trpT_tRNA + 3 tyr1_tRNA + 4 val1_tRNA + 2 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913
tl_elo_b0415_4_rib1	Translation elongation 1 b0415 4 ribosome(s)	620 EF-G.GTP + 92 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 36 EF-Tu.GTP.asn1-tRNA + 24 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 44 EF-Tu.GTP.glu1-tRNA + 56 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 60 EF-Tu.GTP.ile1-tRNA + 40 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 32 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 16 EF-Tu.GTP.serV-tRNA + 28 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 16 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 28 EF-Tu.GTP.val3-tRNA + 3100 mg2 + 1 rib_ini_b0415_4 --> 1 rib_70_elo1_b0415_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913
tl_elo_b0415_4_rib2	Translation elongation 2 b0415 4 ribosome(s)	616 h2o + 1 rib_70_elo1_b0415_4_cplx --> 616 EF-G.GDP + 616 EF-Tu.GDP + 92 ala1_tRNA + 20 ala2_tRNA + 20 arg1_tRNA + 36 asn1_tRNA + 24 asp1_tRNA + 4 fmet_tRNA + 8 gln1_tRNA + 4 gln2_tRNA + 44 glu1_tRNA + 56 gly1_tRNA + 4 glyU_tRNA + 1232 h + 8 hisR_tRNA + 60 ile1_tRNA + 40 leu1_tRNA + 4 leu2_tRNA + 4 leuU_tRNA + 32 lys1_tRNA + 4 met1_tRNA + 3100 mg2 + 16 phe1_tRNA + 1232 pi + 12 pro1_tRNA + 4 pro2_tRNA + 1 rib_70_elo2_b0415_4_cplx + 16 serV_tRNA + 28 thr1_tRNA + 8 thr2_tRNA + 4 thr3_tRNA + 4 trpT_tRNA + 12 tyr1_tRNA + 16 val1_tRNA + 8 val2_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913
tl_elo_b0415_9_rib1	Translation elongation 1 b0415 9 ribosome(s)	1395 EF-G.GTP + 207 EF-Tu.GTP.ala1-tRNA + 54 EF-Tu.GTP.ala2-tRNA + 45 EF-Tu.GTP.arg1-tRNA + 81 EF-Tu.GTP.asn1-tRNA + 54 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.gln1-tRNA + 9 EF-Tu.GTP.gln2-tRNA + 99 EF-Tu.GTP.glu1-tRNA + 126 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyU-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 135 EF-Tu.GTP.ile1-tRNA + 90 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 72 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 36 EF-Tu.GTP.phe1-tRNA + 27 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 36 EF-Tu.GTP.serV-tRNA + 63 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.trpT-tRNA + 27 EF-Tu.GTP.tyr1-tRNA + 36 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 63 EF-Tu.GTP.val3-tRNA + 6975 mg2 + 1 rib_ini_b0415_9 --> 1 rib_70_elo1_b0415_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913
tl_elo_b0415_9_rib2	Translation elongation 2 b0415 9 ribosome(s)	1386 h2o + 1 rib_70_elo1_b0415_9_cplx --> 1386 EF-G.GDP + 1386 EF-Tu.GDP + 207 ala1_tRNA + 45 ala2_tRNA + 45 arg1_tRNA + 81 asn1_tRNA + 54 asp1_tRNA + 9 fmet_tRNA + 18 gln1_tRNA + 9 gln2_tRNA + 99 glu1_tRNA + 126 gly1_tRNA + 9 glyU_tRNA + 2772 h + 18 hisR_tRNA + 135 ile1_tRNA + 90 leu1_tRNA + 9 leu2_tRNA + 9 leuU_tRNA + 72 lys1_tRNA + 9 met1_tRNA + 6975 mg2 + 36 phe1_tRNA + 2772 pi + 27 pro1_tRNA + 9 pro2_tRNA + 1 rib_70_elo2_b0415_9_cplx + 36 serV_tRNA + 63 thr1_tRNA + 18 thr2_tRNA + 9 thr3_tRNA + 9 trpT_tRNA + 27 tyr1_tRNA + 36 val1_tRNA + 18 val2_tRNA + 63 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913
tl_elo_b0416_1_rib1	Translation elongation 1 b0416 1 ribosome(s)	138 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 9 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 11 EF-Tu.GTP.glu1-tRNA + 2 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 5 EF-Tu.GTP.ile1-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 690 mg2 + 1 rib_ini_b0416_1 --> 1 rib_70_elo1_b0416_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913

tl_elo_b0416_1_rib2	Translation elongation 2 b0416 1 ribosome(s)	137 h2o + 1 rib_70_elo1_b0416_1_cplx --> 137 EF-G.GDP + 137 EF-Tu.GDP + 15 ala1_tRNA + 3 ala2_tRNA + 9 arg1_tRNA + 5 asn1_tRNA + 9 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 11 glu1_tRNA + 2 gly1_tRNA + 2 glyT_tRNA + 1 glyU_tRNA + 274 h + 1 hisR_tRNA + 5 ile1_tRNA + 13 leu1_tRNA + 1 leu2_tRNA + 3 leuU_tRNA + 10 lys1_tRNA + 1 met1_tRNA + 690 mg2 + 4 phe1_tRNA + 274 pi + 3 pro2_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b0416_1_cplx + 3 ser1_tRNA + 1 ser2_tRNA + 1 ser3_tRNA + 2 serV_tRNA + 1 thr1_tRNA + 1 thr2_tRNA + 1 trpT_tRNA + 7 tyr1_tRNA + 8 val1_tRNA + 3 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913
tl_elo_b0416_4_rib1	Translation elongation 1 b0416 4 ribosome(s)	552 EF-G.GTP + 60 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 36 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 36 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 44 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 52 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 44 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 28 EF-Tu.GTP.tyr1-tRNA + 32 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 2760 mg2 + 1 rib_ini_b0416_4 --> 1 rib_70_elo1_b0416_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913
tl_elo_b0416_4_rib2	Translation elongation 2 b0416 4 ribosome(s)	548 h2o + 1 rib_70_elo1_b0416_4_cplx --> 548 EF-G.GDP + 548 EF-Tu.GDP + 60 ala1_tRNA + 12 ala2_tRNA + 36 arg1_tRNA + 20 asn1_tRNA + 36 asp1_tRNA + 4 cysT_tRNA + 4 fmet_tRNA + 24 gln1_tRNA + 44 glu1_tRNA + 8 gly1_tRNA + 8 glyT_tRNA + 4 glyU_tRNA + 1096 h + 4 hisR_tRNA + 20 ile1_tRNA + 52 leu1_tRNA + 4 leu2_tRNA + 12 leuU_tRNA + 40 lys1_tRNA + 4 met1_tRNA + 2760 mg2 + 16 phe1_tRNA + 1096 pi + 12 pro2_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b0416_4_cplx + 12 ser1_tRNA + 4 ser2_tRNA + 4 ser3_tRNA + 8 serV_tRNA + 4 thr1_tRNA + 4 thr2_tRNA + 4 trpT_tRNA + 28 tyr1_tRNA + 32 val1_tRNA + 12 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913
tl_elo_b0416_8_rib1	Translation elongation 1 b0416 8 ribosome(s)	1104 EF-G.GTP + 120 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 72 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 72 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 48 EF-Tu.GTP.gln1-tRNA + 88 EF-Tu.GTP.glu1-tRNA + 16 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 40 EF-Tu.GTP.ile1-tRNA + 104 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 24 EF-Tu.GTP.leuU-tRNA + 88 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 32 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 16 EF-Tu.GTP.proM-tRNA + 24 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 16 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 56 EF-Tu.GTP.tyr1-tRNA + 64 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val2-tRNA + 16 EF-Tu.GTP.val3-tRNA + 5520 mg2 + 1 rib_ini_b0416_8 --> 1 rib_70_elo1_b0416_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913
tl_elo_b0416_8_rib2	Translation elongation 2 b0416 8 ribosome(s)	1096 h2o + 1 rib_70_elo1_b0416_8_cplx --> 1096 EF-G.GDP + 1096 EF-Tu.GDP + 120 ala1_tRNA + 24 ala2_tRNA + 72 arg1_tRNA + 40 asn1_tRNA + 72 asp1_tRNA + 8 cysT_tRNA + 8 fmet_tRNA + 48 gln1_tRNA + 88 glu1_tRNA + 16 gly1_tRNA + 16 glyT_tRNA + 8 glyU_tRNA + 2192 h + 8 hisR_tRNA + 40 ile1_tRNA + 104 leu1_tRNA + 8 leu2_tRNA + 24 leuU_tRNA + 80 lys1_tRNA + 8 met1_tRNA + 5520 mg2 + 32 phe1_tRNA + 2192 pi + 24 pro2_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b0416_8_cplx + 24 ser1_tRNA + 8 ser2_tRNA + 8 ser3_tRNA + 16 serV_tRNA + 8 thr1_tRNA + 8 thr2_tRNA + 8 trpT_tRNA + 56 tyr1_tRNA + 64 val1_tRNA + 24 val2_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913
tl_elo_b0423_14_rib1	Translation elongation 1 b0423 14 ribosome(s)	6734 EF-G.GTP + 266 EF-Tu.GTP.ala1-tRNA + 42 EF-Tu.GTP.ala2-tRNA + 504 EF-Tu.GTP.arg1-tRNA + 266 EF-Tu.GTP.asn1-tRNA + 434 EF-Tu.GTP.asp1-tRNA + 70 EF-Tu.GTP.cysT-tRNA + 252 EF-Tu.GTP.gln1-tRNA + 14 EF-Tu.GTP.gln2-tRNA + 546 EF-Tu.GTP.glu1-tRNA + 420 EF-Tu.GTP.gly1-tRNA + 56 EF-Tu.GTP.glyU-tRNA + 182 EF-Tu.GTP.hisR-tRNA + 532 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.ile2-tRNA + 336 EF-Tu.GTP.leu1-tRNA + 56 EF-Tu.GTP.leu2-tRNA + 182 EF-Tu.GTP.leuU-tRNA + 28 EF-Tu.GTP.leuZ-tRNA + 392 EF-Tu.GTP.lys1-tRNA + 112 EF-Tu.GTP.met1-tRNA + 294 EF-Tu.GTP.phe1-tRNA + 168 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.proM-tRNA + 112 EF-Tu.GTP.ser1-tRNA + 70 EF-Tu.GTP.ser2-tRNA + 42 EF-Tu.GTP.ser3-tRNA + 126 EF-Tu.GTP.serV-tRNA + 196 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 70 EF-Tu.GTP.thr3-tRNA + 56 EF-Tu.GTP.trpT-tRNA + 182 EF-Tu.GTP.tyr1-tRNA + 392 EF-Tu.GTP.val1-tRNA + 168 EF-Tu.GTP.val2-tRNA + 126 EF-Tu.GTP.val3-tRNA + 33670 mg2 + 1 rib_ini_b0423_14 --> 1 rib_70_elo1_b0423_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_elo_b0423_14_rib2	Translation elongation 2 b0423 14 ribosome(s)	6720 h2o + 1 rib_70_elo1_b0423_14_cplx --> 6720 EF-G.GDP + 6720 EF-Tu.GDP + 266 ala1_tRNA + 42 ala2_tRNA + 504 arg1_tRNA + 266 asn1_tRNA + 434 asp1_tRNA + 70 cysT_tRNA + 14 fmet_tRNA + 252 gln1_tRNA + 14 gln2_tRNA + 546 glu1_tRNA + 420 gly1_tRNA + 56 glyU_tRNA + 13440 h + 182 hisR_tRNA + 532 ile1_tRNA + 14 ile2_tRNA + 336 leu1_tRNA + 56 leu2_tRNA + 182 leuU_tRNA + 28 leuZ_tRNA + 392 lys1_tRNA + 112 met1_tRNA + 33670 mg2 + 294 phe1_tRNA + 13440 pi + 154 pro1_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b0423_14_cplx + 112 ser1_tRNA + 70 ser2_tRNA + 42 ser3_tRNA + 126 serV_tRNA + 196 thr1_tRNA + 14 thr2_tRNA + 70 thr3_tRNA + 56 trpT_tRNA + 182 tyr1_tRNA + 392 val1_tRNA + 168 val2_tRNA + 126 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476

tl_elo_b0423_1_rib1	Translation elongation 1 b0423 1 ribosome(s)	481 EF-G.GTP + 19 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 36 EF-Tu.GTP.arg1-tRNA + 19 EF-Tu.GTP.asn1-tRNA + 31 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 18 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 39 EF-Tu.GTP.glu1-tRNA + 30 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 13 EF-Tu.GTP.hisR-tRNA + 38 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 24 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 13 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 28 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 21 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 13 EF-Tu.GTP.tyr1-tRNA + 28 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 2405 mg2 + 1 rib_ini_b0423_1 --> 1 rib_70_elo1_b0423_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_elo_b0423_1_rib2	Translation elongation 2 b0423 1 ribosome(s)	480 h2o + 1 rib_70_elo1_b0423_1_cplx --> 480 EF-G.GDP + 480 EF-Tu.GDP + 19 ala1_tRNA + 3 ala2_tRNA + 36 arg1_tRNA + 19 asn1_tRNA + 31 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 18 gln1_tRNA + 1 gln2_tRNA + 39 glu1_tRNA + 30 gly1_tRNA + 4 glyU_tRNA + 960 h + 13 hisR_tRNA + 38 ile1_tRNA + 1 ile2_tRNA + 24 leu1_tRNA + 4 leu2_tRNA + 13 leuU_tRNA + 2 leuZ_tRNA + 28 lys1_tRNA + 8 met1_tRNA + 2405 mg2 + 21 phe1_tRNA + 960 pi + 11 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b0423_1_cplx + 8 ser1_tRNA + 5 ser2_tRNA + 3 ser3_tRNA + 9 serV_tRNA + 14 thr1_tRNA + 1 thr2_tRNA + 5 thr3_tRNA + 4 trpT_tRNA + 13 tyr1_tRNA + 28 val1_tRNA + 12 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_elo_b0423_28_rib1	Translation elongation 1 b0423 28 ribosome(s)	13468 EF-G.GTP + 532 EF-Tu.GTP.ala1-tRNA + 84 EF-Tu.GTP.ala2-tRNA + 1008 EF-Tu.GTP.arg1-tRNA + 532 EF-Tu.GTP.asn1-tRNA + 868 EF-Tu.GTP.asp1-tRNA + 140 EF-Tu.GTP.cysT-tRNA + 504 EF-Tu.GTP.gln1-tRNA + 28 EF-Tu.GTP.gln2-tRNA + 1092 EF-Tu.GTP.glu1-tRNA + 840 EF-Tu.GTP.gly1-tRNA + 112 EF-Tu.GTP.glyU-tRNA + 364 EF-Tu.GTP.hisR-tRNA + 1064 EF-Tu.GTP.ile1-tRNA + 28 EF-Tu.GTP.ile2-tRNA + 672 EF-Tu.GTP.leu1-tRNA + 112 EF-Tu.GTP.leu2-tRNA + 364 EF-Tu.GTP.leuU-tRNA + 56 EF-Tu.GTP.leuZ-tRNA + 784 EF-Tu.GTP.lys1-tRNA + 224 EF-Tu.GTP.met1-tRNA + 588 EF-Tu.GTP.phe1-tRNA + 336 EF-Tu.GTP.pro1-tRNA + 28 EF-Tu.GTP.proM-tRNA + 224 EF-Tu.GTP.ser1-tRNA + 140 EF-Tu.GTP.ser2-tRNA + 84 EF-Tu.GTP.ser3-tRNA + 252 EF-Tu.GTP.serV-tRNA + 392 EF-Tu.GTP.thr1-tRNA + 28 EF-Tu.GTP.thr2-tRNA + 140 EF-Tu.GTP.thr3-tRNA + 112 EF-Tu.GTP.trpT-tRNA + 364 EF-Tu.GTP.tyr1-tRNA + 784 EF-Tu.GTP.val1-tRNA + 336 EF-Tu.GTP.val2-tRNA + 252 EF-Tu.GTP.val3-tRNA + 67340 mg2 + 1 rib_ini_b0423_28 --> 1 rib_70_elo1_b0423_28_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_elo_b0423_28_rib2	Translation elongation 2 b0423 28 ribosome(s)	13440 h2o + 1 rib_70_elo1_b0423_28_cplx --> 13440 EF-G.GDP + 13440 EF-Tu.GDP + 532 ala1_tRNA + 84 ala2_tRNA + 1008 arg1_tRNA + 532 asn1_tRNA + 868 asp1_tRNA + 140 cysT_tRNA + 28 fmet_tRNA + 504 gln1_tRNA + 28 gln2_tRNA + 1092 glu1_tRNA + 840 gly1_tRNA + 112 glyU_tRNA + 26880 h + 364 hisR_tRNA + 1064 ile1_tRNA + 28 ile2_tRNA + 672 leu1_tRNA + 112 leu2_tRNA + 364 leuU_tRNA + 56 leuZ_tRNA + 784 lys1_tRNA + 224 met1_tRNA + 67340 mg2 + 588 phe1_tRNA + 26880 pi + 308 pro1_tRNA + 28 proM_tRNA + 1 rib_70_elo2_b0423_28_cplx + 224 ser1_tRNA + 140 ser2_tRNA + 84 ser3_tRNA + 252 serV_tRNA + 392 thr1_tRNA + 28 thr2_tRNA + 140 thr3_tRNA + 112 trpT_tRNA + 364 tyr1_tRNA + 784 val1_tRNA + 336 val2_tRNA + 252 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_elo_b0436_12_rib1	Translation elongation 1 b0436 12 ribosome(s)	5172 EF-G.GTP + 468 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 312 EF-Tu.GTP.arg1-tRNA + 192 EF-Tu.GTP.asn1-tRNA + 300 EF-Tu.GTP.asp1-tRNA + 156 EF-Tu.GTP.gln1-tRNA + 36 EF-Tu.GTP.gln2-tRNA + 708 EF-Tu.GTP.glu1-tRNA + 384 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.hisR-tRNA + 300 EF-Tu.GTP.ile1-tRNA + 360 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 420 EF-Tu.GTP.lys1-tRNA + 120 EF-Tu.GTP.met1-tRNA + 204 EF-Tu.GTP.phe1-tRNA + 132 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 72 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.serT-tRNA + 72 EF-Tu.GTP.serV-tRNA + 120 EF-Tu.GTP.thr1-tRNA + 96 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 96 EF-Tu.GTP.tyr1-tRNA + 216 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 276 EF-Tu.GTP.val3-tRNA + 25860 mg2 + 1 rib_ini_b0436_12 --> 1 rib_70_elo1_b0436_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.28E+00	9.28E+00	0	6.91E+00	6.906667	0	2.87E+00	2.868462
tl_elo_b0436_12_rib2	Translation elongation 2 b0436 12 ribosome(s)	5160 h2o + 1 rib_70_elo1_b0436_12_cplx --> 5160 EF-G.GDP + 5160 EF-Tu.GDP + 456 ala1_tRNA + 24 ala2_tRNA + 312 arg1_tRNA + 192 asn1_tRNA + 300 asp1_tRNA + 12 fmet_tRNA + 156 gln1_tRNA + 36 gln2_tRNA + 708 glu1_tRNA + 384 gly1_tRNA + 10320 h + 24 hisR_tRNA + 300 ile1_tRNA + 360 leu1_tRNA + 12 leuU_tRNA + 420 lys1_tRNA + 120 met1_tRNA + 25860 mg2 + 204 phe1_tRNA + 10320 pi + 132 pro1_tRNA + 12 proM_tRNA + 1 rib_70_elo2_b0436_12_cplx + 12 ser1_tRNA + 72 ser2_tRNA + 12 serT_tRNA + 72 serV_tRNA + 120 thr1_tRNA + 96 thr2_tRNA + 12 thr3_tRNA + 12 trpT_tRNA + 96 tyr1_tRNA + 216 val1_tRNA + 12 val2_tRNA + 276 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.28E+00	9.28E+00	0	6.91E+00	6.906667	0	2.87E+00	2.868462
tl_elo_b0436_1_rib1	Translation elongation 1 b0436 1 ribosome(s)	431 EF-G.GTP + 39 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 26 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.asn1-tRNA + 25 EF-Tu.GTP.asp1-tRNA + 13 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 59 EF-Tu.GTP.glu1-tRNA + 32 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 25 EF-Tu.GTP.ile1-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 35 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 17 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 18 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 23 EF-Tu.GTP.val3-tRNA + 2155 mg2 + 1 rib_ini_b0436_1 --> 1 rib_70_elo1_b0436_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.00E+01	9.00E+01	0	8.29E+01	82.88	0	1.55E+00	1.55375

tl_elo_b0436_1_rib2	Translation elongation 2 b0436 1 ribosome(s)	430 h2o + 1 rib_70_elo1_b0436_1_cplx --> 430 EF-G.GDP + 430 EF-Tu.GDP + 38 ala1_tRNA + 2 ala2_tRNA + 26 arg1_tRNA + 16 asn1_tRNA + 25 asp1_tRNA + 1 fmet_tRNA + 13 gln1_tRNA + 3 gln2_tRNA + 59 glu1_tRNA + 32 gly1_tRNA + 860 h + 2 hisR_tRNA + 25 ile1_tRNA + 30 leu1_tRNA + 1 leuU_tRNA + 35 lys1_tRNA + 10 met1_tRNA + 2155 mg2 + 17 phe1_tRNA + 860 pi + 11 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b0436_1_cplx + 1 ser1_tRNA + 6 ser2_tRNA + 1 serT_tRNA + 6 serV_tRNA + 10 thr1_tRNA + 8 thr2_tRNA + 1 thr3_tRNA + 1 trpT_tRNA + 8 tyr1_tRNA + 18 val1_tRNA + 1 val2_tRNA + 23 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.00E+01	9.00E+01	0	8.29E+01	82.88	0	1.55E+00	1.55375
tl_elo_b0436_25_rib1	Translation elongation 1 b0436 25 ribosome(s)	10775 EF-G.GTP + 975 EF-Tu.GTP.ala1-tRNA + 50 EF-Tu.GTP.ala2-tRNA + 650 EF-Tu.GTP.arg1-tRNA + 400 EF-Tu.GTP.asn1-tRNA + 625 EF-Tu.GTP.asp1-tRNA + 325 EF-Tu.GTP.gln1-tRNA + 75 EF-Tu.GTP.gln2-tRNA + 1475 EF-Tu.GTP.glu1-tRNA + 800 EF-Tu.GTP.gly1-tRNA + 50 EF-Tu.GTP.hisR-tRNA + 625 EF-Tu.GTP.ile1-tRNA + 750 EF-Tu.GTP.leu1-tRNA + 25 EF-Tu.GTP.leuU-tRNA + 875 EF-Tu.GTP.lys1-tRNA + 250 EF-Tu.GTP.met1-tRNA + 425 EF-Tu.GTP.phe1-tRNA + 275 EF-Tu.GTP.pro1-tRNA + 25 EF-Tu.GTP.proM-tRNA + 25 EF-Tu.GTP.ser1-tRNA + 150 EF-Tu.GTP.ser2-tRNA + 25 EF-Tu.GTP.serT-tRNA + 150 EF-Tu.GTP.serV-tRNA + 250 EF-Tu.GTP.thr1-tRNA + 200 EF-Tu.GTP.thr2-tRNA + 25 EF-Tu.GTP.thr3-tRNA + 25 EF-Tu.GTP.trpT-tRNA + 200 EF-Tu.GTP.tyr1-tRNA + 450 EF-Tu.GTP.val1-tRNA + 25 EF-Tu.GTP.val2-tRNA + 575 EF-Tu.GTP.val3-tRNA + 53875 mg2 + 1 rib_ini_b0436_25 --> 1 rib_70_elo1_b0436_25_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.50E+00	4.50E+00	0	3.32E+00	3.3152	1.11E+00	3.32E+00	2.205662
tl_elo_b0436_25_rib2	Translation elongation 2 b0436 25 ribosome(s)	10750 h2o + 1 rib_70_elo1_b0436_25_cplx --> 10750 EF-G.GDP + 10750 EF-Tu.GDP + 950 ala1_tRNA + 50 ala2_tRNA + 650 arg1_tRNA + 400 asn1_tRNA + 625 asp1_tRNA + 25 fmet_tRNA + 325 gln1_tRNA + 75 gln2_tRNA + 1475 glu1_tRNA + 800 gly1_tRNA + 21500 h + 50 hisR_tRNA + 625 ile1_tRNA + 750 leu1_tRNA + 25 leuU_tRNA + 875 lys1_tRNA + 250 met1_tRNA + 53875 mg2 + 425 phe1_tRNA + 21500 pi + 275 pro1_tRNA + 25 proM_tRNA + 1 rib_70_elo2_b0436_25_cplx + 25 ser1_tRNA + 150 ser2_tRNA + 25 serT_tRNA + 150 serV_tRNA + 250 thr1_tRNA + 200 thr2_tRNA + 25 thr3_tRNA + 25 trpT_tRNA + 200 tyr1_tRNA + 450 val1_tRNA + 25 val2_tRNA + 575 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.50E+00	4.50E+00	0	3.32E+00	3.3152	1.11E+00	3.32E+00	2.205662
tl_elo_b0503_10_rib1	Translation elongation 1 b0503 10 ribosome(s)	3630 EF-G.GTP + 320 EF-Tu.GTP.ala1-tRNA + 100 EF-Tu.GTP.ala2-tRNA + 220 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argU-tRNA + 10 EF-Tu.GTP.argW-tRNA + 40 EF-Tu.GTP.argX-tRNA + 100 EF-Tu.GTP.asn1-tRNA + 160 EF-Tu.GTP.asp1-tRNA + 70 EF-Tu.GTP.cysT-tRNA + 160 EF-Tu.GTP.gln1-tRNA + 100 EF-Tu.GTP.gln2-tRNA + 310 EF-Tu.GTP.glu1-tRNA + 220 EF-Tu.GTP.gly1-tRNA + 20 EF-Tu.GTP.glyT-tRNA + 30 EF-Tu.GTP.glyU-tRNA + 130 EF-Tu.GTP.hisR-tRNA + 160 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.ile2-tRNA + 270 EF-Tu.GTP.leu1-tRNA + 40 EF-Tu.GTP.leu2-tRNA + 70 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuW-tRNA + 40 EF-Tu.GTP.leuZ-tRNA + 110 EF-Tu.GTP.lys1-tRNA + 80 EF-Tu.GTP.met1-tRNA + 70 EF-Tu.GTP.phe1-tRNA + 90 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 20 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.proM-tRNA + 30 EF-Tu.GTP.ser3-tRNA + 20 EF-Tu.GTP.serT-tRNA + 60 EF-Tu.GTP.serV-tRNA + 80 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr2-tRNA + 50 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.thrU-tRNA + 70 EF-Tu.GTP.trpT-tRNA + 130 EF-Tu.GTP.tyr1-tRNA + 100 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 50 EF-Tu.GTP.val3-tRNA + 18150 mg2 + 1 rib_	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_elo_b0503_10_rib2	Translation elongation 2 b0503 10 ribosome(s)	3620 h2o + 1 rib_70_elo1_b0503_10_cplx --> 3620 EF-G.GDP + 3620 EF-Tu.GDP + 320 ala1_tRNA + 100 ala2_tRNA + 220 arg1_tRNA + 10 argU_tRNA + 10 argW_tRNA + 30 argX_tRNA + 100 asn1_tRNA + 160 asp1_tRNA + 70 cysT_tRNA + 10 fmet_tRNA + 160 gln1_tRNA + 100 gln2_tRNA + 310 glu1_tRNA + 220 gly1_tRNA + 20 glyT_tRNA + 30 glyU_tRNA + 7240 h + 130 hisR_tRNA + 160 ile1_tRNA + 10 ile2_tRNA + 270 leu1_tRNA + 40 leu2_tRNA + 70 leuU_tRNA + 20 leuW_tRNA + 40 leuZ_tRNA + 110 lys1_tRNA + 80 met1_tRNA + 18150 mg2 + 70 phe1_tRNA + 7240 pi + 90 pro1_tRNA + 10 pro2_tRNA + 20 proL_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b0503_10_cplx + 30 ser3_tRNA + 20 serT_tRNA + 60 serV_tRNA + 80 thr1_tRNA + 20 thr2_tRNA + 50 thr3_tRNA + 10 thrU_tRNA + 70 trpT_tRNA + 130 tyr1_tRNA + 100 val1_tRNA + 10 val2_tRNA + 50 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_elo_b0503_1_rib1	Translation elongation 1 b0503 1 ribosome(s)	363 EF-G.GTP + 32 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 22 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argW-tRNA + 4 EF-Tu.GTP.argX-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 16 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 31 EF-Tu.GTP.glu1-tRNA + 22 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 13 EF-Tu.GTP.hisR-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 27 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 13 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1815 mg2 + 1 rib_ini_b0503_1 --> 1 rib_70_elo1_b0503_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_elo_b0503_1_rib2	Translation elongation 2 b0503 1 ribosome(s)	362 h2o + 1 rib_70_elo1_b0503_1_cplx --> 362 EF-G.GDP + 362 EF-Tu.GDP + 32 ala1_tRNA + 10 ala2_tRNA + 22 arg1_tRNA + 1 argU_tRNA + 1 argW_tRNA + 3 argX_tRNA + 10 asn1_tRNA + 16 asp1_tRNA + 7 cysT_tRNA + 1 fmet_tRNA + 16 gln1_tRNA + 10 gln2_tRNA + 31 glu1_tRNA + 22 gly1_tRNA + 2 glyT_tRNA + 3 glyU_tRNA + 724 h + 13 hisR_tRNA + 16 ile1_tRNA + 1 ile2_tRNA + 27 leu1_tRNA + 4 leu2_tRNA + 7 leuU_tRNA + 2 leuW_tRNA + 4 leuZ_tRNA + 11 lys1_tRNA + 8 met1_tRNA + 1815 mg2 + 7 phe1_tRNA + 724 pi + 9 pro1_tRNA + 1 pro2_tRNA + 2 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b0503_1_cplx + 3 ser3_tRNA + 2 serT_tRNA + 6 serV_tRNA + 8 thr1_tRNA + 2 thr2_tRNA + 5 thr3_tRNA + 1 thrU_tRNA + 7 trpT_tRNA + 13 tyr1_tRNA + 10 val1_tRNA + 1 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496

tl_elo_b0503_21_rib1	Translation elongation 1 b0503 21 ribosome(s)	7623 EF-G.GTP + 672 EF-Tu.GTP.ala1-tRNA + 210 EF-Tu.GTP.ala2-tRNA + 462 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.argU-tRNA + 21 EF-Tu.GTP.argW-tRNA + 84 EF-Tu.GTP.argX-tRNA + 210 EF-Tu.GTP.asn1-tRNA + 336 EF-Tu.GTP.asp1-tRNA + 147 EF-Tu.GTP.cysT-tRNA + 336 EF-Tu.GTP.gln1-tRNA + 210 EF-Tu.GTP.gln2-tRNA + 651 EF-Tu.GTP.glu1-tRNA + 462 EF-Tu.GTP.gly1-tRNA + 42 EF-Tu.GTP.glyT-tRNA + 63 EF-Tu.GTP.glyU-tRNA + 273 EF-Tu.GTP.hisR-tRNA + 336 EF-Tu.GTP.ile1-tRNA + 21 EF-Tu.GTP.ile2-tRNA + 567 EF-Tu.GTP.leu1-tRNA + 84 EF-Tu.GTP.leu2-tRNA + 147 EF-Tu.GTP.leuU-tRNA + 42 EF-Tu.GTP.leuW-tRNA + 84 EF-Tu.GTP.leuZ-tRNA + 231 EF-Tu.GTP.lys1-tRNA + 168 EF-Tu.GTP.met1-tRNA + 147 EF-Tu.GTP.phe1-tRNA + 189 EF-Tu.GTP.pro1-tRNA + 21 EF-Tu.GTP.pro2-tRNA + 42 EF-Tu.GTP.proL-tRNA + 21 EF-Tu.GTP.proM-tRNA + 63 EF-Tu.GTP.ser3-tRNA + 42 EF-Tu.GTP.serT-tRNA + 126 EF-Tu.GTP.serV-tRNA + 168 EF-Tu.GTP.thr1-tRNA + 42 EF-Tu.GTP.thr2-tRNA + 105 EF-Tu.GTP.thr3-tRNA + 21 EF-Tu.GTP.thrU-tRNA + 147 EF-Tu.GTP.trpT-tRNA + 273 EF-Tu.GTP.tyr1-tRNA + 210 EF-Tu.GTP.val1-tRNA + 21 EF-Tu.GTP.val2-tRNA + 105 EF-Tu.GTP.val3-tRNA + 38115 mg2 + 1 rib_ini_b0503_21 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_elo_b0503_21_rib2	Translation elongation 2 b0503 21 ribosome(s)	7602 h2o + 1 rib_70_elo1_b0503_21_cplx --> 7602 EF-G.GDP + 7602 EF-Tu.GDP + 672 ala1_tRNA + 210 ala2_tRNA + 462 arg1_tRNA + 21 argU_tRNA + 21 argW_tRNA + 63 argX_tRNA + 210 asn1_tRNA + 336 asp1_tRNA + 147 cysT_tRNA + 21 fmet_tRNA + 336 gln1_tRNA + 210 gln2_tRNA + 651 glu1_tRNA + 462 gly1_tRNA + 42 glyT_tRNA + 63 glyU_tRNA + 15204 h + 273 hisR_tRNA + 336 ile1_tRNA + 21 ile2_tRNA + 567 leu1_tRNA + 84 leu2_tRNA + 147 leuU_tRNA + 42 leuW_tRNA + 84 leuZ_tRNA + 231 lys1_tRNA + 168 met1_tRNA + 38115 mg2 + 147 phe1_tRNA + 15204 pi + 189 pro1_tRNA + 21 pro2_tRNA + 42 proL_tRNA + 21 proM_tRNA + 1 rib_70_elo2_b0503_21_cplx + 63 ser3_tRNA + 42 serT_tRNA + 126 serV_tRNA + 168 thr1_tRNA + 42 thr2_tRNA + 105 thr3_tRNA + 21 thrU_tRNA + 147 trpT_tRNA + 273 tyr1_tRNA + 210 val1_tRNA + 21 val2_tRNA + 105 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_elo_b0526_13_rib1	Translation elongation 1 b0526 13 ribosome(s)	5980 EF-G.GTP + 533 EF-Tu.GTP.ala1-tRNA + 104 EF-Tu.GTP.ala2-tRNA + 390 EF-Tu.GTP.arg1-tRNA + 234 EF-Tu.GTP.asn1-tRNA + 494 EF-Tu.GTP.asp1-tRNA + 65 EF-Tu.GTP.cysT-tRNA + 130 EF-Tu.GTP.gln1-tRNA + 78 EF-Tu.GTP.gln2-tRNA + 442 EF-Tu.GTP.glu1-tRNA + 325 EF-Tu.GTP.gly1-tRNA + 13 EF-Tu.GTP.glyT-tRNA + 65 EF-Tu.GTP.glyU-tRNA + 208 EF-Tu.GTP.hisR-tRNA + 273 EF-Tu.GTP.ile1-tRNA + 312 EF-Tu.GTP.leu1-tRNA + 39 EF-Tu.GTP.leu2-tRNA + 91 EF-Tu.GTP.leuU-tRNA + 13 EF-Tu.GTP.leuW-tRNA + 13 EF-Tu.GTP.leuZ-tRNA + 299 EF-Tu.GTP.lys1-tRNA + 260 EF-Tu.GTP.met1-tRNA + 247 EF-Tu.GTP.phe1-tRNA + 130 EF-Tu.GTP.pro1-tRNA + 39 EF-Tu.GTP.pro2-tRNA + 26 EF-Tu.GTP.proM-tRNA + 52 EF-Tu.GTP.ser1-tRNA + 26 EF-Tu.GTP.ser2-tRNA + 78 EF-Tu.GTP.ser3-tRNA + 13 EF-Tu.GTP.serT-tRNA + 78 EF-Tu.GTP.serV-tRNA + 143 EF-Tu.GTP.thr1-tRNA + 52 EF-Tu.GTP.thr2-tRNA + 13 EF-Tu.GTP.thr3-tRNA + 26 EF-Tu.GTP.thrU-tRNA + 91 EF-Tu.GTP.trpT-tRNA + 208 EF-Tu.GTP.tyr1-tRNA + 247 EF-Tu.GTP.val1-tRNA + 39 EF-Tu.GTP.val2-tRNA + 91 EF-Tu.GTP.val3-tRNA + 29900 mg2 + 1 rib_ini_b0526_13 --> 1 rib_70_elo1_b0526_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_elo_b0526_13_rib2	Translation elongation 2 b0526 13 ribosome(s)	5967 h2o + 1 rib_70_elo1_b0526_13_cplx --> 5967 EF-G.GDP + 5967 EF-Tu.GDP + 533 ala1_tRNA + 104 ala2_tRNA + 390 arg1_tRNA + 234 asn1_tRNA + 494 asp1_tRNA + 65 cysT_tRNA + 13 fmet_tRNA + 130 gln1_tRNA + 78 gln2_tRNA + 442 glu1_tRNA + 325 gly1_tRNA + 13 glyT_tRNA + 65 glyU_tRNA + 11934 h + 208 hisR_tRNA + 273 ile1_tRNA + 312 leu1_tRNA + 39 leu2_tRNA + 91 leuU_tRNA + 13 leuW_tRNA + 13 leuZ_tRNA + 286 lys1_tRNA + 260 met1_tRNA + 29900 mg2 + 247 phe1_tRNA + 11934 pi + 130 pro1_tRNA + 39 pro2_tRNA + 26 proM_tRNA + 1 rib_70_elo2_b0526_13_cplx + 52 ser1_tRNA + 26 ser2_tRNA + 78 ser3_tRNA + 13 serT_tRNA + 78 serV_tRNA + 143 thr1_tRNA + 52 thr2_tRNA + 13 thr3_tRNA + 26 thrU_tRNA + 91 trpT_tRNA + 208 tyr1_tRNA + 247 val1_tRNA + 39 val2_tRNA + 91 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_elo_b0526_1_rib1	Translation elongation 1 b0526 1 ribosome(s)	460 EF-G.GTP + 41 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 30 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 38 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 34 EF-Tu.GTP.glu1-tRNA + 25 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 24 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 23 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 19 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 16 EF-Tu.GTP.tyr1-tRNA + 19 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 2300 mg2 + 1 rib_ini_b0526_1 --> 1 rib_70_elo1_b0526_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_elo_b0526_1_rib2	Translation elongation 2 b0526 1 ribosome(s)	459 h2o + 1 rib_70_elo1_b0526_1_cplx --> 459 EF-G.GDP + 459 EF-Tu.GDP + 41 ala1_tRNA + 8 ala2_tRNA + 30 arg1_tRNA + 18 asn1_tRNA + 38 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 10 gln1_tRNA + 6 gln2_tRNA + 34 glu1_tRNA + 25 gly1_tRNA + 1 glyT_tRNA + 5 glyU_tRNA + 918 h + 16 hisR_tRNA + 21 ile1_tRNA + 24 leu1_tRNA + 3 leu2_tRNA + 7 leuU_tRNA + 1 leuW_tRNA + 1 leuZ_tRNA + 22 lys1_tRNA + 20 met1_tRNA + 2300 mg2 + 19 phe1_tRNA + 918 pi + 10 pro1_tRNA + 3 pro2_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b0526_1_cplx + 4 ser1_tRNA + 2 ser2_tRNA + 6 ser3_tRNA + 1 serT_tRNA + 6 serV_tRNA + 11 thr1_tRNA + 4 thr2_tRNA + 1 thr3_tRNA + 2 thrU_tRNA + 7 trpT_tRNA + 16 tyr1_tRNA + 19 val1_tRNA + 3 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516

tl_elo_b0526_27_rib1	Translation elongation 1 b0526 27 ribosome(s)	12420 EF-G.GTP + 1107 EF-Tu.GTP.ala1-tRNA + 216 EF-Tu.GTP.ala2-tRNA + 810 EF-Tu.GTP.arg1-tRNA + 486 EF-Tu.GTP.asn1-tRNA + 1026 EF-Tu.GTP.asp1-tRNA + 135 EF-Tu.GTP.cysT-tRNA + 270 EF-Tu.GTP.gln1-tRNA + 162 EF-Tu.GTP.gln2-tRNA + 918 EF-Tu.GTP.glu1-tRNA + 675 EF-Tu.GTP.gly1-tRNA + 27 EF-Tu.GTP.glyT-tRNA + 135 EF-Tu.GTP.glyU-tRNA + 432 EF-Tu.GTP.hisR-tRNA + 567 EF-Tu.GTP.ile1-tRNA + 648 EF-Tu.GTP.leu1-tRNA + 81 EF-Tu.GTP.leu2-tRNA + 189 EF-Tu.GTP.leuU-tRNA + 27 EF-Tu.GTP.leuW-tRNA + 27 EF-Tu.GTP.leuZ-tRNA + 621 EF-Tu.GTP.lys1-tRNA + 540 EF-Tu.GTP.met1-tRNA + 513 EF-Tu.GTP.phe1-tRNA + 270 EF-Tu.GTP.pro1-tRNA + 81 EF-Tu.GTP.pro2-tRNA + 54 EF-Tu.GTP.proM-tRNA + 108 EF-Tu.GTP.ser1-tRNA + 54 EF-Tu.GTP.ser2-tRNA + 162 EF-Tu.GTP.ser3-tRNA + 27 EF-Tu.GTP.serT-tRNA + 162 EF-Tu.GTP.serV-tRNA + 297 EF-Tu.GTP.thr1-tRNA + 108 EF-Tu.GTP.thr2-tRNA + 27 EF-Tu.GTP.thr3-tRNA + 54 EF-Tu.GTP.thrU-tRNA + 189 EF-Tu.GTP.trpT-tRNA + 432 EF-Tu.GTP.tyr1-tRNA + 513 EF-Tu.GTP.val1-tRNA + 81 EF-Tu.GTP.val2-tRNA + 189 EF-Tu.GTP.val3-tRNA + 62100 mg2 + 1 rib_ini_b0526_27 --> 1 rib_70_elo1_b0526_27_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_elo_b0526_27_rib2	Translation elongation 2 b0526 27 ribosome(s)	12393 h2o + 1 rib_70_elo1_b0526_27_cplx --> 12393 EF-G.GDP + 12393 EF-Tu.GDP + 1107 ala1_tRNA + 216 ala2_tRNA + 810 arg1_tRNA + 486 asn1_tRNA + 1026 asp1_tRNA + 135 cysT_tRNA + 27 fmet_tRNA + 270 gln1_tRNA + 162 gln2_tRNA + 918 glu1_tRNA + 675 gly1_tRNA + 27 glyT_tRNA + 135 glyU_tRNA + 24786 h + 432 hisR_tRNA + 567 ile1_tRNA + 648 leu1_tRNA + 81 leu2_tRNA + 189 leuU_tRNA + 27 leuW_tRNA + 27 leuZ_tRNA + 594 lys1_tRNA + 540 met1_tRNA + 62100 mg2 + 513 phe1_tRNA + 24786 pi + 270 pro1_tRNA + 81 pro2_tRNA + 54 proM_tRNA + 1 rib_70_elo2_b0526_27_cplx + 108 ser1_tRNA + 54 ser2_tRNA + 162 ser3_tRNA + 27 serT_tRNA + 162 serV_tRNA + 297 thr1_tRNA + 108 thr2_tRNA + 27 thr3_tRNA + 54 thrU_tRNA + 189 trpT_tRNA + 432 tyr1_tRNA + 513 val1_tRNA + 81 val2_tRNA + 189 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_elo_b0638_11_rib1	Translation elongation 1 b0638 11 ribosome(s)	2222 EF-G.GTP + 143 EF-Tu.GTP.ala1-tRNA + 55 EF-Tu.GTP.ala2-tRNA + 143 EF-Tu.GTP.arg1-tRNA + 11 EF-Tu.GTP.argW-tRNA + 11 EF-Tu.GTP.argX-tRNA + 110 EF-Tu.GTP.asn1-tRNA + 99 EF-Tu.GTP.asp1-tRNA + 33 EF-Tu.GTP.cysT-tRNA + 88 EF-Tu.GTP.gln1-tRNA + 77 EF-Tu.GTP.gln2-tRNA + 154 EF-Tu.GTP.glu1-tRNA + 99 EF-Tu.GTP.gly1-tRNA + 11 EF-Tu.GTP.glyT-tRNA + 22 EF-Tu.GTP.glyU-tRNA + 121 EF-Tu.GTP.hisR-tRNA + 132 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.ile2-tRNA + 99 EF-Tu.GTP.leu1-tRNA + 77 EF-Tu.GTP.leuU-tRNA + 22 EF-Tu.GTP.leuW-tRNA + 55 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 55 EF-Tu.GTP.met1-tRNA + 99 EF-Tu.GTP.phe1-tRNA + 22 EF-Tu.GTP.pro2-tRNA + 44 EF-Tu.GTP.proL-tRNA + 11 EF-Tu.GTP.ser1-tRNA + 11 EF-Tu.GTP.ser3-tRNA + 99 EF-Tu.GTP.serV-tRNA + 33 EF-Tu.GTP.thr1-tRNA + 44 EF-Tu.GTP.thr3-tRNA + 66 EF-Tu.GTP.trpT-tRNA + 33 EF-Tu.GTP.tyr1-tRNA + 33 EF-Tu.GTP.val1-tRNA + 44 EF-Tu.GTP.val2-tRNA + 44 EF-Tu.GTP.val3-tRNA + 11110 mg2 + 1 rib_ini_b0638_11 --> 1 rib_70_elo1_b0638_11_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656
tl_elo_b0638_11_rib2	Translation elongation 2 b0638 11 ribosome(s)	2211 h2o + 1 rib_70_elo1_b0638_11_cplx --> 2211 EF-G.GDP + 2211 EF-Tu.GDP + 132 ala1_tRNA + 55 ala2_tRNA + 143 arg1_tRNA + 11 argW_tRNA + 11 argX_tRNA + 110 asn1_tRNA + 99 asp1_tRNA + 33 cysT_tRNA + 11 fmet_tRNA + 88 gln1_tRNA + 77 gln2_tRNA + 154 glu1_tRNA + 99 gly1_tRNA + 11 glyT_tRNA + 22 glyU_tRNA + 4422 h + 121 hisR_tRNA + 132 ile1_tRNA + 11 ile2_tRNA + 99 leu1_tRNA + 77 leuU_tRNA + 22 leuW_tRNA + 55 leuZ_tRNA + 11 lys1_tRNA + 55 met1_tRNA + 11110 mg2 + 99 phe1_tRNA + 4422 pi + 22 pro2_tRNA + 44 proL_tRNA + 1 rib_70_elo2_b0638_11_cplx + 11 ser1_tRNA + 11 ser3_tRNA + 99 serV_tRNA + 33 thr1_tRNA + 44 thr3_tRNA + 66 trpT_tRNA + 33 tyr1_tRNA + 33 val1_tRNA + 44 val2_tRNA + 44 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656
tl_elo_b0638_1_rib1	Translation elongation 1 b0638 1 ribosome(s)	202 EF-G.GTP + 13 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.argX-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 1 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1010 mg2 + 1 rib_ini_b0638_1 --> 1 rib_70_elo1_b0638_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656
tl_elo_b0638_1_rib2	Translation elongation 2 b0638 1 ribosome(s)	201 h2o + 1 rib_70_elo1_b0638_1_cplx --> 201 EF-G.GDP + 201 EF-Tu.GDP + 12 ala1_tRNA + 5 ala2_tRNA + 13 arg1_tRNA + 1 argW_tRNA + 1 argX_tRNA + 10 asn1_tRNA + 9 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 7 gln2_tRNA + 14 glu1_tRNA + 9 gly1_tRNA + 1 glyT_tRNA + 2 glyU_tRNA + 402 h + 11 hisR_tRNA + 12 ile1_tRNA + 1 ile2_tRNA + 9 leu1_tRNA + 7 leuU_tRNA + 2 leuW_tRNA + 5 leuZ_tRNA + 1 lys1_tRNA + 5 met1_tRNA + 1010 mg2 + 9 phe1_tRNA + 402 pi + 2 pro2_tRNA + 4 proL_tRNA + 1 rib_70_elo2_b0638_1_cplx + 1 ser1_tRNA + 1 ser3_tRNA + 9 serV_tRNA + 3 thr1_tRNA + 4 thr3_tRNA + 6 trpT_tRNA + 3 tyr1_tRNA + 3 val1_tRNA + 4 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656

tl_elo_b0638_5_rib1	Translation elongation 1 b0638 5 ribosome(s)	1010 EF-G.GTP + 65 EF-Tu.GTP.ala1-tRNA + 25 EF-Tu.GTP.ala2-tRNA + 65 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argW-tRNA + 5 EF-Tu.GTP.argX-tRNA + 50 EF-Tu.GTP.asn1-tRNA + 45 EF-Tu.GTP.asp1-tRNA + 15 EF-Tu.GTP.cysT-tRNA + 40 EF-Tu.GTP.gln1-tRNA + 35 EF-Tu.GTP.gln2-tRNA + 70 EF-Tu.GTP.glu1-tRNA + 45 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 10 EF-Tu.GTP.glyU-tRNA + 55 EF-Tu.GTP.hisR-tRNA + 60 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.ile2-tRNA + 45 EF-Tu.GTP.leu1-tRNA + 35 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuW-tRNA + 25 EF-Tu.GTP.leuZ-tRNA + 5 EF-Tu.GTP.lys1-tRNA + 25 EF-Tu.GTP.met1-tRNA + 45 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 20 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 45 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 30 EF-Tu.GTP.trpT-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 20 EF-Tu.GTP.val3-tRNA + 5050 mg2 + 1 rib_ini_b0638_5 --> 1 rib_70_elo1_b0638_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656
tl_elo_b0638_5_rib2	Translation elongation 2 b0638 5 ribosome(s)	1005 h2o + 1 rib_70_elo1_b0638_5_cplx --> 1005 EF-G.GDP + 1005 EF-Tu.GDP + 60 ala1_tRNA + 25 ala2_tRNA + 65 arg1_tRNA + 5 argW_tRNA + 5 argX_tRNA + 50 asn1_tRNA + 45 asp1_tRNA + 15 cysT_tRNA + 5 fmet_tRNA + 40 gln1_tRNA + 35 gln2_tRNA + 70 glu1_tRNA + 45 gly1_tRNA + 5 glyT_tRNA + 10 glyU_tRNA + 2010 h + 55 hisR_tRNA + 60 ile1_tRNA + 5 ile2_tRNA + 45 leu1_tRNA + 35 leuU_tRNA + 10 leuW_tRNA + 25 leuZ_tRNA + 5 lys1_tRNA + 25 met1_tRNA + 5050 mg2 + 45 phe1_tRNA + 2010 pi + 10 pro2_tRNA + 20 proL_tRNA + 1 rib_70_elo2_b0638_5_cplx + 5 ser1_tRNA + 5 ser3_tRNA + 45 serV_tRNA + 15 thr1_tRNA + 20 thr3_tRNA + 30 trpT_tRNA + 15 tyr1_tRNA + 15 val1_tRNA + 20 val2_tRNA + 20 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656
tl_elo_b0639_12_rib1	Translation elongation 1 b0639 12 ribosome(s)	2544 EF-G.GTP + 120 EF-Tu.GTP.ala1-tRNA + 36 EF-Tu.GTP.ala2-tRNA + 96 EF-Tu.GTP.arg1-tRNA + 36 EF-Tu.GTP.argX-tRNA + 120 EF-Tu.GTP.asn1-tRNA + 108 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.cysT-tRNA + 84 EF-Tu.GTP.gln1-tRNA + 96 EF-Tu.GTP.gln2-tRNA + 204 EF-Tu.GTP.glu1-tRNA + 108 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyT-tRNA + 96 EF-Tu.GTP.hisR-tRNA + 144 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.ile2-tRNA + 132 EF-Tu.GTP.leu1-tRNA + 72 EF-Tu.GTP.leu2-tRNA + 72 EF-Tu.GTP.leuU-tRNA + 24 EF-Tu.GTP.leuW-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 84 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 72 EF-Tu.GTP.phe1-tRNA + 132 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 36 EF-Tu.GTP.proL-tRNA + 36 EF-Tu.GTP.proM-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serT-tRNA + 12 EF-Tu.GTP.serV-tRNA + 48 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 48 EF-Tu.GTP.thr3-tRNA + 36 EF-Tu.GTP.thrU-tRNA + 48 EF-Tu.GTP.trpT-tRNA + 108 EF-Tu.GTP.tyr1-tRNA + 60 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 12720 mg2 + 1 rib_ini_b0639_12 --> 1 rib_70_elo1_b0639_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276
tl_elo_b0639_12_rib2	Translation elongation 2 b0639 12 ribosome(s)	2532 h2o + 1 rib_70_elo1_b0639_12_cplx --> 2532 EF-G.GDP + 2532 EF-Tu.GDP + 120 ala1_tRNA + 36 ala2_tRNA + 84 arg1_tRNA + 36 argX_tRNA + 120 asn1_tRNA + 108 asp1_tRNA + 24 cysT_tRNA + 12 fmet_tRNA + 84 gln1_tRNA + 96 gln2_tRNA + 204 glu1_tRNA + 108 gly1_tRNA + 12 glyT_tRNA + 5064 h + 96 hisR_tRNA + 144 ile1_tRNA + 12 ile2_tRNA + 132 leu1_tRNA + 72 leu2_tRNA + 72 leuU_tRNA + 24 leuW_tRNA + 36 leuZ_tRNA + 84 lys1_tRNA + 24 met1_tRNA + 12720 mg2 + 72 phe1_tRNA + 5064 pi + 132 pro1_tRNA + 36 pro2_tRNA + 36 proL_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b0639_12_cplx + 24 ser2_tRNA + 12 ser3_tRNA + 24 serT_tRNA + 12 serV_tRNA + 48 thr1_tRNA + 36 thr2_tRNA + 48 thr3_tRNA + 36 thrU_tRNA + 48 trpT_tRNA + 108 tyr1_tRNA + 60 val1_tRNA + 24 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276
tl_elo_b0639_1_rib1	Translation elongation 1 b0639 1 ribosome(s)	212 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argX-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 17 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 11 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 1 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 1 EF-Tu.GTP.val3-tRNA + 1060 mg2 + 1 rib_ini_b0639_1 --> 1 rib_70_elo1_b0639_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276
tl_elo_b0639_1_rib2	Translation elongation 2 b0639 1 ribosome(s)	211 h2o + 1 rib_70_elo1_b0639_1_cplx --> 211 EF-G.GDP + 211 EF-Tu.GDP + 10 ala1_tRNA + 3 ala2_tRNA + 7 arg1_tRNA + 3 argX_tRNA + 10 asn1_tRNA + 9 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 8 gln2_tRNA + 17 glu1_tRNA + 9 gly1_tRNA + 1 glyT_tRNA + 422 h + 8 hisR_tRNA + 12 ile1_tRNA + 1 ile2_tRNA + 11 leu1_tRNA + 6 leu2_tRNA + 6 leuU_tRNA + 2 leuW_tRNA + 3 leuZ_tRNA + 7 lys1_tRNA + 2 met1_tRNA + 1060 mg2 + 6 phe1_tRNA + 422 pi + 11 pro1_tRNA + 3 pro2_tRNA + 3 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b0639_1_cplx + 2 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 1 serV_tRNA + 4 thr1_tRNA + 3 thr2_tRNA + 4 thr3_tRNA + 3 thrU_tRNA + 4 trpT_tRNA + 9 tyr1_tRNA + 5 val1_tRNA + 2 val2_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276

tl_elo_b0639_6_rib1	Translation elongation 1 b0639 6 ribosome(s)	1272 EF-G.GTP + 60 EF-Tu.GTP.ala1-tRNA + 18 EF-Tu.GTP.ala2-tRNA + 48 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argX-tRNA + 60 EF-Tu.GTP.asn1-tRNA + 54 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 42 EF-Tu.GTP.gln1-tRNA + 48 EF-Tu.GTP.gln2-tRNA + 102 EF-Tu.GTP.glu1-tRNA + 54 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyT-tRNA + 48 EF-Tu.GTP.hisR-tRNA + 72 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.ile2-tRNA + 66 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 36 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuW-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 42 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 36 EF-Tu.GTP.phe1-tRNA + 66 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proL-tRNA + 18 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 12 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 24 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 54 EF-Tu.GTP.tyr1-tRNA + 30 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 6360 mg2 + 1 rib_ini_b0639_6 --> 1 rib_70_elo1_b0639_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276
tl_elo_b0639_6_rib2	Translation elongation 2 b0639 6 ribosome(s)	1266 h2o + 1 rib_70_elo1_b0639_6_cplx --> 1266 EF-G.GDP + 1266 EF-Tu.GDP + 60 ala1_tRNA + 18 ala2_tRNA + 42 arg1_tRNA + 18 argX_tRNA + 60 asn1_tRNA + 54 asp1_tRNA + 12 cysT_tRNA + 6 fmet_tRNA + 42 gln1_tRNA + 48 gln2_tRNA + 102 glu1_tRNA + 54 gly1_tRNA + 6 glyT_tRNA + 2532 h + 48 hisR_tRNA + 72 ile1_tRNA + 6 ile2_tRNA + 66 leu1_tRNA + 36 leu2_tRNA + 36 leuU_tRNA + 12 leuW_tRNA + 18 leuZ_tRNA + 42 lys1_tRNA + 12 met1_tRNA + 6360 mg2 + 36 phe1_tRNA + 2532 pi + 66 pro1_tRNA + 18 pro2_tRNA + 18 proL_tRNA + 18 proM_tRNA + 1 rib_70_elo2_b0639_6_cplx + 12 ser2_tRNA + 6 ser3_tRNA + 12 serT_tRNA + 6 serV_tRNA + 24 thr1_tRNA + 18 thr2_tRNA + 24 thr3_tRNA + 18 thrU_tRNA + 24 trpT_tRNA + 54 tyr1_tRNA + 30 val1_tRNA + 12 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276
tl_elo_b0640_10_rib1	Translation elongation 1 b0640 10 ribosome(s)	3420 EF-G.GTP + 310 EF-Tu.GTP.ala1-tRNA + 60 EF-Tu.GTP.ala2-tRNA + 200 EF-Tu.GTP.arg1-tRNA + 30 EF-Tu.GTP.argX-tRNA + 170 EF-Tu.GTP.asn1-tRNA + 150 EF-Tu.GTP.asp1-tRNA + 50 EF-Tu.GTP.cysT-tRNA + 200 EF-Tu.GTP.gln1-tRNA + 90 EF-Tu.GTP.gln2-tRNA + 200 EF-Tu.GTP.glu1-tRNA + 90 EF-Tu.GTP.gly1-tRNA + 40 EF-Tu.GTP.glyT-tRNA + 20 EF-Tu.GTP.glyU-tRNA + 90 EF-Tu.GTP.hisR-tRNA + 80 EF-Tu.GTP.ile1-tRNA + 230 EF-Tu.GTP.leu1-tRNA + 140 EF-Tu.GTP.leu2-tRNA + 180 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuW-tRNA + 140 EF-Tu.GTP.leuZ-tRNA + 100 EF-Tu.GTP.lys1-tRNA + 40 EF-Tu.GTP.met1-tRNA + 90 EF-Tu.GTP.phe1-tRNA + 50 EF-Tu.GTP.pro1-tRNA + 20 EF-Tu.GTP.pro2-tRNA + 30 EF-Tu.GTP.proL-tRNA + 30 EF-Tu.GTP.proM-tRNA + 10 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 20 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serT-tRNA + 80 EF-Tu.GTP.serV-tRNA + 40 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 40 EF-Tu.GTP.thr3-tRNA + 50 EF-Tu.GTP.thrU-tRNA + 70 EF-Tu.GTP.trpT-tRNA + 50 EF-Tu.GTP.tyr1-tRNA + 90 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 60 EF-Tu.GTP.val3-tRNA + 17100 mg2 + 1 rib_ini_b0640_10 --> 1 rib_70_elo1_b0640_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226
tl_elo_b0640_10_rib2	Translation elongation 2 b0640 10 ribosome(s)	3410 h2o + 1 rib_70_elo1_b0640_10_cplx --> 3410 EF-G.GDP + 3410 EF-Tu.GDP + 310 ala1_tRNA + 60 ala2_tRNA + 200 arg1_tRNA + 30 argX_tRNA + 170 asn1_tRNA + 150 asp1_tRNA + 50 cysT_tRNA + 10 fmet_tRNA + 200 gln1_tRNA + 90 gln2_tRNA + 200 glu1_tRNA + 80 gly1_tRNA + 40 glyT_tRNA + 20 glyU_tRNA + 6820 h + 90 hisR_tRNA + 80 ile1_tRNA + 230 leu1_tRNA + 140 leu2_tRNA + 180 leuU_tRNA + 10 leuW_tRNA + 140 leuZ_tRNA + 100 lys1_tRNA + 40 met1_tRNA + 17100 mg2 + 90 phe1_tRNA + 6820 pi + 50 pro1_tRNA + 20 pro2_tRNA + 30 proL_tRNA + 30 proM_tRNA + 1 rib_70_elo2_b0640_10_cplx + 10 ser1_tRNA + 20 ser2_tRNA + 20 ser3_tRNA + 10 serT_tRNA + 80 serV_tRNA + 40 thr1_tRNA + 30 thr2_tRNA + 40 thr3_tRNA + 50 thrU_tRNA + 70 trpT_tRNA + 50 tyr1_tRNA + 90 val1_tRNA + 10 val2_tRNA + 60 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226
tl_elo_b0640_1_rib1	Translation elongation 1 b0640 1 ribosome(s)	342 EF-G.GTP + 31 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argX-tRNA + 17 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 20 EF-Tu.GTP.gln1-tRNA + 9 EF-Tu.GTP.gln2-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 23 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leu2-tRNA + 18 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 14 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 8 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1710 mg2 + 1 rib_ini_b0640_1 --> 1 rib_70_elo1_b0640_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226
tl_elo_b0640_1_rib2	Translation elongation 2 b0640 1 ribosome(s)	341 h2o + 1 rib_70_elo1_b0640_1_cplx --> 341 EF-G.GDP + 341 EF-Tu.GDP + 31 ala1_tRNA + 6 ala2_tRNA + 20 arg1_tRNA + 3 argX_tRNA + 17 asn1_tRNA + 15 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 20 gln1_tRNA + 9 gln2_tRNA + 20 glu1_tRNA + 8 gly1_tRNA + 4 glyT_tRNA + 2 glyU_tRNA + 682 h + 9 hisR_tRNA + 8 ile1_tRNA + 23 leu1_tRNA + 14 leu2_tRNA + 18 leuU_tRNA + 1 leuW_tRNA + 14 leuZ_tRNA + 10 lys1_tRNA + 4 met1_tRNA + 1710 mg2 + 9 phe1_tRNA + 682 pi + 5 pro1_tRNA + 2 pro2_tRNA + 3 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b0640_1_cplx + 1 ser1_tRNA + 2 ser2_tRNA + 2 ser3_tRNA + 1 serT_tRNA + 8 serV_tRNA + 4 thr1_tRNA + 3 thr2_tRNA + 4 thr3_tRNA + 5 thrU_tRNA + 7 trpT_tRNA + 5 tyr1_tRNA + 9 val1_tRNA + 1 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226

tl_elo_b0640_20_rib1	Translation elongation 1 b0640 20 ribosome(s)	6840 EF-G.GTP + 620 EF-Tu.GTP.ala1-tRNA + 120 EF-Tu.GTP.ala2-tRNA + 400 EF-Tu.GTP.arg1-tRNA + 60 EF-Tu.GTP.argX-tRNA + 340 EF-Tu.GTP.asn1-tRNA + 300 EF-Tu.GTP.asp1-tRNA + 100 EF-Tu.GTP.cysT-tRNA + 400 EF-Tu.GTP.gln1-tRNA + 180 EF-Tu.GTP.gln2-tRNA + 400 EF-Tu.GTP.glu1-tRNA + 180 EF-Tu.GTP.gly1-tRNA + 80 EF-Tu.GTP.glyT-tRNA + 40 EF-Tu.GTP.glyU-tRNA + 180 EF-Tu.GTP.hisR-tRNA + 160 EF-Tu.GTP.ile1-tRNA + 460 EF-Tu.GTP.leu1-tRNA + 280 EF-Tu.GTP.leu2-tRNA + 360 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuW-tRNA + 280 EF-Tu.GTP.leuZ-tRNA + 200 EF-Tu.GTP.lys1-tRNA + 80 EF-Tu.GTP.met1-tRNA + 180 EF-Tu.GTP.phe1-tRNA + 100 EF-Tu.GTP.pro1-tRNA + 40 EF-Tu.GTP.pro2-tRNA + 60 EF-Tu.GTP.proL-tRNA + 60 EF-Tu.GTP.proM-tRNA + 20 EF-Tu.GTP.ser1-tRNA + 40 EF-Tu.GTP.ser2-tRNA + 40 EF-Tu.GTP.ser3-tRNA + 20 EF-Tu.GTP.serT-tRNA + 160 EF-Tu.GTP.serV-tRNA + 80 EF-Tu.GTP.thr1-tRNA + 60 EF-Tu.GTP.thr2-tRNA + 80 EF-Tu.GTP.thr3-tRNA + 100 EF-Tu.GTP.thrU-tRNA + 140 EF-Tu.GTP.trpT-tRNA + 100 EF-Tu.GTP.tyr1-tRNA + 180 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 120 EF-Tu.GTP.val3-tRNA + 34200 mg2 + 1 rib_ini_b0640_20 --> 1 rib_70_elo1_b0640_20_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226
tl_elo_b0640_20_rib2	Translation elongation 2 b0640 20 ribosome(s)	6820 h2o + 1 rib_70_elo1_b0640_20_cplx --> 6820 EF-G.GDP + 6820 EF-Tu.GDP + 620 ala1_tRNA + 120 ala2_tRNA + 400 arg1_tRNA + 60 argX_tRNA + 340 asn1_tRNA + 300 asp1_tRNA + 100 cysT_tRNA + 20 fmet_tRNA + 400 gln1_tRNA + 180 gln2_tRNA + 400 glu1_tRNA + 160 gly1_tRNA + 80 glyT_tRNA + 40 glyU_tRNA + 13640 h + 180 hisR_tRNA + 160 ile1_tRNA + 460 leu1_tRNA + 280 leu2_tRNA + 360 leuU_tRNA + 20 leuW_tRNA + 280 leuZ_tRNA + 200 lys1_tRNA + 80 met1_tRNA + 34200 mg2 + 180 phe1_tRNA + 13640 pi + 100 pro1_tRNA + 40 pro2_tRNA + 60 proL_tRNA + 60 proM_tRNA + 1 rib_70_elo2_b0640_20_cplx + 20 ser1_tRNA + 40 ser2_tRNA + 40 ser3_tRNA + 20 serT_tRNA + 160 serV_tRNA + 80 thr1_tRNA + 60 thr2_tRNA + 80 thr3_tRNA + 100 thrU_tRNA + 140 trpT_tRNA + 100 tyr1_tRNA + 180 val1_tRNA + 20 val2_tRNA + 120 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226
tl_elo_b0641_11_rib1	Translation elongation 1 b0641 11 ribosome(s)	2112 EF-G.GTP + 154 EF-Tu.GTP.ala1-tRNA + 33 EF-Tu.GTP.ala2-tRNA + 165 EF-Tu.GTP.arg1-tRNA + 88 EF-Tu.GTP.asn1-tRNA + 154 EF-Tu.GTP.asp1-tRNA + 11 EF-Tu.GTP.cysT-tRNA + 55 EF-Tu.GTP.gln1-tRNA + 33 EF-Tu.GTP.gln2-tRNA + 88 EF-Tu.GTP.glu1-tRNA + 77 EF-Tu.GTP.gly1-tRNA + 22 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 121 EF-Tu.GTP.ile1-tRNA + 88 EF-Tu.GTP.leu1-tRNA + 66 EF-Tu.GTP.leu2-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 55 EF-Tu.GTP.leuZ-tRNA + 99 EF-Tu.GTP.lys1-tRNA + 77 EF-Tu.GTP.met1-tRNA + 44 EF-Tu.GTP.phe1-tRNA + 44 EF-Tu.GTP.pro1-tRNA + 22 EF-Tu.GTP.pro2-tRNA + 11 EF-Tu.GTP.proL-tRNA + 33 EF-Tu.GTP.proM-tRNA + 44 EF-Tu.GTP.ser1-tRNA + 11 EF-Tu.GTP.ser2-tRNA + 33 EF-Tu.GTP.ser3-tRNA + 11 EF-Tu.GTP.serT-tRNA + 44 EF-Tu.GTP.serV-tRNA + 77 EF-Tu.GTP.thr1-tRNA + 22 EF-Tu.GTP.thr2-tRNA + 77 EF-Tu.GTP.thr3-tRNA + 33 EF-Tu.GTP.thrU-tRNA + 11 EF-Tu.GTP.trpT-tRNA + 44 EF-Tu.GTP.tyr1-tRNA + 66 EF-Tu.GTP.val1-tRNA + 44 EF-Tu.GTP.val2-tRNA + 33 EF-Tu.GTP.val3-tRNA + 10560 mg2 + 1 rib_ini_b0641_11 --> 1 rib_70_elo1_b0641_11_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356
tl_elo_b0641_11_rib2	Translation elongation 2 b0641 11 ribosome(s)	2101 h2o + 1 rib_70_elo1_b0641_11_cplx --> 2101 EF-G.GDP + 2101 EF-Tu.GDP + 154 ala1_tRNA + 33 ala2_tRNA + 165 arg1_tRNA + 77 asn1_tRNA + 154 asp1_tRNA + 11 cysT_tRNA + 11 fmet_tRNA + 55 gln1_tRNA + 33 gln2_tRNA + 88 glu1_tRNA + 77 gly1_tRNA + 22 glyU_tRNA + 4202 h + 11 hisR_tRNA + 121 ile1_tRNA + 88 leu1_tRNA + 66 leu2_tRNA + 11 leuU_tRNA + 55 leuZ_tRNA + 99 lys1_tRNA + 77 met1_tRNA + 10560 mg2 + 44 phe1_tRNA + 4202 pi + 44 pro1_tRNA + 22 pro2_tRNA + 11 proL_tRNA + 33 proM_tRNA + 1 rib_70_elo2_b0641_11_cplx + 44 ser1_tRNA + 11 ser2_tRNA + 33 ser3_tRNA + 11 serT_tRNA + 44 serV_tRNA + 77 thr1_tRNA + 22 thr2_tRNA + 77 thr3_tRNA + 33 thrU_tRNA + 11 trpT_tRNA + 44 tyr1_tRNA + 66 val1_tRNA + 44 val2_tRNA + 33 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356
tl_elo_b0641_1_rib1	Translation elongation 1 b0641 1 ribosome(s)	192 EF-G.GTP + 14 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 7 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 960 mg2 + 1 rib_ini_b0641_1 --> 1 rib_70_elo1_b0641_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356
tl_elo_b0641_1_rib2	Translation elongation 2 b0641 1 ribosome(s)	191 h2o + 1 rib_70_elo1_b0641_1_cplx --> 191 EF-G.GDP + 191 EF-Tu.GDP + 14 ala1_tRNA + 3 ala2_tRNA + 15 arg1_tRNA + 7 asn1_tRNA + 14 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 3 gln2_tRNA + 8 glu1_tRNA + 7 gly1_tRNA + 2 glyU_tRNA + 382 h + 1 hisR_tRNA + 11 ile1_tRNA + 8 leu1_tRNA + 6 leu2_tRNA + 1 leuU_tRNA + 5 leuZ_tRNA + 9 lys1_tRNA + 7 met1_tRNA + 960 mg2 + 4 phe1_tRNA + 382 pi + 4 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b0641_1_cplx + 4 ser1_tRNA + 1 ser2_tRNA + 3 ser3_tRNA + 1 serT_tRNA + 4 serV_tRNA + 7 thr1_tRNA + 2 thr2_tRNA + 7 thr3_tRNA + 3 thrU_tRNA + 1 trpT_tRNA + 4 tyr1_tRNA + 6 val1_tRNA + 4 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356

tl_elo_b0641_5_rib1	Translation elongation 1 b0641 5 ribosome(s)	960 EF-G.GTP + 70 EF-Tu.GTP.ala1-tRNA + 15 EF-Tu.GTP.ala2-tRNA + 75 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 70 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 25 EF-Tu.GTP.gln1-tRNA + 15 EF-Tu.GTP.gln2-tRNA + 40 EF-Tu.GTP.glu1-tRNA + 35 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 55 EF-Tu.GTP.ile1-tRNA + 40 EF-Tu.GTP.leu1-tRNA + 30 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 25 EF-Tu.GTP.leuZ-tRNA + 45 EF-Tu.GTP.lys1-tRNA + 35 EF-Tu.GTP.met1-tRNA + 20 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proL-tRNA + 15 EF-Tu.GTP.proM-tRNA + 20 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 15 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serT-tRNA + 20 EF-Tu.GTP.serV-tRNA + 35 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 35 EF-Tu.GTP.thr3-tRNA + 15 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 20 EF-Tu.GTP.tyr1-tRNA + 30 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 15 EF-Tu.GTP.val3-tRNA + 4800 mg2 + 1 rib_ini_b0641_5 --> 1 rib_70_elo1_b0641_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356
tl_elo_b0641_5_rib2	Translation elongation 2 b0641 5 ribosome(s)	955 h2o + 1 rib_70_elo1_b0641_5_cplx --> 955 EF-G.GDP + 955 EF-Tu.GDP + 70 ala1_tRNA + 15 ala2_tRNA + 75 arg1_tRNA + 35 asn1_tRNA + 70 asp1_tRNA + 5 cysT_tRNA + 5 fmet_tRNA + 25 gln1_tRNA + 15 gln2_tRNA + 40 glu1_tRNA + 35 gly1_tRNA + 10 glyU_tRNA + 1910 h + 5 hisR_tRNA + 55 ile1_tRNA + 40 leu1_tRNA + 30 leu2_tRNA + 5 leuU_tRNA + 25 leuZ_tRNA + 45 lys1_tRNA + 35 met1_tRNA + 4800 mg2 + 20 phe1_tRNA + 1910 pi + 20 pro1_tRNA + 10 pro2_tRNA + 5 proL_tRNA + 15 proM_tRNA + 1 rib_70_elo2_b0641_5_cplx + 20 ser1_tRNA + 5 ser2_tRNA + 15 ser3_tRNA + 5 serT_tRNA + 20 serV_tRNA + 35 thr1_tRNA + 10 thr2_tRNA + 35 thr3_tRNA + 15 thrU_tRNA + 5 trpT_tRNA + 20 tyr1_tRNA + 30 val1_tRNA + 20 val2_tRNA + 15 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356
tl_elo_b0642_1_rib1	Translation elongation 1 b0642 1 ribosome(s)	859 EF-G.GTP + 67 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 41 EF-Tu.GTP.arg1-tRNA + 39 EF-Tu.GTP.asn1-tRNA + 58 EF-Tu.GTP.asp1-tRNA + 11 EF-Tu.GTP.cysT-tRNA + 26 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 66 EF-Tu.GTP.glu1-tRNA + 55 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 34 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 49 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 54 EF-Tu.GTP.lys1-tRNA + 33 EF-Tu.GTP.met1-tRNA + 27 EF-Tu.GTP.phe1-tRNA + 29 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 7 EF-Tu.GTP.proM-tRNA + 10 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serV-tRNA + 29 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 11 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 21 EF-Tu.GTP.trpT-tRNA + 36 EF-Tu.GTP.tyr1-tRNA + 34 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 30 EF-Tu.GTP.val3-tRNA + 4295 mg2 + 1 rib_ini_b0642_1 --> 1 rib_70_elo1_b0642_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_elo_b0642_1_rib2	Translation elongation 2 b0642 1 ribosome(s)	858 h2o + 1 rib_70_elo1_b0642_1_cplx --> 858 EF-G.GDP + 858 EF-Tu.GDP + 67 ala1_tRNA + 12 ala2_tRNA + 41 arg1_tRNA + 39 asn1_tRNA + 58 asp1_tRNA + 11 cysT_tRNA + 1 fmet_tRNA + 26 gln1_tRNA + 4 gln2_tRNA + 66 glu1_tRNA + 54 gly1_tRNA + 2 glyU_tRNA + 1716 h + 16 hisR_tRNA + 34 ile1_tRNA + 1 ile2_tRNA + 49 leu1_tRNA + 2 leu2_tRNA + 12 leuU_tRNA + 1 leuW_tRNA + 1 leuZ_tRNA + 54 lys1_tRNA + 33 met1_tRNA + 4295 mg2 + 27 phe1_tRNA + 1716 pi + 29 pro1_tRNA + 3 pro2_tRNA + 2 proL_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b0642_1_cplx + 10 ser1_tRNA + 9 ser2_tRNA + 1 ser3_tRNA + 4 serV_tRNA + 29 thr1_tRNA + 12 thr2_tRNA + 11 thr3_tRNA + 2 thrU_tRNA + 21 trpT_tRNA + 36 tyr1_tRNA + 34 val1_tRNA + 8 val2_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_elo_b0642_25_rib1	Translation elongation 1 b0642 25 ribosome(s)	21475 EF-G.GTP + 1675 EF-Tu.GTP.ala1-tRNA + 300 EF-Tu.GTP.ala2-tRNA + 1025 EF-Tu.GTP.arg1-tRNA + 975 EF-Tu.GTP.asn1-tRNA + 1450 EF-Tu.GTP.asp1-tRNA + 275 EF-Tu.GTP.cysT-tRNA + 650 EF-Tu.GTP.gln1-tRNA + 100 EF-Tu.GTP.gln2-tRNA + 1650 EF-Tu.GTP.glu1-tRNA + 1375 EF-Tu.GTP.gly1-tRNA + 50 EF-Tu.GTP.glyU-tRNA + 400 EF-Tu.GTP.hisR-tRNA + 850 EF-Tu.GTP.ile1-tRNA + 25 EF-Tu.GTP.ile2-tRNA + 1225 EF-Tu.GTP.leu1-tRNA + 50 EF-Tu.GTP.leu2-tRNA + 300 EF-Tu.GTP.leuU-tRNA + 25 EF-Tu.GTP.leuW-tRNA + 25 EF-Tu.GTP.leuZ-tRNA + 1350 EF-Tu.GTP.lys1-tRNA + 825 EF-Tu.GTP.met1-tRNA + 675 EF-Tu.GTP.phe1-tRNA + 725 EF-Tu.GTP.pro1-tRNA + 75 EF-Tu.GTP.pro2-tRNA + 50 EF-Tu.GTP.proL-tRNA + 175 EF-Tu.GTP.proM-tRNA + 250 EF-Tu.GTP.ser1-tRNA + 225 EF-Tu.GTP.ser2-tRNA + 25 EF-Tu.GTP.ser3-tRNA + 100 EF-Tu.GTP.serV-tRNA + 725 EF-Tu.GTP.thr1-tRNA + 300 EF-Tu.GTP.thr2-tRNA + 275 EF-Tu.GTP.thr3-tRNA + 50 EF-Tu.GTP.thrU-tRNA + 525 EF-Tu.GTP.trpT-tRNA + 900 EF-Tu.GTP.tyr1-tRNA + 850 EF-Tu.GTP.val1-tRNA + 200 EF-Tu.GTP.val2-tRNA + 750 EF-Tu.GTP.val3-tRNA + 107375 mg2 + 1 rib_ini_b0642_25 --> 1 rib_70_elo1_b0642_25_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_elo_b0642_25_rib2	Translation elongation 2 b0642 25 ribosome(s)	21450 h2o + 1 rib_70_elo1_b0642_25_cplx --> 21450 EF-G.GDP + 21450 EF-Tu.GDP + 1675 ala1_tRNA + 300 ala2_tRNA + 1025 arg1_tRNA + 975 asn1_tRNA + 1450 asp1_tRNA + 275 cysT_tRNA + 25 fmet_tRNA + 650 gln1_tRNA + 100 gln2_tRNA + 1650 glu1_tRNA + 1350 gly1_tRNA + 50 glyU_tRNA + 42900 h + 400 hisR_tRNA + 850 ile1_tRNA + 25 ile2_tRNA + 1225 leu1_tRNA + 50 leu2_tRNA + 300 leuU_tRNA + 25 leuW_tRNA + 25 leuZ_tRNA + 1350 lys1_tRNA + 825 met1_tRNA + 107375 mg2 + 675 phe1_tRNA + 42900 pi + 725 pro1_tRNA + 75 pro2_tRNA + 50 proL_tRNA + 175 proM_tRNA + 1 rib_70_elo2_b0642_25_cplx + 250 ser1_tRNA + 225 ser2_tRNA + 25 ser3_tRNA + 100 serV_tRNA + 725 thr1_tRNA + 300 thr2_tRNA + 275 thr3_tRNA + 50 thrU_tRNA + 525 trpT_tRNA + 900 tyr1_tRNA + 850 val1_tRNA + 200 val2_tRNA + 750 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316

tl_elo_b0642_50_rib1	Translation elongation 1 b0642 50 ribosome(s)	42950 EF-G.GTP + 3350 EF-Tu.GTP.ala1-tRNA + 600 EF-Tu.GTP.ala2-tRNA + 2050 EF-Tu.GTP.arg1-tRNA + 1950 EF-Tu.GTP.asn1-tRNA + 2900 EF-Tu.GTP.asp1-tRNA + 550 EF-Tu.GTP.cysT-tRNA + 1300 EF-Tu.GTP.gln1-tRNA + 200 EF-Tu.GTP.gln2-tRNA + 3300 EF-Tu.GTP.glu1-tRNA + 2750 EF-Tu.GTP.gly1-tRNA + 100 EF-Tu.GTP.glyU-tRNA + 800 EF-Tu.GTP.hisR-tRNA + 1700 EF-Tu.GTP.ile1-tRNA + 50 EF-Tu.GTP.ile2-tRNA + 2450 EF-Tu.GTP.leu1-tRNA + 100 EF-Tu.GTP.leu2-tRNA + 600 EF-Tu.GTP.leuU-tRNA + 50 EF-Tu.GTP.leuW-tRNA + 50 EF-Tu.GTP.leuZ-tRNA + 2700 EF-Tu.GTP.lys1-tRNA + 1650 EF-Tu.GTP.met1-tRNA + 1350 EF-Tu.GTP.phe1-tRNA + 1450 EF-Tu.GTP.pro1-tRNA + 150 EF-Tu.GTP.pro2-tRNA + 100 EF-Tu.GTP.proL-tRNA + 350 EF-Tu.GTP.proM-tRNA + 500 EF-Tu.GTP.ser1-tRNA + 450 EF-Tu.GTP.ser2-tRNA + 50 EF-Tu.GTP.ser3-tRNA + 200 EF-Tu.GTP.serV-tRNA + 1450 EF-Tu.GTP.thr1-tRNA + 600 EF-Tu.GTP.thr2-tRNA + 550 EF-Tu.GTP.thr3-tRNA + 100 EF-Tu.GTP.thrU-tRNA + 1050 EF-Tu.GTP.trpT-tRNA + 1800 EF-Tu.GTP.tyr1-tRNA + 1700 EF-Tu.GTP.val1-tRNA + 400 EF-Tu.GTP.val2-tRNA + 1500 EF-Tu.GTP.val3-tRNA + 214750 mg2 + 1 rib_ini_b0642_50 --> 1 rib_70_elo1_b0642_50_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_elo_b0642_50_rib2	Translation elongation 2 b0642 50 ribosome(s)	42900 h2o + 1 rib_70_elo1_b0642_50_cplx --> 42900 EF-G.GDP + 42900 EF-Tu.GDP + 3350 ala1_tRNA + 600 ala2_tRNA + 2050 arg1_tRNA + 1950 asn1_tRNA + 2900 asp1_tRNA + 550 cysT_tRNA + 50 fmet_tRNA + 1300 gln1_tRNA + 200 gln2_tRNA + 3300 glu1_tRNA + 2700 gly1_tRNA + 100 glyU_tRNA + 85800 h + 800 hisR_tRNA + 1700 ile1_tRNA + 50 ile2_tRNA + 2450 leu1_tRNA + 100 leu2_tRNA + 600 leuU_tRNA + 50 leuW_tRNA + 50 leuZ_tRNA + 2700 lys1_tRNA + 1650 met1_tRNA + 214750 mg2 + 1350 phe1_tRNA + 85800 pi + 1450 pro1_tRNA + 150 pro2_tRNA + 100 proL_tRNA + 350 proM_tRNA + 1 rib_70_elo2_b0642_50_cplx + 500 ser1_tRNA + 450 ser2_tRNA + 50 ser3_tRNA + 200 serV_tRNA + 1450 thr1_tRNA + 600 thr2_tRNA + 550 thr3_tRNA + 100 thrU_tRNA + 1050 trpT_tRNA + 1800 tyr1_tRNA + 1700 val1_tRNA + 400 val2_tRNA + 1500 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_elo_b0661_13_rib1	Translation elongation 1 b0661 13 ribosome(s)	6149 EF-G.GTP + 221 EF-Tu.GTP.ala1-tRNA + 143 EF-Tu.GTP.ala2-tRNA + 455 EF-Tu.GTP.arg1-tRNA + 13 EF-Tu.GTP.argX-tRNA + 221 EF-Tu.GTP.asn1-tRNA + 429 EF-Tu.GTP.asp1-tRNA + 78 EF-Tu.GTP.cysT-tRNA + 169 EF-Tu.GTP.gln1-tRNA + 65 EF-Tu.GTP.gln2-tRNA + 520 EF-Tu.GTP.glu1-tRNA + 351 EF-Tu.GTP.gly1-tRNA + 13 EF-Tu.GTP.glyT-tRNA + 52 EF-Tu.GTP.glyU-tRNA + 117 EF-Tu.GTP.hisR-tRNA + 442 EF-Tu.GTP.ile1-tRNA + 364 EF-Tu.GTP.leu1-tRNA + 13 EF-Tu.GTP.leu2-tRNA + 78 EF-Tu.GTP.leuU-tRNA + 13 EF-Tu.GTP.leuW-tRNA + 13 EF-Tu.GTP.leuZ-tRNA + 273 EF-Tu.GTP.lys1-tRNA + 169 EF-Tu.GTP.met1-tRNA + 234 EF-Tu.GTP.phe1-tRNA + 221 EF-Tu.GTP.pro1-tRNA + 26 EF-Tu.GTP.pro2-tRNA + 39 EF-Tu.GTP.proM-tRNA + 65 EF-Tu.GTP.ser1-tRNA + 39 EF-Tu.GTP.ser2-tRNA + 52 EF-Tu.GTP.ser3-tRNA + 39 EF-Tu.GTP.serT-tRNA + 143 EF-Tu.GTP.serV-tRNA + 260 EF-Tu.GTP.thr1-tRNA + 13 EF-Tu.GTP.thr2-tRNA + 78 EF-Tu.GTP.thr3-tRNA + 39 EF-Tu.GTP.thrU-tRNA + 52 EF-Tu.GTP.trpT-tRNA + 182 EF-Tu.GTP.tyr1-tRNA + 273 EF-Tu.GTP.val1-tRNA + 117 EF-Tu.GTP.val2-tRNA + 65 EF-Tu.GTP.val3-tRNA + 30745 mg2 + 1 rib_ini_b0661_13 --> 1 rib_70_elo1_b0661_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_elo_b0661_13_rib2	Translation elongation 2 b0661 13 ribosome(s)	6136 h2o + 1 rib_70_elo1_b0661_13_cplx --> 6136 EF-G.GDP + 6136 EF-Tu.GDP + 221 ala1_tRNA + 143 ala2_tRNA + 455 arg1_tRNA + 13 argX_tRNA + 221 asn1_tRNA + 429 asp1_tRNA + 78 cysT_tRNA + 13 fmet_tRNA + 169 gln1_tRNA + 65 gln2_tRNA + 520 glu1_tRNA + 351 gly1_tRNA + 13 glyT_tRNA + 52 glyU_tRNA + 12272 h + 117 hisR_tRNA + 442 ile1_tRNA + 364 leu1_tRNA + 13 leu2_tRNA + 78 leuU_tRNA + 13 leuW_tRNA + 13 leuZ_tRNA + 273 lys1_tRNA + 169 met1_tRNA + 30745 mg2 + 234 phe1_tRNA + 12272 pi + 208 pro1_tRNA + 26 pro2_tRNA + 39 proM_tRNA + 1 rib_70_elo2_b0661_13_cplx + 65 ser1_tRNA + 39 ser2_tRNA + 52 ser3_tRNA + 39 serT_tRNA + 143 serV_tRNA + 260 thr1_tRNA + 13 thr2_tRNA + 78 thr3_tRNA + 39 thrU_tRNA + 52 trpT_tRNA + 182 tyr1_tRNA + 273 val1_tRNA + 117 val2_tRNA + 65 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_elo_b0661_1_rib1	Translation elongation 1 b0661 1 ribosome(s)	473 EF-G.GTP + 17 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.ala2-tRNA + 35 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 17 EF-Tu.GTP.asn1-tRNA + 33 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 13 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 40 EF-Tu.GTP.glu1-tRNA + 27 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 34 EF-Tu.GTP.ile1-tRNA + 28 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 21 EF-Tu.GTP.lys1-tRNA + 13 EF-Tu.GTP.met1-tRNA + 18 EF-Tu.GTP.phe1-tRNA + 17 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 11 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 14 EF-Tu.GTP.tyr1-tRNA + 21 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 2365 mg2 + 1 rib_ini_b0661_1 --> 1 rib_70_elo1_b0661_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_elo_b0661_1_rib2	Translation elongation 2 b0661 1 ribosome(s)	472 h2o + 1 rib_70_elo1_b0661_1_cplx --> 472 EF-G.GDP + 472 EF-Tu.GDP + 17 ala1_tRNA + 11 ala2_tRNA + 35 arg1_tRNA + 1 argX_tRNA + 17 asn1_tRNA + 33 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 13 gln1_tRNA + 5 gln2_tRNA + 40 glu1_tRNA + 27 gly1_tRNA + 1 glyT_tRNA + 4 glyU_tRNA + 944 h + 9 hisR_tRNA + 34 ile1_tRNA + 28 leu1_tRNA + 1 leu2_tRNA + 6 leuU_tRNA + 1 leuW_tRNA + 1 leuZ_tRNA + 21 lys1_tRNA + 13 met1_tRNA + 2365 mg2 + 18 phe1_tRNA + 944 pi + 16 pro1_tRNA + 2 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b0661_1_cplx + 5 ser1_tRNA + 3 ser2_tRNA + 4 ser3_tRNA + 3 serT_tRNA + 11 serV_tRNA + 20 thr1_tRNA + 1 thr2_tRNA + 6 thr3_tRNA + 3 thrU_tRNA + 4 trpT_tRNA + 14 tyr1_tRNA + 21 val1_tRNA + 9 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532

tl_elo_b0661_27_rib1	Translation elongation 1 b0661 27 ribosome(s)	12771 EF-G.GTP + 459 EF-Tu.GTP.ala1-tRNA + 297 EF-Tu.GTP.ala2-tRNA + 945 EF-Tu.GTP.arg1-tRNA + 27 EF-Tu.GTP.argX-tRNA + 459 EF-Tu.GTP.asn1-tRNA + 891 EF-Tu.GTP.asp1-tRNA + 162 EF-Tu.GTP.cysT-tRNA + 351 EF-Tu.GTP.gln1-tRNA + 135 EF-Tu.GTP.gln2-tRNA + 1080 EF-Tu.GTP.glu1-tRNA + 729 EF-Tu.GTP.gly1-tRNA + 27 EF-Tu.GTP.glyT-tRNA + 108 EF-Tu.GTP.glyU-tRNA + 243 EF-Tu.GTP.hisR-tRNA + 918 EF-Tu.GTP.ile1-tRNA + 756 EF-Tu.GTP.leu1-tRNA + 27 EF-Tu.GTP.leu2-tRNA + 162 EF-Tu.GTP.leuU-tRNA + 27 EF-Tu.GTP.leuW-tRNA + 27 EF-Tu.GTP.leuZ-tRNA + 567 EF-Tu.GTP.lys1-tRNA + 351 EF-Tu.GTP.met1-tRNA + 486 EF-Tu.GTP.phe1-tRNA + 459 EF-Tu.GTP.pro1-tRNA + 54 EF-Tu.GTP.pro2-tRNA + 81 EF-Tu.GTP.proM-tRNA + 135 EF-Tu.GTP.ser1-tRNA + 81 EF-Tu.GTP.ser2-tRNA + 108 EF-Tu.GTP.ser3-tRNA + 81 EF-Tu.GTP.serT-tRNA + 297 EF-Tu.GTP.serV-tRNA + 540 EF-Tu.GTP.thr1-tRNA + 27 EF-Tu.GTP.thr2-tRNA + 162 EF-Tu.GTP.thr3-tRNA + 81 EF-Tu.GTP.thrU-tRNA + 108 EF-Tu.GTP.trpT-tRNA + 378 EF-Tu.GTP.tyr1-tRNA + 567 EF-Tu.GTP.val1-tRNA + 243 EF-Tu.GTP.val2-tRNA + 135 EF-Tu.GTP.val3-tRNA + 63855 mg2 + 1 rib_ini_b0661_27 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_elo_b0661_27_rib2	Translation elongation 2 b0661 27 ribosome(s)	12744 h2o + 1 rib_70_elo1_b0661_27_cplx --> 12744 EF-G.GDP + 12744 EF-Tu.GDP + 459 ala1_tRNA + 297 ala2_tRNA + 945 arg1_tRNA + 27 argX_tRNA + 459 asn1_tRNA + 891 asp1_tRNA + 162 cysT_tRNA + 27 fmet_tRNA + 351 gln1_tRNA + 135 gln2_tRNA + 1080 glu1_tRNA + 729 gly1_tRNA + 27 glyT_tRNA + 108 glyU_tRNA + 25488 h + 243 hisR_tRNA + 918 ile1_tRNA + 756 leu1_tRNA + 27 leu2_tRNA + 162 leuU_tRNA + 27 leuW_tRNA + 27 leuZ_tRNA + 567 lys1_tRNA + 351 met1_tRNA + 63855 mg2 + 486 phe1_tRNA + 25488 pi + 432 pro1_tRNA + 54 pro2_tRNA + 81 proM_tRNA + 1 rib_70_elo2_b0661_27_cplx + 135 ser1_tRNA + 81 ser2_tRNA + 108 ser3_tRNA + 81 serT_tRNA + 297 serV_tRNA + 540 thr1_tRNA + 27 thr2_tRNA + 162 thr3_tRNA + 81 thrU_tRNA + 108 trpT_tRNA + 378 tyr1_tRNA + 567 val1_tRNA + 243 val2_tRNA + 135 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_elo_b0680_16_rib1	Translation elongation 1 b0680 16 ribosome(s)	8848 EF-G.GTP + 464 EF-Tu.GTP.ala1-tRNA + 160 EF-Tu.GTP.ala2-tRNA + 640 EF-Tu.GTP.arg1-tRNA + 432 EF-Tu.GTP.asn1-tRNA + 592 EF-Tu.GTP.asp1-tRNA + 160 EF-Tu.GTP.cysT-tRNA + 224 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.gln2-tRNA + 736 EF-Tu.GTP.glu1-tRNA + 496 EF-Tu.GTP.gly1-tRNA + 32 EF-Tu.GTP.glyU-tRNA + 256 EF-Tu.GTP.hisR-tRNA + 560 EF-Tu.GTP.ile1-tRNA + 512 EF-Tu.GTP.leu1-tRNA + 32 EF-Tu.GTP.leu2-tRNA + 64 EF-Tu.GTP.leuU-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 512 EF-Tu.GTP.lys1-tRNA + 176 EF-Tu.GTP.met1-tRNA + 384 EF-Tu.GTP.phe1-tRNA + 400 EF-Tu.GTP.pro1-tRNA + 32 EF-Tu.GTP.pro2-tRNA + 16 EF-Tu.GTP.proM-tRNA + 80 EF-Tu.GTP.ser1-tRNA + 80 EF-Tu.GTP.ser2-tRNA + 96 EF-Tu.GTP.ser3-tRNA + 16 EF-Tu.GTP.serT-tRNA + 176 EF-Tu.GTP.serV-tRNA + 240 EF-Tu.GTP.thr1-tRNA + 80 EF-Tu.GTP.thr2-tRNA + 96 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 128 EF-Tu.GTP.trpT-tRNA + 352 EF-Tu.GTP.tyr1-tRNA + 320 EF-Tu.GTP.val1-tRNA + 48 EF-Tu.GTP.val2-tRNA + 192 EF-Tu.GTP.val3-tRNA + 44240 mg2 + 1 rib_ini_b0680_16 --> 1 rib_70_elo1_b0680_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.39E+02	139.1751	0	6.30E+00	6.304
tl_elo_b0680_16_rib2	Translation elongation 2 b0680 16 ribosome(s)	8832 h2o + 1 rib_70_elo1_b0680_16_cplx --> 8832 EF-G.GDP + 8832 EF-Tu.GDP + 464 ala1_tRNA + 160 ala2_tRNA + 640 arg1_tRNA + 432 asn1_tRNA + 592 asp1_tRNA + 160 cysT_tRNA + 16 fmet_tRNA + 224 gln1_tRNA + 16 gln2_tRNA + 720 glu1_tRNA + 496 gly1_tRNA + 32 glyU_tRNA + 17664 h + 256 hisR_tRNA + 560 ile1_tRNA + 512 leu1_tRNA + 32 leu2_tRNA + 64 leuU_tRNA + 32 leuZ_tRNA + 512 lys1_tRNA + 176 met1_tRNA + 44240 mg2 + 384 phe1_tRNA + 17664 pi + 400 pro1_tRNA + 32 pro2_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b0680_16_cplx + 80 ser1_tRNA + 80 ser2_tRNA + 96 ser3_tRNA + 16 serT_tRNA + 176 serV_tRNA + 240 thr1_tRNA + 80 thr2_tRNA + 96 thr3_tRNA + 16 thrU_tRNA + 128 trpT_tRNA + 352 tyr1_tRNA + 320 val1_tRNA + 48 val2_tRNA + 192 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.39E+02	139.1751	0	6.30E+00	6.304
tl_elo_b0680_1_rib1	Translation elongation 1 b0680 1 ribosome(s)	553 EF-G.GTP + 29 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 40 EF-Tu.GTP.arg1-tRNA + 27 EF-Tu.GTP.asn1-tRNA + 37 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.cysT-tRNA + 14 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 46 EF-Tu.GTP.glu1-tRNA + 31 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 35 EF-Tu.GTP.ile1-tRNA + 32 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 32 EF-Tu.GTP.lys1-tRNA + 11 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 25 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 11 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 22 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 2765 mg2 + 1 rib_ini_b0680_1 --> 1 rib_70_elo1_b0680_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.39E+02	139.1751	0	6.30E+00	6.304
tl_elo_b0680_1_rib2	Translation elongation 2 b0680 1 ribosome(s)	552 h2o + 1 rib_70_elo1_b0680_1_cplx --> 552 EF-G.GDP + 552 EF-Tu.GDP + 29 ala1_tRNA + 10 ala2_tRNA + 40 arg1_tRNA + 27 asn1_tRNA + 37 asp1_tRNA + 10 cysT_tRNA + 1 fmet_tRNA + 14 gln1_tRNA + 1 gln2_tRNA + 45 glu1_tRNA + 31 gly1_tRNA + 2 glyU_tRNA + 1104 h + 16 hisR_tRNA + 35 ile1_tRNA + 32 leu1_tRNA + 2 leu2_tRNA + 4 leuU_tRNA + 2 leuZ_tRNA + 32 lys1_tRNA + 11 met1_tRNA + 2765 mg2 + 24 phe1_tRNA + 1104 pi + 25 pro1_tRNA + 2 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b0680_1_cplx + 5 ser1_tRNA + 5 ser2_tRNA + 6 ser3_tRNA + 1 serT_tRNA + 11 serV_tRNA + 15 thr1_tRNA + 5 thr2_tRNA + 6 thr3_tRNA + 1 thrU_tRNA + 8 trpT_tRNA + 22 tyr1_tRNA + 20 val1_tRNA + 3 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.39E+02	139.1751	0	6.30E+00	6.304

tl_elo_b0680_32_rib1	Translation elongation 1 b0680 32 ribosome(s)	17696 EF-G.GTP + 928 EF-Tu.GTP.ala1-tRNA + 320 EF-Tu.GTP.ala2-tRNA + 1280 EF-Tu.GTP.arg1-tRNA + 864 EF-Tu.GTP.asn1-tRNA + 1184 EF-Tu.GTP.asp1-tRNA + 320 EF-Tu.GTP.cysT-tRNA + 448 EF-Tu.GTP.gln1-tRNA + 32 EF-Tu.GTP.gln2-tRNA + 1472 EF-Tu.GTP.glu1-tRNA + 992 EF-Tu.GTP.gly1-tRNA + 64 EF-Tu.GTP.glyU-tRNA + 512 EF-Tu.GTP.hisR-tRNA + 1120 EF-Tu.GTP.ile1-tRNA + 1024 EF-Tu.GTP.leu1-tRNA + 64 EF-Tu.GTP.leu2-tRNA + 128 EF-Tu.GTP.leuU-tRNA + 64 EF-Tu.GTP.leuZ-tRNA + 1024 EF-Tu.GTP.lys1-tRNA + 352 EF-Tu.GTP.met1-tRNA + 768 EF-Tu.GTP.phe1-tRNA + 800 EF-Tu.GTP.pro1-tRNA + 64 EF-Tu.GTP.pro2-tRNA + 32 EF-Tu.GTP.proM-tRNA + 160 EF-Tu.GTP.ser1-tRNA + 160 EF-Tu.GTP.ser2-tRNA + 192 EF-Tu.GTP.ser3-tRNA + 32 EF-Tu.GTP.serT-tRNA + 352 EF-Tu.GTP.serV-tRNA + 480 EF-Tu.GTP.thr1-tRNA + 160 EF-Tu.GTP.thr2-tRNA + 192 EF-Tu.GTP.thr3-tRNA + 32 EF-Tu.GTP.thrU-tRNA + 256 EF-Tu.GTP.trpT-tRNA + 704 EF-Tu.GTP.tyr1-tRNA + 640 EF-Tu.GTP.val1-tRNA + 96 EF-Tu.GTP.val2-tRNA + 384 EF-Tu.GTP.val3-tRNA + 88480 mg2 + 1 rib_ini_b0680_32 --> 1 rib_70_elo1_b0680_32_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.34E+02	133.9288	0	6.30E+00	6.304
tl_elo_b0680_32_rib2	Translation elongation 2 b0680 32 ribosome(s)	17664 h2o + 1 rib_70_elo1_b0680_32_cplx --> 17664 EF-G.GDP + 17664 EF-Tu.GDP + 928 ala1_tRNA + 320 ala2_tRNA + 1280 arg1_tRNA + 864 asn1_tRNA + 1184 asp1_tRNA + 320 cysT_tRNA + 32 fmet_tRNA + 448 gln1_tRNA + 32 gln2_tRNA + 1440 glu1_tRNA + 992 gly1_tRNA + 64 glyU_tRNA + 35328 h + 512 hisR_tRNA + 1120 ile1_tRNA + 1024 leu1_tRNA + 64 leu2_tRNA + 128 leuU_tRNA + 64 leuZ_tRNA + 1024 lys1_tRNA + 352 met1_tRNA + 88480 mg2 + 768 phe1_tRNA + 35328 pi + 800 pro1_tRNA + 64 pro2_tRNA + 32 proM_tRNA + 1 rib_70_elo2_b0680_32_cplx + 160 ser1_tRNA + 160 ser2_tRNA + 192 ser3_tRNA + 32 serT_tRNA + 352 serV_tRNA + 480 thr1_tRNA + 160 thr2_tRNA + 192 thr3_tRNA + 32 thrU_tRNA + 256 trpT_tRNA + 704 tyr1_tRNA + 640 val1_tRNA + 96 val2_tRNA + 384 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.34E+02	133.9288	0	6.30E+00	6.304
tl_elo_b0850_1_rib1	Translation elongation 1 b0850 1 ribosome(s)	94 EF-G.GTP + 6 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 4 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argX-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 5 EF-Tu.GTP.glu1-tRNA + 3 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 5 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 1 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val3-tRNA + 470 mg2 + 1 rib_ini_b0850_1 --> 1 rib_70_elo1_b0850_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907
tl_elo_b0850_1_rib2	Translation elongation 2 b0850 1 ribosome(s)	93 h2o + 1 rib_70_elo1_b0850_1_cplx --> 93 EF-G.GDP + 93 EF-Tu.GDP + 6 ala1_tRNA + 2 ala2_tRNA + 4 arg1_tRNA + 1 argU_tRNA + 1 argX_tRNA + 3 asn1_tRNA + 3 asp1_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 1 gln2_tRNA + 5 glu1_tRNA + 3 gly1_tRNA + 1 glyT_tRNA + 186 h + 5 ile1_tRNA + 1 ile2_tRNA + 8 leu1_tRNA + 3 leu2_tRNA + 5 leuU_tRNA + 1 leuW_tRNA + 4 lys1_tRNA + 5 met1_tRNA + 470 mg2 + 3 phe1_tRNA + 186 pi + 1 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b0850_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 1 serV_tRNA + 1 tyr1_tRNA + 7 val1_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907
tl_elo_b0850_2_rib1	Translation elongation 1 b0850 2 ribosome(s)	188 EF-G.GTP + 12 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argU-tRNA + 2 EF-Tu.GTP.argX-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 10 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 8 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 2 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 14 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val3-tRNA + 940 mg2 + 1 rib_ini_b0850_2 --> 1 rib_70_elo1_b0850_2_cp	irreversible	Translation	0.00E+00	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907
tl_elo_b0850_2_rib2	Translation elongation 2 b0850 2 ribosome(s)	186 h2o + 1 rib_70_elo1_b0850_2_cplx --> 186 EF-G.GDP + 186 EF-Tu.GDP + 12 ala1_tRNA + 4 ala2_tRNA + 8 arg1_tRNA + 2 argU_tRNA + 2 argX_tRNA + 6 asn1_tRNA + 6 asp1_tRNA + 2 fmet_tRNA + 6 gln1_tRNA + 2 gln2_tRNA + 10 glu1_tRNA + 6 gly1_tRNA + 2 glyT_tRNA + 372 h + 10 ile1_tRNA + 2 ile2_tRNA + 1 leu1_tRNA + 6 leu2_tRNA + 10 leuU_tRNA + 2 leuW_tRNA + 8 lys1_tRNA + 10 met1_tRNA + 940 mg2 + 6 phe1_tRNA + 372 pi + 2 pro1_tRNA + 4 pro2_tRNA + 2 proL_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b0850_2_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 4 ser3_tRNA + 4 serT_tRNA + 2 serV_tRNA + 2 tyr1_tRNA + 14 val1_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907

tl_elo_b0850_5_rib1	Translation elongation 1 b0850 5 ribosome(s)	470 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argU-tRNA + 5 EF-Tu.GTP.argX-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 15 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 25 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 25 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.ile2-tRNA + 40 EF-Tu.GTP.leu1-tRNA + 15 EF-Tu.GTP.leu2-tRNA + 25 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuW-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 25 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proL-tRNA + 20 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 35 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val3-tRNA + 2350 mg2 + 1 rib_ini_b0850_5 --> 1 rib_70_elo1_b0850_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907
tl_elo_b0850_5_rib2	Translation elongation 2 b0850 5 ribosome(s)	465 h2o + 1 rib_70_elo1_b0850_5_cplx --> 465 EF-G.GDP + 465 EF-Tu.GDP + 30 ala1_tRNA + 10 ala2_tRNA + 20 arg1_tRNA + 5 argU_tRNA + 5 argX_tRNA + 15 asn1_tRNA + 15 asp1_tRNA + 5 fmet_tRNA + 15 gln1_tRNA + 5 gln2_tRNA + 25 glu1_tRNA + 15 gly1_tRNA + 5 glyT_tRNA + 930 h + 25 ile1_tRNA + 5 ile2_tRNA + 4 leu1_tRNA + 15 leu2_tRNA + 25 leuU_tRNA + 5 leuW_tRNA + 20 lys1_tRNA + 25 met1_tRNA + 2350 mg2 + 15 phe1_tRNA + 930 pi + 5 pro1_tRNA + 10 pro2_tRNA + 5 proL_tRNA + 20 proM_tRNA + 1 rib_70_elo2_b0850_5_cplx + 5 ser1_tRNA + 5 ser2_tRNA + 10 ser3_tRNA + 10 serT_tRNA + 5 serV_tRNA + 5 tyr1_tRNA + 35 val1_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907
tl_elo_b0851_14_rib1	Translation elongation 1 b0851 14 ribosome(s)	3346 EF-G.GTP + 280 EF-Tu.GTP.ala1-tRNA + 42 EF-Tu.GTP.ala2-tRNA + 210 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.argX-tRNA + 126 EF-Tu.GTP.asn1-tRNA + 168 EF-Tu.GTP.asp1-tRNA + 70 EF-Tu.GTP.cysT-tRNA + 112 EF-Tu.GTP.gln1-tRNA + 70 EF-Tu.GTP.gln2-tRNA + 196 EF-Tu.GTP.glu1-tRNA + 154 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyT-tRNA + 42 EF-Tu.GTP.glyU-tRNA + 112 EF-Tu.GTP.hisR-tRNA + 252 EF-Tu.GTP.ile1-tRNA + 196 EF-Tu.GTP.leu1-tRNA + 70 EF-Tu.GTP.leu2-tRNA + 98 EF-Tu.GTP.leuU-tRNA + 70 EF-Tu.GTP.leuZ-tRNA + 112 EF-Tu.GTP.lys1-tRNA + 28 EF-Tu.GTP.met1-tRNA + 98 EF-Tu.GTP.phe1-tRNA + 98 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proL-tRNA + 28 EF-Tu.GTP.proM-tRNA + 70 EF-Tu.GTP.ser1-tRNA + 14 EF-Tu.GTP.ser3-tRNA + 126 EF-Tu.GTP.serV-tRNA + 70 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 84 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.thrU-tRNA + 56 EF-Tu.GTP.trpT-tRNA + 84 EF-Tu.GTP.tyr1-tRNA + 84 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 28 EF-Tu.GTP.val3-tRNA + 16730 mg2 + 1 rib_ini_b0851_14 --> 1 rib_70_elo1_b0851_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_elo_b0851_14_rib2	Translation elongation 2 b0851 14 ribosome(s)	3332 h2o + 1 rib_70_elo1_b0851_14_cplx --> 3332 EF-G.GDP + 3332 EF-Tu.GDP + 280 ala1_tRNA + 42 ala2_tRNA + 196 arg1_tRNA + 14 argX_tRNA + 126 asn1_tRNA + 168 asp1_tRNA + 70 cysT_tRNA + 14 fmet_tRNA + 112 gln1_tRNA + 70 gln2_tRNA + 196 glu1_tRNA + 154 gly1_tRNA + 14 glyT_tRNA + 42 glyU_tRNA + 6664 h + 112 hisR_tRNA + 252 ile1_tRNA + 196 leu1_tRNA + 70 leu2_tRNA + 98 leuU_tRNA + 70 leuZ_tRNA + 112 lys1_tRNA + 28 met1_tRNA + 16730 mg2 + 98 phe1_tRNA + 6664 pi + 98 pro1_tRNA + 14 pro2_tRNA + 14 proL_tRNA + 28 proM_tRNA + 1 rib_70_elo2_b0851_14_cplx + 70 ser1_tRNA + 14 ser3_tRNA + 126 serV_tRNA + 70 thr1_tRNA + 14 thr2_tRNA + 84 thr3_tRNA + 14 thrU_tRNA + 56 trpT_tRNA + 84 tyr1_tRNA + 84 val1_tRNA + 14 val2_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_elo_b0851_1_rib1	Translation elongation 1 b0851 1 ribosome(s)	239 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 11 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 1195 mg2 + 1 rib_ini_b0851_1 --> 1 rib_70_elo1_b0851_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_elo_b0851_1_rib2	Translation elongation 2 b0851 1 ribosome(s)	238 h2o + 1 rib_70_elo1_b0851_1_cplx --> 238 EF-G.GDP + 238 EF-Tu.GDP + 20 ala1_tRNA + 3 ala2_tRNA + 14 arg1_tRNA + 1 argX_tRNA + 9 asn1_tRNA + 12 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 5 gln2_tRNA + 14 glu1_tRNA + 11 gly1_tRNA + 1 glyT_tRNA + 3 glyU_tRNA + 476 h + 8 hisR_tRNA + 18 ile1_tRNA + 14 leu1_tRNA + 5 leu2_tRNA + 7 leuU_tRNA + 5 leuZ_tRNA + 8 lys1_tRNA + 2 met1_tRNA + 1195 mg2 + 7 phe1_tRNA + 476 pi + 7 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b0851_1_cplx + 5 ser1_tRNA + 1 ser3_tRNA + 9 serV_tRNA + 5 thr1_tRNA + 1 thr2_tRNA + 6 thr3_tRNA + 1 thrU_tRNA + 4 trpT_tRNA + 6 tyr1_tRNA + 6 val1_tRNA + 1 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537

tl_elo_b0851_7_rib1	Translation elongation 1 b0851 7 ribosome(s)	1673 EF-G.GTP + 140 EF-Tu.GTP.ala1-tRNA + 21 EF-Tu.GTP.ala2-tRNA + 105 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argX-tRNA + 63 EF-Tu.GTP.asn1-tRNA + 84 EF-Tu.GTP.asp1-tRNA + 35 EF-Tu.GTP.cysT-tRNA + 56 EF-Tu.GTP.gln1-tRNA + 35 EF-Tu.GTP.gln2-tRNA + 98 EF-Tu.GTP.glu1-tRNA + 77 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyT-tRNA + 21 EF-Tu.GTP.glyU-tRNA + 56 EF-Tu.GTP.hisR-tRNA + 126 EF-Tu.GTP.ile1-tRNA + 98 EF-Tu.GTP.leu1-tRNA + 35 EF-Tu.GTP.leu2-tRNA + 49 EF-Tu.GTP.leuU-tRNA + 35 EF-Tu.GTP.leuZ-tRNA + 56 EF-Tu.GTP.lys1-tRNA + 14 EF-Tu.GTP.met1-tRNA + 49 EF-Tu.GTP.phe1-tRNA + 49 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proL-tRNA + 14 EF-Tu.GTP.proM-tRNA + 35 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.ser3-tRNA + 63 EF-Tu.GTP.serV-tRNA + 35 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 42 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 28 EF-Tu.GTP.trpT-tRNA + 42 EF-Tu.GTP.tyr1-tRNA + 42 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 14 EF-Tu.GTP.val3-tRNA + 8365 mg2 + 1 rib_ini_b0851_7 --> 1 rib_70_elo1_b0851_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_elo_b0851_7_rib2	Translation elongation 2 b0851 7 ribosome(s)	1666 h2o + 1 rib_70_elo1_b0851_7_cplx --> 1666 EF-G.GDP + 1666 EF-Tu.GDP + 140 ala1_tRNA + 21 ala2_tRNA + 98 arg1_tRNA + 7 argX_tRNA + 63 asn1_tRNA + 84 asp1_tRNA + 35 cysT_tRNA + 7 fmet_tRNA + 56 gln1_tRNA + 35 gln2_tRNA + 98 glu1_tRNA + 77 gly1_tRNA + 7 glyT_tRNA + 21 glyU_tRNA + 3332 h + 56 hisR_tRNA + 126 ile1_tRNA + 98 leu1_tRNA + 35 leu2_tRNA + 49 leuU_tRNA + 35 leuZ_tRNA + 56 lys1_tRNA + 14 met1_tRNA + 8365 mg2 + 49 phe1_tRNA + 3332 pi + 49 pro1_tRNA + 7 pro2_tRNA + 7 proL_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b0851_7_cplx + 35 ser1_tRNA + 7 ser3_tRNA + 63 serV_tRNA + 35 thr1_tRNA + 7 thr2_tRNA + 42 thr3_tRNA + 7 thrU_tRNA + 28 trpT_tRNA + 42 tyr1_tRNA + 42 val1_tRNA + 7 val2_tRNA + 14 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_elo_b0852_17_rib1	Translation elongation 1 b0852 17 ribosome(s)	5083 EF-G.GTP + 493 EF-Tu.GTP.ala1-tRNA + 119 EF-Tu.GTP.ala2-tRNA + 323 EF-Tu.GTP.arg1-tRNA + 85 EF-Tu.GTP.argX-tRNA + 119 EF-Tu.GTP.asn1-tRNA + 272 EF-Tu.GTP.asp1-tRNA + 85 EF-Tu.GTP.cysT-tRNA + 119 EF-Tu.GTP.gln1-tRNA + 34 EF-Tu.GTP.gln2-tRNA + 323 EF-Tu.GTP.glu1-tRNA + 323 EF-Tu.GTP.gly1-tRNA + 51 EF-Tu.GTP.glyT-tRNA + 85 EF-Tu.GTP.glyU-tRNA + 119 EF-Tu.GTP.hisR-tRNA + 391 EF-Tu.GTP.ile1-tRNA + 85 EF-Tu.GTP.ile2-tRNA + 272 EF-Tu.GTP.leu1-tRNA + 85 EF-Tu.GTP.leu2-tRNA + 68 EF-Tu.GTP.leuU-tRNA + 34 EF-Tu.GTP.leuZ-tRNA + 204 EF-Tu.GTP.lys1-tRNA + 119 EF-Tu.GTP.met1-tRNA + 85 EF-Tu.GTP.phe1-tRNA + 119 EF-Tu.GTP.pro1-tRNA + 34 EF-Tu.GTP.pro2-tRNA + 17 EF-Tu.GTP.proL-tRNA + 17 EF-Tu.GTP.proM-tRNA + 51 EF-Tu.GTP.ser1-tRNA + 51 EF-Tu.GTP.ser2-tRNA + 68 EF-Tu.GTP.ser3-tRNA + 85 EF-Tu.GTP.serV-tRNA + 85 EF-Tu.GTP.thr1-tRNA + 136 EF-Tu.GTP.thr3-tRNA + 34 EF-Tu.GTP.thrU-tRNA + 17 EF-Tu.GTP.trpT-tRNA + 119 EF-Tu.GTP.tyr1-tRNA + 153 EF-Tu.GTP.val1-tRNA + 119 EF-Tu.GTP.val2-tRNA + 85 EF-Tu.GTP.val3-tRNA + 25415 mg2 + 1 rib_ini_b0852_17 --> 1 rib_70_elo1_b0852_17_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867
tl_elo_b0852_17_rib2	Translation elongation 2 b0852 17 ribosome(s)	5066 h2o + 1 rib_70_elo1_b0852_17_cplx --> 5066 EF-G.GDP + 5066 EF-Tu.GDP + 493 ala1_tRNA + 119 ala2_tRNA + 323 arg1_tRNA + 85 argX_tRNA + 119 asn1_tRNA + 272 asp1_tRNA + 85 cysT_tRNA + 17 fmet_tRNA + 119 gln1_tRNA + 34 gln2_tRNA + 323 glu1_tRNA + 306 gly1_tRNA + 51 glyT_tRNA + 85 glyU_tRNA + 10132 h + 119 hisR_tRNA + 391 ile1_tRNA + 85 ile2_tRNA + 272 leu1_tRNA + 85 leu2_tRNA + 68 leuU_tRNA + 34 leuZ_tRNA + 204 lys1_tRNA + 119 met1_tRNA + 25415 mg2 + 85 phe1_tRNA + 10132 pi + 119 pro1_tRNA + 34 pro2_tRNA + 17 proL_tRNA + 17 proM_tRNA + 1 rib_70_elo2_b0852_17_cplx + 51 ser1_tRNA + 51 ser2_tRNA + 68 ser3_tRNA + 85 serV_tRNA + 85 thr1_tRNA + 136 thr3_tRNA + 34 thrU_tRNA + 17 trpT_tRNA + 119 tyr1_tRNA + 153 val1_tRNA + 119 val2_tRNA + 85 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867
tl_elo_b0852_1_rib1	Translation elongation 1 b0852 1 ribosome(s)	299 EF-G.GTP + 29 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 19 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 16 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 19 EF-Tu.GTP.glu1-tRNA + 19 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 23 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.ile2-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1495 mg2 + 1 rib_ini_b0852_1 --> 1 rib_70_elo1_b0852_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867
tl_elo_b0852_1_rib2	Translation elongation 2 b0852 1 ribosome(s)	298 h2o + 1 rib_70_elo1_b0852_1_cplx --> 298 EF-G.GDP + 298 EF-Tu.GDP + 29 ala1_tRNA + 7 ala2_tRNA + 19 arg1_tRNA + 5 argX_tRNA + 7 asn1_tRNA + 16 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 2 gln2_tRNA + 19 glu1_tRNA + 18 gly1_tRNA + 3 glyT_tRNA + 5 glyU_tRNA + 596 h + 7 hisR_tRNA + 23 ile1_tRNA + 5 ile2_tRNA + 16 leu1_tRNA + 5 leu2_tRNA + 4 leuU_tRNA + 2 leuZ_tRNA + 12 lys1_tRNA + 7 met1_tRNA + 1495 mg2 + 5 phe1_tRNA + 596 pi + 7 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b0852_1_cplx + 3 ser1_tRNA + 3 ser2_tRNA + 4 ser3_tRNA + 5 serV_tRNA + 5 thr1_tRNA + 8 thr3_tRNA + 2 thrU_tRNA + 1 trpT_tRNA + 7 tyr1_tRNA + 9 val1_tRNA + 7 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867

tl_elo_b0852_8_rib1	Translation elongation 1 b0852 8 ribosome(s)	2392 EF-G.GTP + 232 EF-Tu.GTP.ala1-tRNA + 56 EF-Tu.GTP.ala2-tRNA + 152 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.argX-tRNA + 56 EF-Tu.GTP.asn1-tRNA + 128 EF-Tu.GTP.asp1-tRNA + 40 EF-Tu.GTP.cysT-tRNA + 56 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.gln2-tRNA + 152 EF-Tu.GTP.glu1-tRNA + 152 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.glyT-tRNA + 40 EF-Tu.GTP.glyU-tRNA + 56 EF-Tu.GTP.hisR-tRNA + 184 EF-Tu.GTP.ile1-tRNA + 40 EF-Tu.GTP.ile2-tRNA + 128 EF-Tu.GTP.leu1-tRNA + 40 EF-Tu.GTP.leu2-tRNA + 32 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuZ-tRNA + 96 EF-Tu.GTP.lys1-tRNA + 56 EF-Tu.GTP.met1-tRNA + 40 EF-Tu.GTP.phe1-tRNA + 56 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proL-tRNA + 8 EF-Tu.GTP.proM-tRNA + 24 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 32 EF-Tu.GTP.ser3-tRNA + 40 EF-Tu.GTP.serV-tRNA + 40 EF-Tu.GTP.thr1-tRNA + 64 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 56 EF-Tu.GTP.tyr1-tRNA + 72 EF-Tu.GTP.val1-tRNA + 56 EF-Tu.GTP.val2-tRNA + 40 EF-Tu.GTP.val3-tRNA + 11960 mg2 + 1 rib_ini_b0852_8 --> 1 rib_70_elo1_b0852_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867
tl_elo_b0852_8_rib2	Translation elongation 2 b0852 8 ribosome(s)	2384 h2o + 1 rib_70_elo1_b0852_8_cplx --> 2384 EF-G.GDP + 2384 EF-Tu.GDP + 232 ala1_tRNA + 56 ala2_tRNA + 152 arg1_tRNA + 40 argX_tRNA + 56 asn1_tRNA + 128 asp1_tRNA + 40 cysT_tRNA + 8 fmet_tRNA + 56 gln1_tRNA + 16 gln2_tRNA + 152 glu1_tRNA + 144 gly1_tRNA + 24 glyT_tRNA + 40 glyU_tRNA + 4768 h + 56 hisR_tRNA + 184 ile1_tRNA + 40 ile2_tRNA + 128 leu1_tRNA + 40 leu2_tRNA + 32 leuU_tRNA + 16 leuZ_tRNA + 96 lys1_tRNA + 56 met1_tRNA + 11960 mg2 + 40 phe1_tRNA + 4768 pi + 56 pro1_tRNA + 16 pro2_tRNA + 8 proL_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b0852_8_cplx + 24 ser1_tRNA + 24 ser2_tRNA + 32 ser3_tRNA + 40 serV_tRNA + 40 thr1_tRNA + 64 thr3_tRNA + 16 thrU_tRNA + 8 trpT_tRNA + 56 tyr1_tRNA + 72 val1_tRNA + 56 val2_tRNA + 40 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867
tl_elo_b0853_1_rib1	Translation elongation 1 b0853 1 ribosome(s)	157 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 3 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 3 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 3 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 785 mg2 + 1 rib_ini_b0853_1 --> 1 rib_70_elo1_b0853_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107
tl_elo_b0853_1_rib2	Translation elongation 2 b0853 1 ribosome(s)	156 h2o + 1 rib_70_elo1_b0853_1_cplx --> 156 EF-G.GDP + 156 EF-Tu.GDP + 7 ala1_tRNA + 6 ala2_tRNA + 3 arg1_tRNA + 9 asn1_tRNA + 14 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 3 gln2_tRNA + 8 glu1_tRNA + 3 gly1_tRNA + 2 glyU_tRNA + 312 h + 3 hisR_tRNA + 6 ile1_tRNA + 14 leu1_tRNA + 1 leu2_tRNA + 4 leuU_tRNA + 3 leuZ_tRNA + 3 lys1_tRNA + 6 met1_tRNA + 785 mg2 + 9 phe1_tRNA + 312 pi + 2 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b0853_1_cplx + 1 ser1_tRNA + 3 ser2_tRNA + 3 ser3_tRNA + 1 serT_tRNA + 3 serV_tRNA + 3 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 2 trpT_tRNA + 2 tyr1_tRNA + 5 val1_tRNA + 4 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107
tl_elo_b0853_4_rib1	Translation elongation 1 b0853 4 ribosome(s)	628 EF-G.GTP + 28 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 36 EF-Tu.GTP.asn1-tRNA + 56 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 32 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 32 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 24 EF-Tu.GTP.ile1-tRNA + 56 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 36 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 12 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 16 EF-Tu.GTP.val2-tRNA + 16 EF-Tu.GTP.val3-tRNA + 3140 mg2 + 1 rib_ini_b0853_4 --> 1 rib_70_elo1_b0853_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107
tl_elo_b0853_4_rib2	Translation elongation 2 b0853 4 ribosome(s)	624 h2o + 1 rib_70_elo1_b0853_4_cplx --> 624 EF-G.GDP + 624 EF-Tu.GDP + 28 ala1_tRNA + 24 ala2_tRNA + 12 arg1_tRNA + 36 asn1_tRNA + 56 asp1_tRNA + 12 cysT_tRNA + 4 fmet_tRNA + 32 gln1_tRNA + 12 gln2_tRNA + 32 glu1_tRNA + 12 gly1_tRNA + 8 glyU_tRNA + 1248 h + 12 hisR_tRNA + 24 ile1_tRNA + 56 leu1_tRNA + 4 leu2_tRNA + 16 leuU_tRNA + 12 leuZ_tRNA + 12 lys1_tRNA + 24 met1_tRNA + 3140 mg2 + 36 phe1_tRNA + 1248 pi + 8 pro1_tRNA + 8 pro2_tRNA + 4 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b0853_4_cplx + 4 ser1_tRNA + 12 ser2_tRNA + 12 ser3_tRNA + 4 serT_tRNA + 12 serV_tRNA + 12 thr1_tRNA + 4 thr2_tRNA + 8 thr3_tRNA + 4 thrU_tRNA + 8 trpT_tRNA + 8 tyr1_tRNA + 20 val1_tRNA + 16 val2_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107

tl_elo_b0853_9_rib1	Translation elongation 1 b0853 9 ribosome(s)	1413 EF-G.GTP + 63 EF-Tu.GTP.ala1-tRNA + 54 EF-Tu.GTP.ala2-tRNA + 27 EF-Tu.GTP.arg1-tRNA + 81 EF-Tu.GTP.asn1-tRNA + 126 EF-Tu.GTP.asp1-tRNA + 27 EF-Tu.GTP.cysT-tRNA + 72 EF-Tu.GTP.gln1-tRNA + 27 EF-Tu.GTP.gln2-tRNA + 72 EF-Tu.GTP.glu1-tRNA + 27 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyU-tRNA + 36 EF-Tu.GTP.hisR-tRNA + 54 EF-Tu.GTP.ile1-tRNA + 126 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 36 EF-Tu.GTP.leuU-tRNA + 27 EF-Tu.GTP.leuZ-tRNA + 27 EF-Tu.GTP.lys1-tRNA + 54 EF-Tu.GTP.met1-tRNA + 81 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.proL-tRNA + 9 EF-Tu.GTP.proM-tRNA + 9 EF-Tu.GTP.ser1-tRNA + 27 EF-Tu.GTP.ser2-tRNA + 27 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serT-tRNA + 27 EF-Tu.GTP.serV-tRNA + 27 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 18 EF-Tu.GTP.trpT-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 45 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val2-tRNA + 36 EF-Tu.GTP.val3-tRNA + 7065 mg2 + 1 rib_ini_b0853_9 --> 1 rib_70_elo1_b0853_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107
tl_elo_b0853_9_rib2	Translation elongation 2 b0853 9 ribosome(s)	1404 h2o + 1 rib_70_elo1_b0853_9_cplx --> 1404 EF-G.GDP + 1404 EF-Tu.GDP + 63 ala1_tRNA + 54 ala2_tRNA + 27 arg1_tRNA + 81 asn1_tRNA + 126 asp1_tRNA + 27 cysT_tRNA + 9 fmet_tRNA + 72 gln1_tRNA + 27 gln2_tRNA + 72 glu1_tRNA + 27 gly1_tRNA + 18 glyU_tRNA + 2808 h + 27 hisR_tRNA + 54 ile1_tRNA + 126 leu1_tRNA + 9 leu2_tRNA + 36 leuU_tRNA + 27 leuZ_tRNA + 27 lys1_tRNA + 54 met1_tRNA + 7065 mg2 + 81 phe1_tRNA + 2808 pi + 18 pro1_tRNA + 18 pro2_tRNA + 9 proL_tRNA + 9 proM_tRNA + 1 rib_70_elo2_b0853_9_cplx + 9 ser1_tRNA + 27 ser2_tRNA + 27 ser3_tRNA + 9 serT_tRNA + 27 serV_tRNA + 27 thr1_tRNA + 9 thr2_tRNA + 18 thr3_tRNA + 9 thrU_tRNA + 18 trpT_tRNA + 18 tyr1_tRNA + 45 val1_tRNA + 36 val2_tRNA + 36 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107
tl_elo_b0858_1_rib1	Translation elongation 1 b0858 1 ribosome(s)	161 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 7 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 5 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 8 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 805 mg2 + 1 rib_ini_b0858_1 --> 1 rib_70_elo1_b0858_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_elo_b0858_1_rib2	Translation elongation 2 b0858 1 ribosome(s)	160 h2o + 1 rib_70_elo1_b0858_1_cplx --> 160 EF-G.GDP + 160 EF-Tu.GDP + 9 ala1_tRNA + 2 ala2_tRNA + 8 arg1_tRNA + 2 argX_tRNA + 2 asn1_tRNA + 3 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 2 gln2_tRNA + 7 glu1_tRNA + 6 gly1_tRNA + 1 glyT_tRNA + 2 glyU_tRNA + 320 h + 3 hisR_tRNA + 12 ile1_tRNA + 18 leu1_tRNA + 3 leu2_tRNA + 3 leuU_tRNA + 1 leuW_tRNA + 2 leuZ_tRNA + 5 lys1_tRNA + 5 met1_tRNA + 805 mg2 + 12 phe1_tRNA + 320 pi + 2 pro1_tRNA + 1 pro2_tRNA + 2 proL_tRNA + 1 rib_70_elo2_b0858_1_cplx + 2 ser2_tRNA + 2 ser3_tRNA + 3 serT_tRNA + 8 serV_tRNA + 3 thr1_tRNA + 3 thr3_tRNA + 2 thrU_tRNA + 5 trpT_tRNA + 4 tyr1_tRNA + 8 val1_tRNA + 1 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_elo_b0858_4_rib1	Translation elongation 1 b0858 4 ribosome(s)	644 EF-G.GTP + 36 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 32 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.argX-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 28 EF-Tu.GTP.glu1-tRNA + 24 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 48 EF-Tu.GTP.ile1-tRNA + 72 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuW-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 48 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proL-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 12 EF-Tu.GTP.serT-tRNA + 32 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 20 EF-Tu.GTP.trpT-tRNA + 16 EF-Tu.GTP.tyr1-tRNA + 32 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 3220 mg2 + 1 rib_ini_b0858_4 --> 1 rib_70_elo1_b0858_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_elo_b0858_4_rib2	Translation elongation 2 b0858 4 ribosome(s)	640 h2o + 1 rib_70_elo1_b0858_4_cplx --> 640 EF-G.GDP + 640 EF-Tu.GDP + 36 ala1_tRNA + 8 ala2_tRNA + 32 arg1_tRNA + 8 argX_tRNA + 8 asn1_tRNA + 12 asp1_tRNA + 4 cysT_tRNA + 4 fmet_tRNA + 12 gln1_tRNA + 8 gln2_tRNA + 28 glu1_tRNA + 24 gly1_tRNA + 4 glyT_tRNA + 8 glyU_tRNA + 1280 h + 12 hisR_tRNA + 48 ile1_tRNA + 72 leu1_tRNA + 12 leu2_tRNA + 12 leuU_tRNA + 4 leuW_tRNA + 8 leuZ_tRNA + 20 lys1_tRNA + 20 met1_tRNA + 3220 mg2 + 48 phe1_tRNA + 1280 pi + 8 pro1_tRNA + 4 pro2_tRNA + 8 proL_tRNA + 1 rib_70_elo2_b0858_4_cplx + 8 ser2_tRNA + 8 ser3_tRNA + 12 serT_tRNA + 32 serV_tRNA + 12 thr1_tRNA + 12 thr3_tRNA + 8 thrU_tRNA + 20 trpT_tRNA + 16 tyr1_tRNA + 32 val1_tRNA + 4 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894

tl_elo_b0858_9_rib1	Translation elongation 1 b0858 9 ribosome(s)	1449 EF-G.GTP + 81 EF-Tu.GTP.ala1-tRNA + 18 EF-Tu.GTP.ala2-tRNA + 72 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argX-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 27 EF-Tu.GTP.asp1-tRNA + 9 EF-Tu.GTP.cysT-tRNA + 27 EF-Tu.GTP.gln1-tRNA + 27 EF-Tu.GTP.gln2-tRNA + 63 EF-Tu.GTP.glu1-tRNA + 54 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 18 EF-Tu.GTP.glyU-tRNA + 27 EF-Tu.GTP.hisR-tRNA + 108 EF-Tu.GTP.ile1-tRNA + 162 EF-Tu.GTP.leu1-tRNA + 27 EF-Tu.GTP.leu2-tRNA + 27 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuW-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 45 EF-Tu.GTP.lys1-tRNA + 45 EF-Tu.GTP.met1-tRNA + 108 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proL-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 27 EF-Tu.GTP.serT-tRNA + 72 EF-Tu.GTP.serV-tRNA + 27 EF-Tu.GTP.thr1-tRNA + 27 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 45 EF-Tu.GTP.trpT-tRNA + 36 EF-Tu.GTP.tyr1-tRNA + 72 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 18 EF-Tu.GTP.val3-tRNA + 7245 mg2 + 1 rib_ini_b0858_9 --> 1 rib_70_elo1_b0858_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_elo_b0858_9_rib2	Translation elongation 2 b0858 9 ribosome(s)	1440 h2o + 1 rib_70_elo1_b0858_9_cplx --> 1440 EF-G.GDP + 1440 EF-Tu.GDP + 81 ala1_tRNA + 18 ala2_tRNA + 72 arg1_tRNA + 18 argX_tRNA + 18 asn1_tRNA + 27 asp1_tRNA + 9 cysT_tRNA + 9 fmet_tRNA + 27 gln1_tRNA + 18 gln2_tRNA + 63 glu1_tRNA + 54 gly1_tRNA + 9 glyT_tRNA + 18 glyU_tRNA + 2880 h + 27 hisR_tRNA + 108 ile1_tRNA + 162 leu1_tRNA + 27 leu2_tRNA + 27 leuU_tRNA + 9 leuW_tRNA + 18 leuZ_tRNA + 45 lys1_tRNA + 45 met1_tRNA + 7245 mg2 + 108 phe1_tRNA + 2880 pi + 18 pro1_tRNA + 9 pro2_tRNA + 18 proL_tRNA + 1 rib_70_elo2_b0858_9_cplx + 18 ser2_tRNA + 18 ser3_tRNA + 27 serT_tRNA + 72 serV_tRNA + 27 thr1_tRNA + 27 thr3_tRNA + 18 thrU_tRNA + 45 trpT_tRNA + 36 tyr1_tRNA + 72 val1_tRNA + 9 val2_tRNA + 18 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_elo_b0859_11_rib1	Translation elongation 1 b0859 11 ribosome(s)	4114 EF-G.GTP + 275 EF-Tu.GTP.ala1-tRNA + 132 EF-Tu.GTP.ala2-tRNA + 220 EF-Tu.GTP.arg1-tRNA + 11 EF-Tu.GTP.argX-tRNA + 88 EF-Tu.GTP.asn1-tRNA + 187 EF-Tu.GTP.asp1-tRNA + 121 EF-Tu.GTP.cysT-tRNA + 176 EF-Tu.GTP.gln1-tRNA + 99 EF-Tu.GTP.gln2-tRNA + 231 EF-Tu.GTP.glu1-tRNA + 143 EF-Tu.GTP.gly1-tRNA + 11 EF-Tu.GTP.glyT-tRNA + 77 EF-Tu.GTP.glyU-tRNA + 77 EF-Tu.GTP.hisR-tRNA + 176 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.ile2-tRNA + 286 EF-Tu.GTP.leu1-tRNA + 22 EF-Tu.GTP.leu2-tRNA + 99 EF-Tu.GTP.leuU-tRNA + 22 EF-Tu.GTP.leuW-tRNA + 55 EF-Tu.GTP.leuZ-tRNA + 176 EF-Tu.GTP.lys1-tRNA + 132 EF-Tu.GTP.met1-tRNA + 187 EF-Tu.GTP.phe1-tRNA + 209 EF-Tu.GTP.pro1-tRNA + 33 EF-Tu.GTP.pro2-tRNA + 22 EF-Tu.GTP.proL-tRNA + 33 EF-Tu.GTP.proM-tRNA + 44 EF-Tu.GTP.ser1-tRNA + 11 EF-Tu.GTP.ser2-tRNA + 55 EF-Tu.GTP.serT-tRNA + 77 EF-Tu.GTP.serV-tRNA + 88 EF-Tu.GTP.thr1-tRNA + 44 EF-Tu.GTP.thr2-tRNA + 66 EF-Tu.GTP.thr3-tRNA + 11 EF-Tu.GTP.thrU-tRNA + 66 EF-Tu.GTP.trpT-tRNA + 99 EF-Tu.GTP.tyr1-tRNA + 154 EF-Tu.GTP.val1-tRNA + 22 EF-Tu.GTP.val2-tRNA + 66 EF-Tu.GTP.val3-tRNA + 20570 mg2 + 1 rib_ini_b0859_11 --> 1 rib_70_elo1_b0859_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_elo_b0859_11_rib2	Translation elongation 2 b0859 11 ribosome(s)	4103 h2o + 1 rib_70_elo1_b0859_11_cplx --> 4103 EF-G.GDP + 4103 EF-Tu.GDP + 275 ala1_tRNA + 132 ala2_tRNA + 220 arg1_tRNA + 11 argX_tRNA + 88 asn1_tRNA + 187 asp1_tRNA + 121 cysT_tRNA + 11 fmet_tRNA + 176 gln1_tRNA + 88 gln2_tRNA + 231 glu1_tRNA + 143 gly1_tRNA + 11 glyT_tRNA + 77 glyU_tRNA + 8206 h + 77 hisR_tRNA + 176 ile1_tRNA + 11 ile2_tRNA + 286 leu1_tRNA + 22 leu2_tRNA + 99 leuU_tRNA + 22 leuW_tRNA + 55 leuZ_tRNA + 176 lys1_tRNA + 132 met1_tRNA + 20570 mg2 + 187 phe1_tRNA + 8206 pi + 209 pro1_tRNA + 33 pro2_tRNA + 22 proL_tRNA + 33 proM_tRNA + 1 rib_70_elo2_b0859_11_cplx + 44 ser1_tRNA + 11 ser2_tRNA + 55 serT_tRNA + 77 serV_tRNA + 88 thr1_tRNA + 44 thr2_tRNA + 66 thr3_tRNA + 11 thrU_tRNA + 66 trpT_tRNA + 99 tyr1_tRNA + 154 val1_tRNA + 22 val2_tRNA + 66 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_elo_b0859_1_rib1	Translation elongation 1 b0859 1 ribosome(s)	374 EF-G.GTP + 25 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 17 EF-Tu.GTP.asp1-tRNA + 11 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 9 EF-Tu.GTP.gln2-tRNA + 21 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 26 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 17 EF-Tu.GTP.phe1-tRNA + 19 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 14 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1870 mg2 + 1 rib_ini_b0859_1 --> 1 rib_70_elo1_b0859_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_elo_b0859_1_rib2	Translation elongation 2 b0859 1 ribosome(s)	373 h2o + 1 rib_70_elo1_b0859_1_cplx --> 373 EF-G.GDP + 373 EF-Tu.GDP + 25 ala1_tRNA + 12 ala2_tRNA + 20 arg1_tRNA + 1 argX_tRNA + 8 asn1_tRNA + 17 asp1_tRNA + 11 cysT_tRNA + 1 fmet_tRNA + 16 gln1_tRNA + 8 gln2_tRNA + 21 glu1_tRNA + 13 gly1_tRNA + 1 glyT_tRNA + 7 glyU_tRNA + 746 h + 7 hisR_tRNA + 16 ile1_tRNA + 1 ile2_tRNA + 26 leu1_tRNA + 2 leu2_tRNA + 9 leuU_tRNA + 2 leuW_tRNA + 5 leuZ_tRNA + 16 lys1_tRNA + 12 met1_tRNA + 1870 mg2 + 17 phe1_tRNA + 746 pi + 19 pro1_tRNA + 3 pro2_tRNA + 2 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b0859_1_cplx + 4 ser1_tRNA + 1 ser2_tRNA + 5 serT_tRNA + 7 serV_tRNA + 8 thr1_tRNA + 4 thr2_tRNA + 6 thr3_tRNA + 1 thrU_tRNA + 6 trpT_tRNA + 9 tyr1_tRNA + 14 val1_tRNA + 2 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334

tl_elo_b0859_22_rib1	Translation elongation 1 b0859 22 ribosome(s)	8228 EF-G.GTP + 550 EF-Tu.GTP.ala1-tRNA + 264 EF-Tu.GTP.ala2-tRNA + 440 EF-Tu.GTP.arg1-tRNA + 22 EF-Tu.GTP.argX-tRNA + 176 EF-Tu.GTP.asn1-tRNA + 374 EF-Tu.GTP.asp1-tRNA + 242 EF-Tu.GTP.cysT-tRNA + 352 EF-Tu.GTP.gln1-tRNA + 198 EF-Tu.GTP.gln2-tRNA + 462 EF-Tu.GTP.glu1-tRNA + 286 EF-Tu.GTP.gly1-tRNA + 22 EF-Tu.GTP.glyT-tRNA + 154 EF-Tu.GTP.glyU-tRNA + 154 EF-Tu.GTP.hisR-tRNA + 352 EF-Tu.GTP.ile1-tRNA + 22 EF-Tu.GTP.ile2-tRNA + 572 EF-Tu.GTP.leu1-tRNA + 44 EF-Tu.GTP.leu2-tRNA + 198 EF-Tu.GTP.leuU-tRNA + 44 EF-Tu.GTP.leuW-tRNA + 110 EF-Tu.GTP.leuZ-tRNA + 352 EF-Tu.GTP.lys1-tRNA + 264 EF-Tu.GTP.met1-tRNA + 374 EF-Tu.GTP.phe1-tRNA + 418 EF-Tu.GTP.pro1-tRNA + 66 EF-Tu.GTP.pro2-tRNA + 44 EF-Tu.GTP.proL-tRNA + 66 EF-Tu.GTP.proM-tRNA + 88 EF-Tu.GTP.ser1-tRNA + 22 EF-Tu.GTP.ser2-tRNA + 110 EF-Tu.GTP.serT-tRNA + 154 EF-Tu.GTP.serV-tRNA + 176 EF-Tu.GTP.thr1-tRNA + 88 EF-Tu.GTP.thr2-tRNA + 132 EF-Tu.GTP.thr3-tRNA + 22 EF-Tu.GTP.thrU-tRNA + 132 EF-Tu.GTP.trpT-tRNA + 198 EF-Tu.GTP.tyr1-tRNA + 308 EF-Tu.GTP.val1-tRNA + 44 EF-Tu.GTP.val2-tRNA + 132 EF-Tu.GTP.val3-tRNA + 41140 mg2 + 1 rib	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_elo_b0859_22_rib2	Translation elongation 2 b0859 22 ribosome(s)	8206 h2o + 1 rib_70_elo1_b0859_22_cplx --> 8206 EF-G.GDP + 8206 EF-Tu.GDP + 550 ala1_tRNA + 264 ala2_tRNA + 440 arg1_tRNA + 22 argX_tRNA + 176 asn1_tRNA + 374 asp1_tRNA + 242 cysT_tRNA + 22 fmet_tRNA + 352 gln1_tRNA + 176 gln2_tRNA + 462 glu1_tRNA + 286 gly1_tRNA + 22 glyT_tRNA + 154 glyU_tRNA + 16412 h + 154 hisR_tRNA + 352 ile1_tRNA + 22 ile2_tRNA + 572 leu1_tRNA + 44 leu2_tRNA + 198 leuU_tRNA + 44 leuW_tRNA + 110 leuZ_tRNA + 352 lys1_tRNA + 264 met1_tRNA + 41140 mg2 + 374 phe1_tRNA + 16412 pi + 418 pro1_tRNA + 66 pro2_tRNA + 44 proL_tRNA + 66 proM_tRNA + 1 rib_70_elo2_b0859_22_cplx + 88 ser1_tRNA + 22 ser2_tRNA + 110 serT_tRNA + 154 serV_tRNA + 176 thr1_tRNA + 88 thr2_tRNA + 132 thr3_tRNA + 22 thrU_tRNA + 132 trpT_tRNA + 198 tyr1_tRNA + 308 val1_tRNA + 44 val2_tRNA + 132 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_elo_b0884_1_rib1	Translation elongation 1 b0884 1 ribosome(s)	71 EF-G.GTP + 1 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 5 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 5 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 355 mg2 + 1 rib_ini_b0884_1 --> 1 rib_70_elo1_b0884_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381
tl_elo_b0884_1_rib2	Translation elongation 2 b0884 1 ribosome(s)	70 h2o + 1 rib_70_elo1_b0884_1_cplx --> 70 EF-G.GDP + 70 EF-Tu.GDP + 1 ala1_tRNA + 1 ala2_tRNA + 5 arg1_tRNA + 4 asn1_tRNA + 3 asp1_tRNA + 1 fmet_tRNA + 1 gln2_tRNA + 6 glu1_tRNA + 5 gly1_tRNA + 140 h + 2 hisR_tRNA + 5 ile1_tRNA + 3 leu1_tRNA + 1 leu2_tRNA + 1 leuU_tRNA + 1 leuZ_tRNA + 5 lys1_tRNA + 3 met1_tRNA + 355 mg2 + 2 phe1_tRNA + 140 pi + 1 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b0884_1_cplx + 1 ser1_tRNA + 2 serV_tRNA + 3 thr1_tRNA + 2 thr2_tRNA + 2 thr3_tRNA + 2 tyr1_tRNA + 3 val1_tRNA + 1 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381
tl_elo_b0884_2_rib1	Translation elongation 1 b0884 2 ribosome(s)	142 EF-G.GTP + 2 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 710 mg2 + 1 rib_ini_b0884_2 --> 1 rib_70_elo1_b0884_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381
tl_elo_b0884_2_rib2	Translation elongation 2 b0884 2 ribosome(s)	140 h2o + 1 rib_70_elo1_b0884_2_cplx --> 140 EF-G.GDP + 140 EF-Tu.GDP + 2 ala1_tRNA + 2 ala2_tRNA + 10 arg1_tRNA + 8 asn1_tRNA + 6 asp1_tRNA + 2 fmet_tRNA + 2 gln2_tRNA + 12 glu1_tRNA + 10 gly1_tRNA + 280 h + 4 hisR_tRNA + 10 ile1_tRNA + 6 leu1_tRNA + 2 leu2_tRNA + 2 leuU_tRNA + 2 leuZ_tRNA + 10 lys1_tRNA + 6 met1_tRNA + 710 mg2 + 4 phe1_tRNA + 280 pi + 2 pro1_tRNA + 2 pro2_tRNA + 1 rib_70_elo2_b0884_2_cplx + 2 ser1_tRNA + 4 serV_tRNA + 6 thr1_tRNA + 4 thr2_tRNA + 4 thr3_tRNA + 4 tyr1_tRNA + 6 val1_tRNA + 2 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381
tl_elo_b0884_4_rib1	Translation elongation 1 b0884 4 ribosome(s)	284 EF-G.GTP + 4 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1420 mg2 + 1 rib_ini_b0884_4 --> 1 rib_70_elo1_b0884_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381
tl_elo_b0884_4_rib2	Translation elongation 2 b0884 4 ribosome(s)	280 h2o + 1 rib_70_elo1_b0884_4_cplx --> 280 EF-G.GDP + 280 EF-Tu.GDP + 4 ala1_tRNA + 4 ala2_tRNA + 20 arg1_tRNA + 16 asn1_tRNA + 12 asp1_tRNA + 4 fmet_tRNA + 4 gln2_tRNA + 24 glu1_tRNA + 20 gly1_tRNA + 560 h + 8 hisR_tRNA + 20 ile1_tRNA + 12 leu1_tRNA + 4 leu2_tRNA + 4 leuU_tRNA + 4 leuZ_tRNA + 20 lys1_tRNA + 12 met1_tRNA + 1420 mg2 + 8 phe1_tRNA + 560 pi + 4 pro1_tRNA + 4 pro2_tRNA + 1 rib_70_elo2_b0884_4_cplx + 4 ser1_tRNA + 8 serV_tRNA + 12 thr1_tRNA + 8 thr2_tRNA + 8 thr3_tRNA + 8 tyr1_tRNA + 12 val1_tRNA + 4 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381

tl_elo_b0893_12_rib1	Translation elongation 1 b0893 12 ribosome(s)	5148 EF-G.GTP + 384 EF-Tu.GTP.ala1-tRNA + 36 EF-Tu.GTP.ala2-tRNA + 384 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argX-tRNA + 204 EF-Tu.GTP.asn1-tRNA + 348 EF-Tu.GTP.asp1-tRNA + 60 EF-Tu.GTP.cysT-tRNA + 180 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 468 EF-Tu.GTP.glu1-tRNA + 324 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyT-tRNA + 24 EF-Tu.GTP.glyU-tRNA + 120 EF-Tu.GTP.hisR-tRNA + 216 EF-Tu.GTP.ile1-tRNA + 456 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.leu2-tRNA + 48 EF-Tu.GTP.leuU-tRNA + 24 EF-Tu.GTP.leuZ-tRNA + 252 EF-Tu.GTP.lys1-tRNA + 156 EF-Tu.GTP.met1-tRNA + 144 EF-Tu.GTP.phe1-tRNA + 108 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proL-tRNA + 72 EF-Tu.GTP.proM-tRNA + 60 EF-Tu.GTP.ser1-tRNA + 48 EF-Tu.GTP.ser2-tRNA + 36 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serT-tRNA + 48 EF-Tu.GTP.serV-tRNA + 120 EF-Tu.GTP.thr1-tRNA + 72 EF-Tu.GTP.thr2-tRNA + 72 EF-Tu.GTP.thr3-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 144 EF-Tu.GTP.tyr1-tRNA + 168 EF-Tu.GTP.val1-tRNA + 48 EF-Tu.GTP.val2-tRNA + 144 EF-Tu.GTP.val3-tRNA + 25740 mg2 + 1 rib_ini_b0893_12 --> 1 rib_70_elo1_b0893_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_elo_b0893_12_rib2	Translation elongation 2 b0893 12 ribosome(s)	5136 h2o + 1 rib_70_elo1_b0893_12_cplx --> 5136 EF-G.GDP + 5136 EF-Tu.GDP + 384 ala1_tRNA + 36 ala2_tRNA + 384 arg1_tRNA + 12 argX_tRNA + 204 asn1_tRNA + 348 asp1_tRNA + 60 cysT_tRNA + 12 fmet_tRNA + 180 gln1_tRNA + 24 gln2_tRNA + 468 glu1_tRNA + 312 gly1_tRNA + 12 glyT_tRNA + 24 glyU_tRNA + 10272 h + 120 hisR_tRNA + 216 ile1_tRNA + 456 leu1_tRNA + 24 leu2_tRNA + 48 leuU_tRNA + 24 leuZ_tRNA + 252 lys1_tRNA + 156 met1_tRNA + 25740 mg2 + 144 phe1_tRNA + 10272 pi + 108 pro1_tRNA + 36 pro2_tRNA + 12 proL_tRNA + 72 proM_tRNA + 1 rib_70_elo2_b0893_12_cplx + 60 ser1_tRNA + 48 ser2_tRNA + 36 ser3_tRNA + 24 serT_tRNA + 48 serV_tRNA + 120 thr1_tRNA + 72 thr2_tRNA + 72 thr3_tRNA + 36 trpT_tRNA + 144 tyr1_tRNA + 168 val1_tRNA + 48 val2_tRNA + 144 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_elo_b0893_1_rib1	Translation elongation 1 b0893 1 ribosome(s)	429 EF-G.GTP + 32 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 32 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 17 EF-Tu.GTP.asn1-tRNA + 29 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 15 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 39 EF-Tu.GTP.glu1-tRNA + 27 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 38 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 21 EF-Tu.GTP.lys1-tRNA + 13 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 14 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 2145 mg2 + 1 rib_ini_b0893_1 --> 1 rib_70_elo1_b0893_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_elo_b0893_1_rib2	Translation elongation 2 b0893 1 ribosome(s)	428 h2o + 1 rib_70_elo1_b0893_1_cplx --> 428 EF-G.GDP + 428 EF-Tu.GDP + 32 ala1_tRNA + 3 ala2_tRNA + 32 arg1_tRNA + 1 argX_tRNA + 17 asn1_tRNA + 29 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 15 gln1_tRNA + 2 gln2_tRNA + 39 glu1_tRNA + 26 gly1_tRNA + 1 glyT_tRNA + 2 glyU_tRNA + 856 h + 10 hisR_tRNA + 18 ile1_tRNA + 38 leu1_tRNA + 2 leu2_tRNA + 4 leuU_tRNA + 2 leuZ_tRNA + 21 lys1_tRNA + 13 met1_tRNA + 2145 mg2 + 12 phe1_tRNA + 856 pi + 9 pro1_tRNA + 3 pro2_tRNA + 1 proL_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b0893_1_cplx + 5 ser1_tRNA + 4 ser2_tRNA + 3 ser3_tRNA + 2 serT_tRNA + 4 serV_tRNA + 10 thr1_tRNA + 6 thr2_tRNA + 6 thr3_tRNA + 3 trpT_tRNA + 12 tyr1_tRNA + 14 val1_tRNA + 4 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_elo_b0893_25_rib1	Translation elongation 1 b0893 25 ribosome(s)	10725 EF-G.GTP + 800 EF-Tu.GTP.ala1-tRNA + 75 EF-Tu.GTP.ala2-tRNA + 800 EF-Tu.GTP.arg1-tRNA + 25 EF-Tu.GTP.argX-tRNA + 425 EF-Tu.GTP.asn1-tRNA + 725 EF-Tu.GTP.asp1-tRNA + 125 EF-Tu.GTP.cysT-tRNA + 375 EF-Tu.GTP.gln1-tRNA + 50 EF-Tu.GTP.gln2-tRNA + 975 EF-Tu.GTP.glu1-tRNA + 675 EF-Tu.GTP.gly1-tRNA + 25 EF-Tu.GTP.glyT-tRNA + 50 EF-Tu.GTP.glyU-tRNA + 250 EF-Tu.GTP.hisR-tRNA + 450 EF-Tu.GTP.ile1-tRNA + 950 EF-Tu.GTP.leu1-tRNA + 50 EF-Tu.GTP.leu2-tRNA + 100 EF-Tu.GTP.leuU-tRNA + 50 EF-Tu.GTP.leuZ-tRNA + 525 EF-Tu.GTP.lys1-tRNA + 325 EF-Tu.GTP.met1-tRNA + 300 EF-Tu.GTP.phe1-tRNA + 225 EF-Tu.GTP.pro1-tRNA + 75 EF-Tu.GTP.pro2-tRNA + 25 EF-Tu.GTP.proL-tRNA + 150 EF-Tu.GTP.proM-tRNA + 125 EF-Tu.GTP.ser1-tRNA + 100 EF-Tu.GTP.ser2-tRNA + 75 EF-Tu.GTP.ser3-tRNA + 50 EF-Tu.GTP.serT-tRNA + 100 EF-Tu.GTP.serV-tRNA + 250 EF-Tu.GTP.thr1-tRNA + 150 EF-Tu.GTP.thr2-tRNA + 150 EF-Tu.GTP.thr3-tRNA + 75 EF-Tu.GTP.trpT-tRNA + 300 EF-Tu.GTP.tyr1-tRNA + 350 EF-Tu.GTP.val1-tRNA + 100 EF-Tu.GTP.val2-tRNA + 300 EF-Tu.GTP.val3-tRNA + 53625 mg2 + 1 rib_ini_b0893_25 --> 1 rib_70_elo1_b0893_25_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_elo_b0893_25_rib2	Translation elongation 2 b0893 25 ribosome(s)	10700 h2o + 1 rib_70_elo1_b0893_25_cplx --> 10700 EF-G.GDP + 10700 EF-Tu.GDP + 800 ala1_tRNA + 75 ala2_tRNA + 800 arg1_tRNA + 25 argX_tRNA + 425 asn1_tRNA + 725 asp1_tRNA + 125 cysT_tRNA + 25 fmet_tRNA + 375 gln1_tRNA + 50 gln2_tRNA + 975 glu1_tRNA + 650 gly1_tRNA + 25 glyT_tRNA + 50 glyU_tRNA + 21400 h + 250 hisR_tRNA + 450 ile1_tRNA + 950 leu1_tRNA + 50 leu2_tRNA + 100 leuU_tRNA + 50 leuZ_tRNA + 525 lys1_tRNA + 325 met1_tRNA + 53625 mg2 + 300 phe1_tRNA + 21400 pi + 225 pro1_tRNA + 75 pro2_tRNA + 25 proL_tRNA + 150 proM_tRNA + 1 rib_70_elo2_b0893_25_cplx + 125 ser1_tRNA + 100 ser2_tRNA + 75 ser3_tRNA + 50 serT_tRNA + 100 serV_tRNA + 250 thr1_tRNA + 150 thr2_tRNA + 150 thr3_tRNA + 75 trpT_tRNA + 300 tyr1_tRNA + 350 val1_tRNA + 100 val2_tRNA + 300 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419

tl_elo_b0910_13_rib1	Translation elongation 1 b0910 13 ribosome(s)	2938 EF-G.GTP + 377 EF-Tu.GTP.ala1-tRNA + 65 EF-Tu.GTP.ala2-tRNA + 247 EF-Tu.GTP.arg1-tRNA + 65 EF-Tu.GTP.asn1-tRNA + 195 EF-Tu.GTP.asp1-tRNA + 13 EF-Tu.GTP.cysT-tRNA + 52 EF-Tu.GTP.gln1-tRNA + 65 EF-Tu.GTP.gln2-tRNA + 221 EF-Tu.GTP.glu1-tRNA + 117 EF-Tu.GTP.gly1-tRNA + 13 EF-Tu.GTP.glyT-tRNA + 26 EF-Tu.GTP.glyU-tRNA + 78 EF-Tu.GTP.hisR-tRNA + 143 EF-Tu.GTP.ile1-tRNA + 117 EF-Tu.GTP.leu1-tRNA + 104 EF-Tu.GTP.leu2-tRNA + 52 EF-Tu.GTP.leuU-tRNA + 26 EF-Tu.GTP.leuW-tRNA + 65 EF-Tu.GTP.leuZ-tRNA + 91 EF-Tu.GTP.lys1-tRNA + 39 EF-Tu.GTP.met1-tRNA + 91 EF-Tu.GTP.phe1-tRNA + 39 EF-Tu.GTP.pro1-tRNA + 13 EF-Tu.GTP.pro2-tRNA + 65 EF-Tu.GTP.proM-tRNA + 39 EF-Tu.GTP.ser1-tRNA + 52 EF-Tu.GTP.ser3-tRNA + 13 EF-Tu.GTP.serT-tRNA + 52 EF-Tu.GTP.serV-tRNA + 65 EF-Tu.GTP.thr1-tRNA + 13 EF-Tu.GTP.thr2-tRNA + 26 EF-Tu.GTP.thr3-tRNA + 13 EF-Tu.GTP.trpT-tRNA + 26 EF-Tu.GTP.tyr1-tRNA + 156 EF-Tu.GTP.val1-tRNA + 26 EF-Tu.GTP.val2-tRNA + 78 EF-Tu.GTP.val3-tRNA + 14690 mg2 + 1 rib_ini_b0910_13 --> 1 rib_70_elo1_b0910_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_elo_b0910_13_rib2	Translation elongation 2 b0910 13 ribosome(s)	2925 h2o + 1 rib_70_elo1_b0910_13_cplx --> 2925 EF-G.GDP + 2925 EF-Tu.GDP + 364 ala1_tRNA + 65 ala2_tRNA + 247 arg1_tRNA + 65 asn1_tRNA + 195 asp1_tRNA + 13 cysT_tRNA + 13 fmet_tRNA + 52 gln1_tRNA + 65 gln2_tRNA + 221 glu1_tRNA + 117 gly1_tRNA + 13 glyT_tRNA + 26 glyU_tRNA + 5850 h + 78 hisR_tRNA + 143 ile1_tRNA + 117 leu1_tRNA + 104 leu2_tRNA + 52 leuU_tRNA + 26 leuW_tRNA + 65 leuZ_tRNA + 91 lys1_tRNA + 39 met1_tRNA + 14690 mg2 + 91 phe1_tRNA + 5850 pi + 39 pro1_tRNA + 13 pro2_tRNA + 65 proM_tRNA + 1 rib_70_elo2_b0910_13_cplx + 39 ser1_tRNA + 52 ser3_tRNA + 13 serT_tRNA + 52 serV_tRNA + 65 thr1_tRNA + 13 thr2_tRNA + 26 thr3_tRNA + 13 trpT_tRNA + 26 tyr1_tRNA + 156 val1_tRNA + 26 val2_tRNA + 78 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_elo_b0910_1_rib1	Translation elongation 1 b0910 1 ribosome(s)	226 EF-G.GTP + 29 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 19 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 17 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1130 mg2 + 1 rib_ini_b0910_1 --> 1 rib_70_elo1_b0910_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_elo_b0910_1_rib2	Translation elongation 2 b0910 1 ribosome(s)	225 h2o + 1 rib_70_elo1_b0910_1_cplx --> 225 EF-G.GDP + 225 EF-Tu.GDP + 28 ala1_tRNA + 5 ala2_tRNA + 19 arg1_tRNA + 5 asn1_tRNA + 15 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 5 gln2_tRNA + 17 glu1_tRNA + 9 gly1_tRNA + 1 glyT_tRNA + 2 glyU_tRNA + 450 h + 6 hisR_tRNA + 11 ile1_tRNA + 9 leu1_tRNA + 8 leu2_tRNA + 4 leuU_tRNA + 2 leuW_tRNA + 5 leuZ_tRNA + 7 lys1_tRNA + 3 met1_tRNA + 1130 mg2 + 7 phe1_tRNA + 450 pi + 3 pro1_tRNA + 1 pro2_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b0910_1_cplx + 3 ser1_tRNA + 4 ser3_tRNA + 1 serT_tRNA + 4 serV_tRNA + 5 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 1 trpT_tRNA + 2 tyr1_tRNA + 12 val1_tRNA + 2 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_elo_b0910_6_rib1	Translation elongation 1 b0910 6 ribosome(s)	1356 EF-G.GTP + 174 EF-Tu.GTP.ala1-tRNA + 30 EF-Tu.GTP.ala2-tRNA + 114 EF-Tu.GTP.arg1-tRNA + 30 EF-Tu.GTP.asn1-tRNA + 90 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 30 EF-Tu.GTP.gln2-tRNA + 102 EF-Tu.GTP.glu1-tRNA + 54 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.glyU-tRNA + 36 EF-Tu.GTP.hisR-tRNA + 66 EF-Tu.GTP.ile1-tRNA + 54 EF-Tu.GTP.leu1-tRNA + 48 EF-Tu.GTP.leu2-tRNA + 24 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuW-tRNA + 30 EF-Tu.GTP.leuZ-tRNA + 42 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 42 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 30 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serT-tRNA + 24 EF-Tu.GTP.serV-tRNA + 30 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 72 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 36 EF-Tu.GTP.val3-tRNA + 6780 mg2 + 1 rib_ini_b0910_6 --> 1 rib_70_elo1_b0910_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_elo_b0910_6_rib2	Translation elongation 2 b0910 6 ribosome(s)	1350 h2o + 1 rib_70_elo1_b0910_6_cplx --> 1350 EF-G.GDP + 1350 EF-Tu.GDP + 168 ala1_tRNA + 30 ala2_tRNA + 114 arg1_tRNA + 30 asn1_tRNA + 90 asp1_tRNA + 6 cysT_tRNA + 6 fmet_tRNA + 24 gln1_tRNA + 30 gln2_tRNA + 102 glu1_tRNA + 54 gly1_tRNA + 6 glyT_tRNA + 12 glyU_tRNA + 2700 h + 36 hisR_tRNA + 66 ile1_tRNA + 54 leu1_tRNA + 48 leu2_tRNA + 24 leuU_tRNA + 12 leuW_tRNA + 30 leuZ_tRNA + 42 lys1_tRNA + 18 met1_tRNA + 6780 mg2 + 42 phe1_tRNA + 2700 pi + 18 pro1_tRNA + 6 pro2_tRNA + 30 proM_tRNA + 1 rib_70_elo2_b0910_6_cplx + 18 ser1_tRNA + 2 ser3_tRNA + 6 serT_tRNA + 24 serV_tRNA + 30 thr1_tRNA + 6 thr2_tRNA + 12 thr3_tRNA + 6 trpT_tRNA + 12 tyr1_tRNA + 72 val1_tRNA + 12 val2_tRNA + 36 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644

tl_elo_b0911_16_rib1	Translation elongation 1 b0911 16 ribosome(s)	8896 EF-G.GTP + 688 EF-Tu.GTP.ala1-tRNA + 80 EF-Tu.GTP.ala2-tRNA + 480 EF-Tu.GTP.arg1-tRNA + 384 EF-Tu.GTP.asn1-tRNA + 672 EF-Tu.GTP.asp1-tRNA + 32 EF-Tu.GTP.cysT-tRNA + 208 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.gln2-tRNA + 960 EF-Tu.GTP.glu1-tRNA + 768 EF-Tu.GTP.gly1-tRNA + 128 EF-Tu.GTP.hisR-tRNA + 480 EF-Tu.GTP.ile1-tRNA + 624 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 64 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuZ-tRNA + 688 EF-Tu.GTP.lys1-tRNA + 80 EF-Tu.GTP.met1-tRNA + 272 EF-Tu.GTP.phe1-tRNA + 144 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.proM-tRNA + 192 EF-Tu.GTP.ser1-tRNA + 144 EF-Tu.GTP.ser2-tRNA + 64 EF-Tu.GTP.serV-tRNA + 192 EF-Tu.GTP.thr1-tRNA + 192 EF-Tu.GTP.thr2-tRNA + 16 EF-Tu.GTP.thr3-tRNA + 112 EF-Tu.GTP.trpT-tRNA + 96 EF-Tu.GTP.tyr1-tRNA + 288 EF-Tu.GTP.val1-tRNA + 16 EF-Tu.GTP.val2-tRNA + 768 EF-Tu.GTP.val3-tRNA + 44480 mg2 + 1 rib_ini_b0911_16 --> 1 rib_70_elo1_b0911_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+00	7.04E+00	0	5.18E+00	5.18	0	5.18E+00	5.18
tl_elo_b0911_16_rib2	Translation elongation 2 b0911 16 ribosome(s)	8880 h2o + 1 rib_70_elo1_b0911_16_cplx --> 8880 EF-G.GDP + 8880 EF-Tu.GDP + 688 ala1_tRNA + 80 ala2_tRNA + 480 arg1_tRNA + 384 asn1_tRNA + 672 asp1_tRNA + 32 cysT_tRNA + 16 fmet_tRNA + 208 gln1_tRNA + 16 gln2_tRNA + 944 glu1_tRNA + 768 gly1_tRNA + 17760 h + 128 hisR_tRNA + 480 ile1_tRNA + 624 leu1_tRNA + 16 leu2_tRNA + 64 leuU_tRNA + 16 leuZ_tRNA + 688 lys1_tRNA + 80 met1_tRNA + 44480 mg2 + 272 phe1_tRNA + 17760 pi + 144 pro1_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b0911_16_cplx + 192 ser1_tRNA + 144 ser2_tRNA + 64 serV_tRNA + 192 thr1_tRNA + 192 thr2_tRNA + 16 thr3_tRNA + 112 trpT_tRNA + 96 tyr1_tRNA + 288 val1_tRNA + 16 val2_tRNA + 768 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+00	7.04E+00	0	5.18E+00	5.18	0	5.18E+00	5.18
tl_elo_b0911_1_rib1	Translation elongation 1 b0911 1 ribosome(s)	556 EF-G.GTP + 43 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 30 EF-Tu.GTP.arg1-tRNA + 24 EF-Tu.GTP.asn1-tRNA + 42 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 13 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 60 EF-Tu.GTP.glu1-tRNA + 48 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 30 EF-Tu.GTP.ile1-tRNA + 39 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 43 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 17 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 18 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 48 EF-Tu.GTP.val3-tRNA + 2780 mg2 + 1 rib_ini_b0911_1 --> 1 rib_70_elo1_b0911_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.50E+01	7.50E+01	0	8.08E+01	80.77419	0	1.12E+01	11.248
tl_elo_b0911_1_rib2	Translation elongation 2 b0911 1 ribosome(s)	555 h2o + 1 rib_70_elo1_b0911_1_cplx --> 555 EF-G.GDP + 555 EF-Tu.GDP + 43 ala1_tRNA + 5 ala2_tRNA + 30 arg1_tRNA + 24 asn1_tRNA + 42 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 13 gln1_tRNA + 1 gln2_tRNA + 59 glu1_tRNA + 48 gly1_tRNA + 1110 h + 8 hisR_tRNA + 30 ile1_tRNA + 39 leu1_tRNA + 1 leu2_tRNA + 4 leuU_tRNA + 1 leuZ_tRNA + 43 lys1_tRNA + 5 met1_tRNA + 2780 mg2 + 17 phe1_tRNA + 1110 pi + 9 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b0911_1_cplx + 12 ser1_tRNA + 9 ser2_tRNA + 4 serV_tRNA + 12 thr1_tRNA + 12 thr2_tRNA + 1 thr3_tRNA + 7 trpT_tRNA + 6 tyr1_tRNA + 18 val1_tRNA + 1 val2_tRNA + 48 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.50E+01	7.50E+01	0	8.08E+01	80.77419	0	1.12E+01	11.248
tl_elo_b0911_32_rib1	Translation elongation 1 b0911 32 ribosome(s)	17792 EF-G.GTP + 1376 EF-Tu.GTP.ala1-tRNA + 160 EF-Tu.GTP.ala2-tRNA + 960 EF-Tu.GTP.arg1-tRNA + 768 EF-Tu.GTP.asn1-tRNA + 1344 EF-Tu.GTP.asp1-tRNA + 64 EF-Tu.GTP.cysT-tRNA + 416 EF-Tu.GTP.gln1-tRNA + 32 EF-Tu.GTP.gln2-tRNA + 1920 EF-Tu.GTP.glu1-tRNA + 1536 EF-Tu.GTP.gly1-tRNA + 256 EF-Tu.GTP.hisR-tRNA + 960 EF-Tu.GTP.ile1-tRNA + 1248 EF-Tu.GTP.leu1-tRNA + 32 EF-Tu.GTP.leu2-tRNA + 128 EF-Tu.GTP.leuU-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 1376 EF-Tu.GTP.lys1-tRNA + 160 EF-Tu.GTP.met1-tRNA + 544 EF-Tu.GTP.phe1-tRNA + 288 EF-Tu.GTP.pro1-tRNA + 32 EF-Tu.GTP.proM-tRNA + 384 EF-Tu.GTP.ser1-tRNA + 288 EF-Tu.GTP.ser2-tRNA + 128 EF-Tu.GTP.serV-tRNA + 384 EF-Tu.GTP.thr1-tRNA + 384 EF-Tu.GTP.thr2-tRNA + 32 EF-Tu.GTP.thr3-tRNA + 224 EF-Tu.GTP.trpT-tRNA + 192 EF-Tu.GTP.tyr1-tRNA + 576 EF-Tu.GTP.val1-tRNA + 32 EF-Tu.GTP.val2-tRNA + 1536 EF-Tu.GTP.val3-tRNA + 88960 mg2 + 1 rib_ini_b0911_32 --> 1 rib_70_elo1_b0911_32_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.52E+00	3.52E+00	0	2.59E+00	2.59	0	2.59E+00	2.59
tl_elo_b0911_32_rib2	Translation elongation 2 b0911 32 ribosome(s)	17760 h2o + 1 rib_70_elo1_b0911_32_cplx --> 17760 EF-G.GDP + 17760 EF-Tu.GDP + 1376 ala1_tRNA + 160 ala2_tRNA + 960 arg1_tRNA + 768 asn1_tRNA + 1344 asp1_tRNA + 64 cysT_tRNA + 32 fmet_tRNA + 416 gln1_tRNA + 32 gln2_tRNA + 1888 glu1_tRNA + 1536 gly1_tRNA + 35520 h + 256 hisR_tRNA + 960 ile1_tRNA + 1248 leu1_tRNA + 32 leu2_tRNA + 128 leuU_tRNA + 32 leuZ_tRNA + 1376 lys1_tRNA + 160 met1_tRNA + 88960 mg2 + 544 phe1_tRNA + 35520 pi + 288 pro1_tRNA + 32 proM_tRNA + 1 rib_70_elo2_b0911_32_cplx + 384 ser1_tRNA + 288 ser2_tRNA + 128 serV_tRNA + 384 thr1_tRNA + 384 thr2_tRNA + 32 thr3_tRNA + 224 trpT_tRNA + 192 tyr1_tRNA + 576 val1_tRNA + 32 val2_tRNA + 1536 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.52E+00	3.52E+00	0	2.59E+00	2.59	0	2.59E+00	2.59
tl_elo_b0912_1_rib1	Translation elongation 1 b0912 1 ribosome(s)	93 EF-G.GTP + 3 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 10 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 3 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 1 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val3-tRNA + 465 mg2 + 1 rib_ini_b0912_1 --> 1 rib_70_elo1_b0912_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073

tl_elo_b0912_1_rib2	Translation elongation 2 b0912 1 ribosome(s)	92 h2o + 1 rib_70_elo1_b0912_1_cplx --> 92 EF-G.GDP + 92 EF-Tu.GDP + 3 ala1_tRNA + 4 ala2_tRNA + 7 arg1_tRNA + 1 argU_tRNA + 2 asn1_tRNA + 3 asp1_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 1 gln2_tRNA + 10 glu1_tRNA + 5 gly1_tRNA + 2 glyT_tRNA + 184 h + 4 hisR_tRNA + 4 ile1_tRNA + 1 ile2_tRNA + 3 leu1_tRNA + 2 leu2_tRNA + 2 leuU_tRNA + 8 lys1_tRNA + 2 met1_tRNA + 465 mg2 + 3 phe1_tRNA + 184 pi + 1 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b0912_1_cplx + 1 ser2_tRNA + 2 ser3_tRNA + 1 serT_tRNA + 1 serV_tRNA + 3 thr1_tRNA + 2 thr2_tRNA + 1 thr3_tRNA + 3 tyr1_tRNA + 2 val1_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_elo_b0912_2_rib1	Translation elongation 1 b0912 2 ribosome(s)	186 EF-G.GTP + 6 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argU-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 2 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val3-tRNA + 930 mg2 + 1 rib_ini_b0912_2 --> 1 rib_70_elo1_b0912_2_cp	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_elo_b0912_2_rib2	Translation elongation 2 b0912 2 ribosome(s)	184 h2o + 1 rib_70_elo1_b0912_2_cplx --> 184 EF-G.GDP + 184 EF-Tu.GDP + 6 ala1_tRNA + 8 ala2_tRNA + 14 arg1_tRNA + 2 argU_tRNA + 4 asn1_tRNA + 6 asp1_tRNA + 2 fmet_tRNA + 4 gln1_tRNA + 2 gln2_tRNA + 20 glu1_tRNA + 10 gly1_tRNA + 4 glyT_tRNA + 368 h + 8 hisR_tRNA + 8 ile1_tRNA + 2 ile2_tRNA + 6 leu1_tRNA + 4 leu2_tRNA + 4 leuU_tRNA + 16 lys1_tRNA + 4 met1_tRNA + 930 mg2 + 6 phe1_tRNA + 368 pi + 2 pro1_tRNA + 4 pro2_tRNA + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b0912_2_cplx + 2 ser2_tRNA + 4 ser3_tRNA + 2 serT_tRNA + 2 serV_tRNA + 6 thr1_tRNA + 4 thr2_tRNA + 2 thr3_tRNA + 6 tyr1_tRNA + 4 val1_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_elo_b0912_5_rib1	Translation elongation 1 b0912 5 ribosome(s)	465 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 35 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argU-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 50 EF-Tu.GTP.glu1-tRNA + 30 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 20 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.ile2-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 40 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val3-tRNA + 2325 mg2 + 1 rib_ini_b0912_5 --> 1 rib_70_elo1_b0912_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_elo_b0912_5_rib2	Translation elongation 2 b0912 5 ribosome(s)	460 h2o + 1 rib_70_elo1_b0912_5_cplx --> 460 EF-G.GDP + 460 EF-Tu.GDP + 15 ala1_tRNA + 20 ala2_tRNA + 35 arg1_tRNA + 5 argU_tRNA + 10 asn1_tRNA + 15 asp1_tRNA + 5 fmet_tRNA + 10 gln1_tRNA + 5 gln2_tRNA + 50 glu1_tRNA + 25 gly1_tRNA + 10 glyT_tRNA + 920 h + 20 hisR_tRNA + 20 ile1_tRNA + 5 ile2_tRNA + 15 leu1_tRNA + 10 leu2_tRNA + 10 leuU_tRNA + 40 lys1_tRNA + 10 met1_tRNA + 2325 mg2 + 15 phe1_tRNA + 920 pi + 5 pro1_tRNA + 10 pro2_tRNA + 5 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b0912_5_cplx + 5 ser2_tRNA + 10 ser3_tRNA + 5 serT_tRNA + 5 serV_tRNA + 15 thr1_tRNA + 10 thr2_tRNA + 5 thr3_tRNA + 15 tyr1_tRNA + 10 val1_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_elo_b0930_13_rib1	Translation elongation 1 b0930 13 ribosome(s)	6045 EF-G.GTP + 416 EF-Tu.GTP.ala1-tRNA + 117 EF-Tu.GTP.ala2-tRNA + 429 EF-Tu.GTP.arg1-tRNA + 13 EF-Tu.GTP.argW-tRNA + 260 EF-Tu.GTP.asn1-tRNA + 403 EF-Tu.GTP.asp1-tRNA + 52 EF-Tu.GTP.cysT-tRNA + 130 EF-Tu.GTP.gln1-tRNA + 39 EF-Tu.GTP.gln2-tRNA + 481 EF-Tu.GTP.glu1-tRNA + 364 EF-Tu.GTP.gly1-tRNA + 39 EF-Tu.GTP.glyT-tRNA + 13 EF-Tu.GTP.glyU-tRNA + 104 EF-Tu.GTP.hisR-tRNA + 221 EF-Tu.GTP.ile1-tRNA + 351 EF-Tu.GTP.leu1-tRNA + 26 EF-Tu.GTP.leu2-tRNA + 91 EF-Tu.GTP.leuU-tRNA + 247 EF-Tu.GTP.lys1-tRNA + 117 EF-Tu.GTP.met1-tRNA + 364 EF-Tu.GTP.phe1-tRNA + 169 EF-Tu.GTP.pro1-tRNA + 26 EF-Tu.GTP.pro2-tRNA + 13 EF-Tu.GTP.proL-tRNA + 39 EF-Tu.GTP.proM-tRNA + 65 EF-Tu.GTP.ser1-tRNA + 91 EF-Tu.GTP.ser2-tRNA + 26 EF-Tu.GTP.ser3-tRNA + 52 EF-Tu.GTP.serT-tRNA + 78 EF-Tu.GTP.serV-tRNA + 169 EF-Tu.GTP.thr1-tRNA + 65 EF-Tu.GTP.thr2-tRNA + 52 EF-Tu.GTP.thr3-tRNA + 13 EF-Tu.GTP.thrU-tRNA + 91 EF-Tu.GTP.trpT-tRNA + 208 EF-Tu.GTP.tyr1-tRNA + 286 EF-Tu.GTP.val1-tRNA + 117 EF-Tu.GTP.val2-tRNA + 208 EF-Tu.GTP.val3-tRNA + 30225 mg2 + 1 rib_ini_b0930_13 --> 1 rib_70_elo1_b0930_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_elo_b0930_13_rib2	Translation elongation 2 b0930 13 ribosome(s)	6032 h2o + 1 rib_70_elo1_b0930_13_cplx --> 6032 EF-G.GDP + 6032 EF-Tu.GDP + 416 ala1_tRNA + 117 ala2_tRNA + 429 arg1_tRNA + 13 argW_tRNA + 260 asn1_tRNA + 403 asp1_tRNA + 52 cysT_tRNA + 13 fmet_tRNA + 130 gln1_tRNA + 39 gln2_tRNA + 481 glu1_tRNA + 364 gly1_tRNA + 39 glyT_tRNA + 13 glyU_tRNA + 12064 h + 104 hisR_tRNA + 221 ile1_tRNA + 351 leu1_tRNA + 26 leu2_tRNA + 91 leuU_tRNA + 247 lys1_tRNA + 117 met1_tRNA + 30225 mg2 + 351 phe1_tRNA + 12064 pi + 169 pro1_tRNA + 26 pro2_tRNA + 13 proL_tRNA + 39 proM_tRNA + 1 rib_70_elo2_b0930_13_cplx + 65 ser1_tRNA + 91 ser2_tRNA + 26 ser3_tRNA + 52 serT_tRNA + 78 serV_tRNA + 169 thr1_tRNA + 65 thr2_tRNA + 52 thr3_tRNA + 13 thrU_tRNA + 91 trpT_tRNA + 208 tyr1_tRNA + 286 val1_tRNA + 117 val2_tRNA + 208 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434

tl_elo_b0930_1_rib1	Translation elongation 1 b0930 1 ribosome(s)	465 EF-G.GTP + 32 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 33 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 31 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 37 EF-Tu.GTP.glu1-tRNA + 28 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 17 EF-Tu.GTP.ile1-tRNA + 27 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 19 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 28 EF-Tu.GTP.phe1-tRNA + 13 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 13 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 16 EF-Tu.GTP.tyr1-tRNA + 22 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 16 EF-Tu.GTP.val3-tRNA + 2325 mg2 + 1 rib_ini_b0930_1 --> 1 rib_70_elo1_b0930_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_elo_b0930_1_rib2	Translation elongation 2 b0930 1 ribosome(s)	464 h2o + 1 rib_70_elo1_b0930_1_cplx --> 464 EF-G.GDP + 464 EF-Tu.GDP + 32 ala1_tRNA + 9 ala2_tRNA + 33 arg1_tRNA + 1 argW_tRNA + 20 asn1_tRNA + 31 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 10 gln1_tRNA + 3 gln2_tRNA + 37 glu1_tRNA + 28 gly1_tRNA + 3 glyT_tRNA + 1 glyU_tRNA + 928 h + 8 hisR_tRNA + 17 ile1_tRNA + 27 leu1_tRNA + 2 leu2_tRNA + 7 leuU_tRNA + 19 lys1_tRNA + 9 met1_tRNA + 2325 mg2 + 27 phe1_tRNA + 928 pi + 13 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b0930_1_cplx + 5 ser1_tRNA + 7 ser2_tRNA + 2 ser3_tRNA + 4 serT_tRNA + 6 serV_tRNA + 13 thr1_tRNA + 5 thr2_tRNA + 4 thr3_tRNA + 1 thrU_tRNA + 7 trpT_tRNA + 16 tyr1_tRNA + 22 val1_tRNA + 9 val2_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_elo_b0930_27_rib1	Translation elongation 1 b0930 27 ribosome(s)	12555 EF-G.GTP + 864 EF-Tu.GTP.ala1-tRNA + 243 EF-Tu.GTP.ala2-tRNA + 891 EF-Tu.GTP.arg1-tRNA + 27 EF-Tu.GTP.argW-tRNA + 540 EF-Tu.GTP.asn1-tRNA + 837 EF-Tu.GTP.asp1-tRNA + 108 EF-Tu.GTP.cysT-tRNA + 270 EF-Tu.GTP.gln1-tRNA + 81 EF-Tu.GTP.gln2-tRNA + 999 EF-Tu.GTP.glu1-tRNA + 756 EF-Tu.GTP.gly1-tRNA + 81 EF-Tu.GTP.glyT-tRNA + 27 EF-Tu.GTP.glyU-tRNA + 216 EF-Tu.GTP.hisR-tRNA + 459 EF-Tu.GTP.ile1-tRNA + 729 EF-Tu.GTP.leu1-tRNA + 54 EF-Tu.GTP.leu2-tRNA + 189 EF-Tu.GTP.leuU-tRNA + 513 EF-Tu.GTP.lys1-tRNA + 243 EF-Tu.GTP.met1-tRNA + 756 EF-Tu.GTP.phe1-tRNA + 351 EF-Tu.GTP.pro1-tRNA + 54 EF-Tu.GTP.pro2-tRNA + 27 EF-Tu.GTP.proL-tRNA + 81 EF-Tu.GTP.proM-tRNA + 135 EF-Tu.GTP.ser1-tRNA + 189 EF-Tu.GTP.ser2-tRNA + 54 EF-Tu.GTP.ser3-tRNA + 108 EF-Tu.GTP.serT-tRNA + 162 EF-Tu.GTP.serV-tRNA + 351 EF-Tu.GTP.thr1-tRNA + 135 EF-Tu.GTP.thr2-tRNA + 108 EF-Tu.GTP.thr3-tRNA + 27 EF-Tu.GTP.thrU-tRNA + 189 EF-Tu.GTP.trpT-tRNA + 432 EF-Tu.GTP.tyr1-tRNA + 594 EF-Tu.GTP.val1-tRNA + 243 EF-Tu.GTP.val2-tRNA + 432 EF-Tu.GTP.val3-tRNA + 62775 mg2 + 1 rib_ini_b0930_27 --> 1 rib_70_elo1_b0930_27_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_elo_b0930_27_rib2	Translation elongation 2 b0930 27 ribosome(s)	12528 h2o + 1 rib_70_elo1_b0930_27_cplx --> 12528 EF-G.GDP + 12528 EF-Tu.GDP + 864 ala1_tRNA + 243 ala2_tRNA + 891 arg1_tRNA + 27 argW_tRNA + 540 asn1_tRNA + 837 asp1_tRNA + 108 cysT_tRNA + 27 fmet_tRNA + 270 gln1_tRNA + 81 gln2_tRNA + 999 glu1_tRNA + 756 gly1_tRNA + 81 glyT_tRNA + 27 glyU_tRNA + 25056 h + 216 hisR_tRNA + 459 ile1_tRNA + 729 leu1_tRNA + 54 leu2_tRNA + 189 leuU_tRNA + 513 lys1_tRNA + 243 met1_tRNA + 62775 mg2 + 729 phe1_tRNA + 25056 pi + 351 pro1_tRNA + 54 pro2_tRNA + 27 proL_tRNA + 81 proM_tRNA + 1 rib_70_elo2_b0930_27_cplx + 135 ser1_tRNA + 189 ser2_tRNA + 54 ser3_tRNA + 108 serT_tRNA + 162 serV_tRNA + 351 thr1_tRNA + 135 thr2_tRNA + 108 thr3_tRNA + 27 thrU_tRNA + 189 trpT_tRNA + 432 tyr1_tRNA + 594 val1_tRNA + 243 val2_tRNA + 432 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_elo_b0969_1_rib1	Translation elongation 1 b0969 1 ribosome(s)	108 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 5 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 2 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 13 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 7 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 540 mg2 + 1 rib_ini_b0969_1 --> 1 rib_70_elo1_b0969_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_elo_b0969_1_rib2	Translation elongation 2 b0969 1 ribosome(s)	107 h2o + 1 rib_70_elo1_b0969_1_cplx --> 107 EF-G.GDP + 107 EF-Tu.GDP + 7 ala1_tRNA + 1 ala2_tRNA + 5 arg1_tRNA + 4 asn1_tRNA + 2 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 1 gln2_tRNA + 13 glu1_tRNA + 6 gly1_tRNA + 1 glyU_tRNA + 214 h + 1 hisR_tRNA + 5 ile1_tRNA + 1 ile2_tRNA + 7 leu1_tRNA + 1 leuU_tRNA + 1 leuZ_tRNA + 10 lys1_tRNA + 2 met1_tRNA + 540 mg2 + 6 phe1_tRNA + 214 pi + 6 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b0969_1_cplx + 1 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 4 serV_tRNA + 2 thr1_tRNA + 1 thr2_tRNA + 1 thr3_tRNA + 2 trpT_tRNA + 4 tyr1_tRNA + 7 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954

tl_elo_b0969_3_rib1	Translation elongation 1 b0969 3 ribosome(s)	324 EF-G.GTP + 21 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 39 EF-Tu.GTP.glu1-tRNA + 18 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 21 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 30 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 18 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 12 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 21 EF-Tu.GTP.val1-tRNA + 1620 mg2 + 1 rib_ini_b0969_3 --> 1 rib_70_elo1_b0969_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_elo_b0969_3_rib2	Translation elongation 2 b0969 3 ribosome(s)	321 h2o + 1 rib_70_elo1_b0969_3_cplx --> 321 EF-G.GDP + 321 EF-Tu.GDP + 21 ala1_tRNA + 3 ala2_tRNA + 15 arg1_tRNA + 12 asn1_tRNA + 6 asp1_tRNA + 3 cysT_tRNA + 3 fmet_tRNA + 3 gln1_tRNA + 3 gln2_tRNA + 39 glu1_tRNA + 18 gly1_tRNA + 3 glyU_tRNA + 642 h + 3 hisR_tRNA + 15 ile1_tRNA + 3 ile2_tRNA + 21 leu1_tRNA + 3 leuU_tRNA + 3 leuZ_tRNA + 30 lys1_tRNA + 6 met1_tRNA + 1620 mg2 + 18 phe1_tRNA + 642 pi + 18 pro1_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b0969_3_cplx + 3 ser2_tRNA + 3 ser3_tRNA + 3 serT_tRNA + 12 serV_tRNA + 6 thr1_tRNA + 3 thr2_tRNA + 3 thr3_tRNA + 6 trpT_tRNA + 12 tyr1_tRNA + 21 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_elo_b0969_6_rib1	Translation elongation 1 b0969 6 ribosome(s)	648 EF-G.GTP + 42 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 30 EF-Tu.GTP.arg1-tRNA + 24 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 78 EF-Tu.GTP.glu1-tRNA + 36 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 36 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.ile2-tRNA + 42 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 60 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 36 EF-Tu.GTP.phe1-tRNA + 36 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serT-tRNA + 24 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 24 EF-Tu.GTP.tyr1-tRNA + 42 EF-Tu.GTP.val1-tRNA + 3240 mg2 + 1 rib_ini_b0969_6 --> 1 rib_70_elo1_b0969_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_elo_b0969_6_rib2	Translation elongation 2 b0969 6 ribosome(s)	642 h2o + 1 rib_70_elo1_b0969_6_cplx --> 642 EF-G.GDP + 642 EF-Tu.GDP + 42 ala1_tRNA + 6 ala2_tRNA + 30 arg1_tRNA + 24 asn1_tRNA + 12 asp1_tRNA + 6 cysT_tRNA + 6 fmet_tRNA + 6 gln1_tRNA + 6 gln2_tRNA + 78 glu1_tRNA + 36 gly1_tRNA + 6 glyU_tRNA + 1284 h + 6 hisR_tRNA + 30 ile1_tRNA + 6 ile2_tRNA + 42 leu1_tRNA + 6 leuU_tRNA + 6 leuZ_tRNA + 60 lys1_tRNA + 12 met1_tRNA + 3240 mg2 + 36 phe1_tRNA + 1284 pi + 36 pro1_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b0969_6_cplx + 6 ser2_tRNA + 6 ser3_tRNA + 6 serT_tRNA + 24 serV_tRNA + 12 thr1_tRNA + 6 thr2_tRNA + 6 thr3_tRNA + 12 trpT_tRNA + 24 tyr1_tRNA + 42 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_elo_b1066_11_rib1	Translation elongation 1 b1066 11 ribosome(s)	2123 EF-G.GTP + 88 EF-Tu.GTP.ala1-tRNA + 66 EF-Tu.GTP.ala2-tRNA + 176 EF-Tu.GTP.arg1-tRNA + 11 EF-Tu.GTP.argW-tRNA + 77 EF-Tu.GTP.asn1-tRNA + 132 EF-Tu.GTP.asp1-tRNA + 22 EF-Tu.GTP.cysT-tRNA + 33 EF-Tu.GTP.gln1-tRNA + 44 EF-Tu.GTP.gln2-tRNA + 99 EF-Tu.GTP.glu1-tRNA + 132 EF-Tu.GTP.gly1-tRNA + 22 EF-Tu.GTP.glyT-tRNA + 22 EF-Tu.GTP.glyU-tRNA + 99 EF-Tu.GTP.hisR-tRNA + 88 EF-Tu.GTP.ile1-tRNA + 88 EF-Tu.GTP.leu1-tRNA + 11 EF-Tu.GTP.leu2-tRNA + 44 EF-Tu.GTP.leuU-tRNA + 44 EF-Tu.GTP.leuZ-tRNA + 99 EF-Tu.GTP.lys1-tRNA + 55 EF-Tu.GTP.met1-tRNA + 110 EF-Tu.GTP.phe1-tRNA + 22 EF-Tu.GTP.pro1-tRNA + 22 EF-Tu.GTP.proL-tRNA + 44 EF-Tu.GTP.proM-tRNA + 11 EF-Tu.GTP.ser1-tRNA + 11 EF-Tu.GTP.ser2-tRNA + 11 EF-Tu.GTP.ser3-tRNA + 22 EF-Tu.GTP.serT-tRNA + 33 EF-Tu.GTP.serV-tRNA + 44 EF-Tu.GTP.thr1-tRNA + 11 EF-Tu.GTP.thr2-tRNA + 22 EF-Tu.GTP.thr3-tRNA + 11 EF-Tu.GTP.thrU-tRNA + 66 EF-Tu.GTP.trpT-tRNA + 121 EF-Tu.GTP.tyr1-tRNA + 66 EF-Tu.GTP.val1-tRNA + 11 EF-Tu.GTP.val2-tRNA + 33 EF-Tu.GTP.val3-tRNA + 10615 mg2 + 1 rib_ini_b1066_11 --> 1 rib_70_elo1_b1066_11_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_elo_b1066_11_rib2	Translation elongation 2 b1066 11 ribosome(s)	2112 h2o + 1 rib_70_elo1_b1066_11_cplx --> 2112 EF-G.GDP + 2112 EF-Tu.GDP + 88 ala1_tRNA + 66 ala2_tRNA + 165 arg1_tRNA + 11 argW_tRNA + 77 asn1_tRNA + 132 asp1_tRNA + 22 cysT_tRNA + 11 fmet_tRNA + 33 gln1_tRNA + 44 gln2_tRNA + 99 glu1_tRNA + 132 gly1_tRNA + 22 glyT_tRNA + 22 glyU_tRNA + 4224 h + 99 hisR_tRNA + 88 ile1_tRNA + 88 leu1_tRNA + 11 leu2_tRNA + 44 leuU_tRNA + 44 leuZ_tRNA + 99 lys1_tRNA + 55 met1_tRNA + 10615 mg2 + 110 phe1_tRNA + 4224 pi + 22 pro1_tRNA + 22 proL_tRNA + 44 proM_tRNA + 1 rib_70_elo2_b1066_11_cplx + 11 ser1_tRNA + 11 ser2_tRNA + 11 ser3_tRNA + 22 serT_tRNA + 33 serV_tRNA + 44 thr1_tRNA + 11 thr2_tRNA + 22 thr3_tRNA + 11 thrU_tRNA + 66 trpT_tRNA + 121 tyr1_tRNA + 66 val1_tRNA + 11 val2_tRNA + 33 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_elo_b1066_1_rib1	Translation elongation 1 b1066 1 ribosome(s)	193 EF-G.GTP + 8 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 16 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 9 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 11 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 965 mg2 + 1 rib_ini_b1066_1 --> 1 rib_70_elo1_b1066_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811

tl_elo_b1066_1_rib2	Translation elongation 2 b1066 1 ribosome(s)	192 h2o + 1 rib_70_elo1_b1066_1_cplx --> 192 EF-G.GDP + 192 EF-Tu.GDP + 8 ala1_tRNA + 6 ala2_tRNA + 15 arg1_tRNA + 1 argW_tRNA + 7 asn1_tRNA + 12 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 4 gln2_tRNA + 9 glu1_tRNA + 12 gly1_tRNA + 2 glyT_tRNA + 2 glyU_tRNA + 384 h + 9 hisR_tRNA + 8 ile1_tRNA + 8 leu1_tRNA + 1 leu2_tRNA + 4 leuU_tRNA + 4 leuZ_tRNA + 9 lys1_tRNA + 5 met1_tRNA + 965 mg2 + 10 phe1_tRNA + 384 pi + 2 pro1_tRNA + 2 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b1066_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 3 serV_tRNA + 4 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 6 trpT_tRNA + 11 tyr1_tRNA + 6 val1_tRNA + 1 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_elo_b1066_5_rib1	Translation elongation 1 b1066 5 ribosome(s)	965 EF-G.GTP + 40 EF-Tu.GTP.ala1-tRNA + 30 EF-Tu.GTP.ala2-tRNA + 80 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argW-tRNA + 35 EF-Tu.GTP.asn1-tRNA + 60 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.cysT-tRNA + 15 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 45 EF-Tu.GTP.glu1-tRNA + 60 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 10 EF-Tu.GTP.glyU-tRNA + 45 EF-Tu.GTP.hisR-tRNA + 40 EF-Tu.GTP.ile1-tRNA + 40 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 20 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 45 EF-Tu.GTP.lys1-tRNA + 25 EF-Tu.GTP.met1-tRNA + 50 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.proL-tRNA + 20 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serT-tRNA + 15 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 30 EF-Tu.GTP.trpT-tRNA + 55 EF-Tu.GTP.tyr1-tRNA + 30 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 15 EF-Tu.GTP.val3-tRNA + 4825 mg2 + 1 rib_ini_b1066_5 --> 1 rib_70_elo1_b1066_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_elo_b1066_5_rib2	Translation elongation 2 b1066 5 ribosome(s)	960 h2o + 1 rib_70_elo1_b1066_5_cplx --> 960 EF-G.GDP + 960 EF-Tu.GDP + 40 ala1_tRNA + 30 ala2_tRNA + 75 arg1_tRNA + 5 argW_tRNA + 35 asn1_tRNA + 60 asp1_tRNA + 10 cysT_tRNA + 5 fmet_tRNA + 15 gln1_tRNA + 20 gln2_tRNA + 45 glu1_tRNA + 60 gly1_tRNA + 10 glyT_tRNA + 10 glyU_tRNA + 1920 h + 45 hisR_tRNA + 40 ile1_tRNA + 40 leu1_tRNA + 5 leu2_tRNA + 20 leuU_tRNA + 20 leuZ_tRNA + 45 lys1_tRNA + 25 met1_tRNA + 4825 mg2 + 50 phe1_tRNA + 1920 pi + 10 pro1_tRNA + 10 proL_tRNA + 20 proM_tRNA + 1 rib_70_elo2_b1066_5_cplx + 5 ser1_tRNA + 5 ser2_tRNA + 5 ser3_tRNA + 10 serT_tRNA + 15 serV_tRNA + 20 thr1_tRNA + 5 thr2_tRNA + 10 thr3_tRNA + 5 thrU_tRNA + 30 trpT_tRNA + 55 tyr1_tRNA + 30 val1_tRNA + 5 val2_tRNA + 15 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_elo_b1084_1_rib1	Translation elongation 1 b1084 1 ribosome(s)	1060 EF-G.GTP + 96 EF-Tu.GTP.ala1-tRNA + 30 EF-Tu.GTP.ala2-tRNA + 101 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 32 EF-Tu.GTP.asn1-tRNA + 39 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 49 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 130 EF-Tu.GTP.glu1-tRNA + 41 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 24 EF-Tu.GTP.hisR-tRNA + 49 EF-Tu.GTP.ile1-tRNA + 42 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 36 EF-Tu.GTP.lys1-tRNA + 13 EF-Tu.GTP.met1-tRNA + 20 EF-Tu.GTP.phe1-tRNA + 42 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 24 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 15 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 27 EF-Tu.GTP.serV-tRNA + 25 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 11 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 17 EF-Tu.GTP.tyr1-tRNA + 44 EF-Tu.GTP.val1-tRNA + 15 EF-Tu.GTP.val2-tRNA + 37 EF-Tu.GTP.val3-tRNA + 5300 mg2 + 1 rib_ini_b1084_1 --> 1 rib_70_elo1_b1084_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.52E+01	65.23211	0	1.86E+00	1.859
tl_elo_b1084_1_rib2	Translation elongation 2 b1084 1 ribosome(s)	1059 h2o + 1 rib_70_elo1_b1084_1_cplx --> 1059 EF-G.GDP + 1059 EF-Tu.GDP + 96 ala1_tRNA + 30 ala2_tRNA + 101 arg1_tRNA + 1 argU_tRNA + 32 asn1_tRNA + 39 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 49 gln1_tRNA + 18 gln2_tRNA + 129 glu1_tRNA + 41 gly1_tRNA + 5 glyU_tRNA + 2118 h + 24 hisR_tRNA + 49 ile1_tRNA + 42 leu1_tRNA + 4 leu2_tRNA + 10 leuU_tRNA + 1 leuW_tRNA + 8 leuZ_tRNA + 36 lys1_tRNA + 13 met1_tRNA + 5300 mg2 + 20 phe1_tRNA + 2118 pi + 42 pro1_tRNA + 18 pro2_tRNA + 2 proL_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b1084_1_cplx + 5 ser1_tRNA + 15 ser2_tRNA + 4 ser3_tRNA + 2 serT_tRNA + 27 serV_tRNA + 25 thr1_tRNA + 12 thr2_tRNA + 11 thr3_tRNA + 3 thrU_tRNA + 4 trpT_tRNA + 17 tyr1_tRNA + 44 val1_tRNA + 15 val2_tRNA + 37 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.52E+01	65.23211	0	1.86E+00	1.859
tl_elo_b1084_31_rib1	Translation elongation 1 b1084 31 ribosome(s)	32860 EF-G.GTP + 2976 EF-Tu.GTP.ala1-tRNA + 930 EF-Tu.GTP.ala2-tRNA + 3131 EF-Tu.GTP.arg1-tRNA + 31 EF-Tu.GTP.argU-tRNA + 992 EF-Tu.GTP.asn1-tRNA + 1209 EF-Tu.GTP.asp1-tRNA + 124 EF-Tu.GTP.cysT-tRNA + 1519 EF-Tu.GTP.gln1-tRNA + 558 EF-Tu.GTP.gln2-tRNA + 4030 EF-Tu.GTP.glu1-tRNA + 1271 EF-Tu.GTP.gly1-tRNA + 155 EF-Tu.GTP.glyU-tRNA + 744 EF-Tu.GTP.hisR-tRNA + 1519 EF-Tu.GTP.ile1-tRNA + 1302 EF-Tu.GTP.leu1-tRNA + 124 EF-Tu.GTP.leu2-tRNA + 310 EF-Tu.GTP.leuU-tRNA + 31 EF-Tu.GTP.leuW-tRNA + 248 EF-Tu.GTP.leuZ-tRNA + 1116 EF-Tu.GTP.lys1-tRNA + 403 EF-Tu.GTP.met1-tRNA + 620 EF-Tu.GTP.phe1-tRNA + 1302 EF-Tu.GTP.pro1-tRNA + 558 EF-Tu.GTP.pro2-tRNA + 62 EF-Tu.GTP.proL-tRNA + 744 EF-Tu.GTP.proM-tRNA + 155 EF-Tu.GTP.ser1-tRNA + 465 EF-Tu.GTP.ser2-tRNA + 124 EF-Tu.GTP.ser3-tRNA + 62 EF-Tu.GTP.serT-tRNA + 837 EF-Tu.GTP.serV-tRNA + 775 EF-Tu.GTP.thr1-tRNA + 372 EF-Tu.GTP.thr2-tRNA + 341 EF-Tu.GTP.thr3-tRNA + 93 EF-Tu.GTP.thrU-tRNA + 124 EF-Tu.GTP.trpT-tRNA + 527 EF-Tu.GTP.tyr1-tRNA + 1364 EF-Tu.GTP.val1-tRNA + 465 EF-Tu.GTP.val2-tRNA + 1147 EF-Tu.GTP.val3-tRNA + 164300 mg2 + 1 rib_ini_b1084_31 --> 1 rib_70_	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	4.89E+01	48.91891	0	1.86E+00	1.859

tl_elo_b1084_31_rib2	Translation elongation 2 b1084 31 ribosome(s)	32829 h2o + 1 rib_70_elo1_b1084_31_cplx --> 32829 EF-G.GDP + 32829 EF-Tu.GDP + 2976 ala1_tRNA + 930 ala2_tRNA + 3131 arg1_tRNA + 31 argU_tRNA + 992 asn1_tRNA + 1209 asp1_tRNA + 124 cysT_tRNA + 31 fmet_tRNA + 1519 gln1_tRNA + 558 gln2_tRNA + 3999 glu1_tRNA + 1271 gly1_tRNA + 155 glyU_tRNA + 65658 h + 744 hisR_tRNA + 1519 ile1_tRNA + 1302 leu1_tRNA + 124 leu2_tRNA + 310 leuU_tRNA + 31 leuW_tRNA + 248 leuZ_tRNA + 1116 lys1_tRNA + 403 met1_tRNA + 164300 mg2 + 620 phe1_tRNA + 65658 pi + 1302 pro1_tRNA + 558 pro2_tRNA + 62 proL_tRNA + 744 proM_tRNA + 1 rib_70_elo2_b1084_31_cplx + 155 ser1_tRNA + 465 ser2_tRNA + 124 ser3_tRNA + 62 serT_tRNA + 837 serV_tRNA + 775 thr1_tRNA + 372 thr2_tRNA + 341 thr3_tRNA + 93 thrU_tRNA + 124 trpT_tRNA + 527 tyr1_tRNA + 1364 val1_tRNA + 465 val2_tRNA + 1147 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	4.89E+01	48.91891	0	1.86E+00	1.859
tl_elo_b1084_62_rib1	Translation elongation 1 b1084 62 ribosome(s)	65720 EF-G.GTP + 5952 EF-Tu.GTP.ala1-tRNA + 1860 EF-Tu.GTP.ala2-tRNA + 6262 EF-Tu.GTP.arg1-tRNA + 62 EF-Tu.GTP.argU-tRNA + 1984 EF-Tu.GTP.asn1-tRNA + 2418 EF-Tu.GTP.asp1-tRNA + 248 EF-Tu.GTP.cysT-tRNA + 3038 EF-Tu.GTP.gln1-tRNA + 1116 EF-Tu.GTP.gln2-tRNA + 8060 EF-Tu.GTP.glu1-tRNA + 2542 EF-Tu.GTP.gly1-tRNA + 310 EF-Tu.GTP.glyU-tRNA + 1488 EF-Tu.GTP.hisR-tRNA + 3038 EF-Tu.GTP.ile1-tRNA + 2604 EF-Tu.GTP.leu1-tRNA + 248 EF-Tu.GTP.leu2-tRNA + 620 EF-Tu.GTP.leuU-tRNA + 62 EF-Tu.GTP.leuW-tRNA + 496 EF-Tu.GTP.leuZ-tRNA + 2232 EF-Tu.GTP.lys1-tRNA + 806 EF-Tu.GTP.met1-tRNA + 1240 EF-Tu.GTP.phe1-tRNA + 2604 EF-Tu.GTP.pro1-tRNA + 1116 EF-Tu.GTP.pro2-tRNA + 124 EF-Tu.GTP.proL-tRNA + 1488 EF-Tu.GTP.proM-tRNA + 310 EF-Tu.GTP.ser1-tRNA + 930 EF-Tu.GTP.ser2-tRNA + 248 EF-Tu.GTP.ser3-tRNA + 124 EF-Tu.GTP.serT-tRNA + 1674 EF-Tu.GTP.serV-tRNA + 1550 EF-Tu.GTP.thr1-tRNA + 744 EF-Tu.GTP.thr2-tRNA + 682 EF-Tu.GTP.thr3-tRNA + 186 EF-Tu.GTP.thrU-tRNA + 248 EF-Tu.GTP.trpT-tRNA + 1054 EF-Tu.GTP.tyr1-tRNA + 2728 EF-Tu.GTP.val1-tRNA + 930 EF-Tu.GTP.val2-tRNA + 2294 EF-Tu.GTP.val3-tRNA + 328600 mg2 + 1 rib_ini_b1084_62 --> 1 rib_70_	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	2.45E+01	24.45946	0	1.86E+00	1.859
tl_elo_b1084_62_rib2	Translation elongation 2 b1084 62 ribosome(s)	65658 h2o + 1 rib_70_elo1_b1084_62_cplx --> 65658 EF-G.GDP + 65658 EF-Tu.GDP + 5952 ala1_tRNA + 1860 ala2_tRNA + 6262 arg1_tRNA + 62 argU_tRNA + 1984 asn1_tRNA + 2418 asp1_tRNA + 248 cysT_tRNA + 62 fmet_tRNA + 3038 gln1_tRNA + 1116 gln2_tRNA + 7998 glu1_tRNA + 2542 gly1_tRNA + 310 glyU_tRNA + 131316 h + 1488 hisR_tRNA + 3038 ile1_tRNA + 2604 leu1_tRNA + 248 leu2_tRNA + 620 leuU_tRNA + 62 leuW_tRNA + 496 leuZ_tRNA + 2232 lys1_tRNA + 806 met1_tRNA + 328600 mg2 + 1240 phe1_tRNA + 131316 pi + 2604 pro1_tRNA + 1116 pro2_tRNA + 124 proL_tRNA + 1488 proM_tRNA + 1 rib_70_elo2_b1084_62_cplx + 31 ser1_tRNA + 930 ser2_tRNA + 248 ser3_tRNA + 124 serT_tRNA + 1674 serV_tRNA + 1550 thr1_tRNA + 744 thr2_tRNA + 682 thr3_tRNA + 186 thrU_tRNA + 248 trpT_tRNA + 1054 tyr1_tRNA + 2728 val1_tRNA + 930 val2_tRNA + 2294 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	2.45E+01	24.45946	0	1.86E+00	1.859
tl_elo_b1086_18_rib1	Translation elongation 1 b1086 18 ribosome(s)	5724 EF-G.GTP + 432 EF-Tu.GTP.ala1-tRNA + 36 EF-Tu.GTP.ala2-tRNA + 486 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argW-tRNA + 90 EF-Tu.GTP.argX-tRNA + 108 EF-Tu.GTP.asn1-tRNA + 252 EF-Tu.GTP.asp1-tRNA + 36 EF-Tu.GTP.cysT-tRNA + 90 EF-Tu.GTP.gln1-tRNA + 162 EF-Tu.GTP.gln2-tRNA + 468 EF-Tu.GTP.glu1-tRNA + 324 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 72 EF-Tu.GTP.glyU-tRNA + 198 EF-Tu.GTP.hisR-tRNA + 270 EF-Tu.GTP.ile1-tRNA + 270 EF-Tu.GTP.leu1-tRNA + 180 EF-Tu.GTP.leu2-tRNA + 72 EF-Tu.GTP.leuU-tRNA + 90 EF-Tu.GTP.leuZ-tRNA + 396 EF-Tu.GTP.lys1-tRNA + 72 EF-Tu.GTP.met1-tRNA + 162 EF-Tu.GTP.phe1-tRNA + 144 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 72 EF-Tu.GTP.proM-tRNA + 36 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 72 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serT-tRNA + 126 EF-Tu.GTP.serV-tRNA + 90 EF-Tu.GTP.thr1-tRNA + 72 EF-Tu.GTP.thr2-tRNA + 36 EF-Tu.GTP.thr3-tRNA + 72 EF-Tu.GTP.thrU-tRNA + 18 EF-Tu.GTP.trpT-tRNA + 126 EF-Tu.GTP.tyr1-tRNA + 324 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 144 EF-Tu.GTP.val3-tRNA + 28620 mg2 + 1 rib_ini_b1086_18 --> 1 rib_70_elo1_b1086_18_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_elo_b1086_18_rib2	Translation elongation 2 b1086 18 ribosome(s)	5706 h2o + 1 rib_70_elo1_b1086_18_cplx --> 5706 EF-G.GDP + 5706 EF-Tu.GDP + 432 ala1_tRNA + 36 ala2_tRNA + 468 arg1_tRNA + 18 argW_tRNA + 90 argX_tRNA + 108 asn1_tRNA + 252 asp1_tRNA + 36 cysT_tRNA + 18 fmet_tRNA + 90 gln1_tRNA + 162 gln2_tRNA + 468 glu1_tRNA + 324 gly1_tRNA + 18 glyT_tRNA + 72 glyU_tRNA + 11412 h + 198 hisR_tRNA + 270 ile1_tRNA + 270 leu1_tRNA + 180 leu2_tRNA + 72 leuU_tRNA + 90 leuZ_tRNA + 396 lys1_tRNA + 72 met1_tRNA + 28620 mg2 + 162 phe1_tRNA + 11412 pi + 144 pro1_tRNA + 36 pro2_tRNA + 72 proM_tRNA + 1 rib_70_elo2_b1086_18_cplx + 36 ser1_tRNA + 18 ser2_tRNA + 72 ser3_tRNA + 18 serT_tRNA + 126 serV_tRNA + 90 thr1_tRNA + 72 thr2_tRNA + 36 thr3_tRNA + 72 thrU_tRNA + 18 trpT_tRNA + 126 tyr1_tRNA + 324 val1_tRNA + 18 val2_tRNA + 144 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_elo_b1086_1_rib1	Translation elongation 1 b1086 1 ribosome(s)	318 EF-G.GTP + 24 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 27 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 5 EF-Tu.GTP.argX-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 9 EF-Tu.GTP.gln2-tRNA + 26 EF-Tu.GTP.glu1-tRNA + 18 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 22 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 18 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 1590 mg2 + 1 rib_ini_b1086_1 --> 1 rib_70_elo1_b1086_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597

tl_elo_b1086_1_rib2	Translation elongation 2 b1086 1 ribosome(s)	317 h2o + 1 rib_70_elo1_b1086_1_cplx --> 317 EF-G.GDP + 317 EF-Tu.GDP + 24 ala1_tRNA + 2 ala2_tRNA + 26 arg1_tRNA + 1 argW_tRNA + 5 argX_tRNA + 6 asn1_tRNA + 14 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 9 gln2_tRNA + 26 glu1_tRNA + 18 gly1_tRNA + 1 glyT_tRNA + 4 glyU_tRNA + 634 h + 11 hisR_tRNA + 15 ile1_tRNA + 15 leu1_tRNA + 10 leu2_tRNA + 4 leuU_tRNA + 5 leuZ_tRNA + 22 lys1_tRNA + 4 met1_tRNA + 1590 mg2 + 9 phe1_tRNA + 634 pi + 8 pro1_tRNA + 2 pro2_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b1086_1_cplx + 2 ser1_tRNA + 1 ser2_tRNA + 4 ser3_tRNA + 1 serT_tRNA + 7 serV_tRNA + 5 thr1_tRNA + 4 thr2_tRNA + 2 thr3_tRNA + 4 thrU_tRNA + 1 trpT_tRNA + 7 tyr1_tRNA + 18 val1_tRNA + 1 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_elo_b1086_9_rib1	Translation elongation 1 b1086 9 ribosome(s)	2862 EF-G.GTP + 216 EF-Tu.GTP.ala1-tRNA + 18 EF-Tu.GTP.ala2-tRNA + 243 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argW-tRNA + 45 EF-Tu.GTP.argX-tRNA + 54 EF-Tu.GTP.asn1-tRNA + 126 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.cysT-tRNA + 45 EF-Tu.GTP.gln1-tRNA + 81 EF-Tu.GTP.gln2-tRNA + 234 EF-Tu.GTP.glu1-tRNA + 162 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 36 EF-Tu.GTP.glyU-tRNA + 99 EF-Tu.GTP.hisR-tRNA + 135 EF-Tu.GTP.ile1-tRNA + 135 EF-Tu.GTP.leu1-tRNA + 90 EF-Tu.GTP.leu2-tRNA + 36 EF-Tu.GTP.leuU-tRNA + 45 EF-Tu.GTP.leuZ-tRNA + 198 EF-Tu.GTP.lys1-tRNA + 36 EF-Tu.GTP.met1-tRNA + 81 EF-Tu.GTP.phe1-tRNA + 72 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 36 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 36 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serT-tRNA + 63 EF-Tu.GTP.serV-tRNA + 45 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.thr3-tRNA + 36 EF-Tu.GTP.thrU-tRNA + 9 EF-Tu.GTP.trpT-tRNA + 63 EF-Tu.GTP.tyr1-tRNA + 162 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 72 EF-Tu.GTP.val3-tRNA + 14310 mg2 + 1 rib_ini_b1086_9 --> 1 rib_70_elo1_b1086_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_elo_b1086_9_rib2	Translation elongation 2 b1086 9 ribosome(s)	2853 h2o + 1 rib_70_elo1_b1086_9_cplx --> 2853 EF-G.GDP + 2853 EF-Tu.GDP + 216 ala1_tRNA + 18 ala2_tRNA + 234 arg1_tRNA + 9 argW_tRNA + 45 argX_tRNA + 54 asn1_tRNA + 126 asp1_tRNA + 18 cysT_tRNA + 9 fmet_tRNA + 45 gln1_tRNA + 81 gln2_tRNA + 234 glu1_tRNA + 162 gly1_tRNA + 9 glyT_tRNA + 36 glyU_tRNA + 5706 h + 99 hisR_tRNA + 135 ile1_tRNA + 135 leu1_tRNA + 90 leu2_tRNA + 36 leuU_tRNA + 45 leuZ_tRNA + 198 lys1_tRNA + 36 met1_tRNA + 14310 mg2 + 81 phe1_tRNA + 5706 pi + 72 pro1_tRNA + 18 pro2_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b1086_9_cplx + 18 ser1_tRNA + 9 ser2_tRNA + 36 ser3_tRNA + 9 serT_tRNA + 63 serV_tRNA + 45 thr1_tRNA + 36 thr2_tRNA + 18 thr3_tRNA + 36 thrU_tRNA + 9 trpT_tRNA + 63 tyr1_tRNA + 162 val1_tRNA + 9 val2_tRNA + 72 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_elo_b1088_10_rib1	Translation elongation 1 b1088 10 ribosome(s)	1720 EF-G.GTP + 100 EF-Tu.GTP.ala1-tRNA + 40 EF-Tu.GTP.ala2-tRNA + 70 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 120 EF-Tu.GTP.asp1-tRNA + 50 EF-Tu.GTP.cysT-tRNA + 50 EF-Tu.GTP.gln1-tRNA + 40 EF-Tu.GTP.gln2-tRNA + 190 EF-Tu.GTP.glu1-tRNA + 40 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyU-tRNA + 30 EF-Tu.GTP.hisR-tRNA + 60 EF-Tu.GTP.ile1-tRNA + 40 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 60 EF-Tu.GTP.leuU-tRNA + 40 EF-Tu.GTP.leuZ-tRNA + 80 EF-Tu.GTP.lys1-tRNA + 30 EF-Tu.GTP.met1-tRNA + 60 EF-Tu.GTP.phe1-tRNA + 60 EF-Tu.GTP.pro1-tRNA + 30 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proL-tRNA + 20 EF-Tu.GTP.proM-tRNA + 30 EF-Tu.GTP.ser1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serT-tRNA + 40 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr2-tRNA + 40 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.thrU-tRNA + 50 EF-Tu.GTP.tyr1-tRNA + 120 EF-Tu.GTP.val1-tRNA + 40 EF-Tu.GTP.val2-tRNA + 50 EF-Tu.GTP.val3-tRNA + 8600 mg2 + 1 rib_ini_b1088_10 --> 1 rib_70_elo1_b1088_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_elo_b1088_10_rib2	Translation elongation 2 b1088 10 ribosome(s)	1710 h2o + 1 rib_70_elo1_b1088_10_cplx --> 1710 EF-G.GDP + 1710 EF-Tu.GDP + 100 ala1_tRNA + 40 ala2_tRNA + 70 arg1_tRNA + 40 asn1_tRNA + 120 asp1_tRNA + 50 cysT_tRNA + 10 fmet_tRNA + 50 gln1_tRNA + 40 gln2_tRNA + 190 glu1_tRNA + 40 gly1_tRNA + 10 glyU_tRNA + 3420 h + 30 hisR_tRNA + 60 ile1_tRNA + 40 leu1_tRNA + 10 leu2_tRNA + 60 leuU_tRNA + 40 leuZ_tRNA + 70 lys1_tRNA + 30 met1_tRNA + 8600 mg2 + 60 phe1_tRNA + 3420 pi + 60 pro1_tRNA + 30 pro2_tRNA + 10 proL_tRNA + 20 proM_tRNA + 1 rib_70_elo2_b1088_10_cplx + 30 ser1_tRNA + 10 ser2_tRNA + 10 ser3_tRNA + 10 serT_tRNA + 40 serV_tRNA + 10 thr1_tRNA + 20 thr2_tRNA + 40 thr3_tRNA + 10 thrU_tRNA + 50 tyr1_tRNA + 120 val1_tRNA + 40 val2_tRNA + 50 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_elo_b1088_1_rib1	Translation elongation 1 b1088 1 ribosome(s)	172 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 19 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 860 mg2 + 1 rib_ini_b1088_1 --> 1 rib_70_elo1_b1088_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855

tl_elo_b1088_1_rib2	Translation elongation 2 b1088 1 ribosome(s)	171 h2o + 1 rib_70_elo1_b1088_1_cplx --> 171 EF-G.GDP + 171 EF-Tu.GDP + 10 ala1_tRNA + 4 ala2_tRNA + 7 arg1_tRNA + 4 asn1_tRNA + 12 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 4 gln2_tRNA + 19 glu1_tRNA + 4 gly1_tRNA + 1 glyU_tRNA + 342 h + 3 hisR_tRNA + 6 ile1_tRNA + 4 leu1_tRNA + 1 leu2_tRNA + 6 leuU_tRNA + 4 leuZ_tRNA + 7 lys1_tRNA + 3 met1_tRNA + 860 mg2 + 6 phe1_tRNA + 342 pi + 6 pro1_tRNA + 3 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b1088_1_cplx + 3 ser1_tRNA + 1 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 4 serV_tRNA + 1 thr1_tRNA + 2 thr2_tRNA + 4 thr3_tRNA + 1 thrU_tRNA + 5 tyr1_tRNA + 12 val1_tRNA + 4 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_elo_b1088_5_rib1	Translation elongation 1 b1088 5 ribosome(s)	860 EF-G.GTP + 50 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 35 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 60 EF-Tu.GTP.asp1-tRNA + 25 EF-Tu.GTP.cysT-tRNA + 25 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 95 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 30 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 30 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 40 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 30 EF-Tu.GTP.phe1-tRNA + 30 EF-Tu.GTP.pro1-tRNA + 15 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.proM-tRNA + 15 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serT-tRNA + 20 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 25 EF-Tu.GTP.tyr1-tRNA + 60 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 25 EF-Tu.GTP.val3-tRNA + 4300 mg2 + 1 rib_ini_b1088_5 --> 1 rib_70_elo1_b1088_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_elo_b1088_5_rib2	Translation elongation 2 b1088 5 ribosome(s)	855 h2o + 1 rib_70_elo1_b1088_5_cplx --> 855 EF-G.GDP + 855 EF-Tu.GDP + 50 ala1_tRNA + 20 ala2_tRNA + 35 arg1_tRNA + 20 asn1_tRNA + 60 asp1_tRNA + 25 cysT_tRNA + 5 fmet_tRNA + 25 gln1_tRNA + 20 gln2_tRNA + 95 glu1_tRNA + 20 gly1_tRNA + 5 glyU_tRNA + 1710 h + 15 hisR_tRNA + 30 ile1_tRNA + 20 leu1_tRNA + 5 leu2_tRNA + 30 leuU_tRNA + 20 leuZ_tRNA + 35 lys1_tRNA + 15 met1_tRNA + 4300 mg2 + 30 phe1_tRNA + 1710 pi + 30 pro1_tRNA + 15 pro2_tRNA + 5 proL_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b1088_5_cplx + 15 ser1_tRNA + 5 ser2_tRNA + 5 ser3_tRNA + 5 serT_tRNA + 20 serV_tRNA + 5 thr1_tRNA + 10 thr2_tRNA + 20 thr3_tRNA + 5 thrU_tRNA + 25 tyr1_tRNA + 60 val1_tRNA + 20 val2_tRNA + 25 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_elo_b1089_1_rib1	Translation elongation 1 b1089 1 ribosome(s)	56 EF-G.GTP + 3 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 1 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 2 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 280 mg2 + 1 rib_ini_b1089_1 --> 1 rib_70_elo1_b1089_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b1089_1_rib2	Translation elongation 2 b1089 1 ribosome(s)	55 h2o + 1 rib_70_elo1_b1089_1_cplx --> 55 EF-G.GDP + 55 EF-Tu.GDP + 3 ala1_tRNA + 2 ala2_tRNA + 7 arg1_tRNA + 1 asn1_tRNA + 3 asp1_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 1 gln2_tRNA + 1 glu1_tRNA + 4 gly1_tRNA + 110 h + 4 hisR_tRNA + 2 ile1_tRNA + 3 leu1_tRNA + 5 lys1_tRNA + 1 met1_tRNA + 280 mg2 + 110 pi + 1 proM_tRNA + 1 rib_70_elo2_b1089_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 1 serV_tRNA + 3 thr1_tRNA + 2 thr2_tRNA + 2 tyr1_tRNA + 2 val1_tRNA + 2 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b1089_3_rib1	Translation elongation 1 b1089 3 ribosome(s)	168 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 21 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 3 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 840 mg2 + 1 rib_ini_b1089_3 --> 1 rib_70_elo1_b1089_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b1089_3_rib2	Translation elongation 2 b1089 3 ribosome(s)	165 h2o + 1 rib_70_elo1_b1089_3_cplx --> 165 EF-G.GDP + 165 EF-Tu.GDP + 9 ala1_tRNA + 6 ala2_tRNA + 21 arg1_tRNA + 3 asn1_tRNA + 9 asp1_tRNA + 3 fmet_tRNA + 3 gln1_tRNA + 3 gln2_tRNA + 3 glu1_tRNA + 12 gly1_tRNA + 330 h + 12 hisR_tRNA + 6 ile1_tRNA + 9 leu1_tRNA + 15 lys1_tRNA + 3 met1_tRNA + 840 mg2 + 330 pi + 3 proM_tRNA + 1 rib_70_elo2_b1089_3_cplx + 6 ser1_tRNA + 6 ser2_tRNA + 3 serV_tRNA + 9 thr1_tRNA + 6 thr2_tRNA + 6 tyr1_tRNA + 6 val1_tRNA + 6 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b1090_10_rib1	Translation elongation 1 b1090 10 ribosome(s)	3550 EF-G.GTP + 230 EF-Tu.GTP.ala1-tRNA + 140 EF-Tu.GTP.ala2-tRNA + 160 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.argW-tRNA + 40 EF-Tu.GTP.argX-tRNA + 130 EF-Tu.GTP.asn1-tRNA + 140 EF-Tu.GTP.asp1-tRNA + 40 EF-Tu.GTP.cysT-tRNA + 110 EF-Tu.GTP.gln1-tRNA + 80 EF-Tu.GTP.gln2-tRNA + 180 EF-Tu.GTP.glu1-tRNA + 190 EF-Tu.GTP.gly1-tRNA + 40 EF-Tu.GTP.glyT-tRNA + 70 EF-Tu.GTP.glyU-tRNA + 30 EF-Tu.GTP.hisR-tRNA + 150 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.ile2-tRNA + 210 EF-Tu.GTP.leu1-tRNA + 40 EF-Tu.GTP.leu2-tRNA + 120 EF-Tu.GTP.leuU-tRNA + 30 EF-Tu.GTP.leuW-tRNA + 120 EF-Tu.GTP.leuZ-tRNA + 170 EF-Tu.GTP.lys1-tRNA + 70 EF-Tu.GTP.met1-tRNA + 80 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 70 EF-Tu.GTP.pro2-tRNA + 30 EF-Tu.GTP.proL-tRNA + 30 EF-Tu.GTP.proM-tRNA + 20 EF-Tu.GTP.ser1-tRNA + 50 EF-Tu.GTP.ser2-tRNA + 40 EF-Tu.GTP.ser3-tRNA + 40 EF-Tu.GTP.serT-tRNA + 100 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 60 EF-Tu.GTP.thr3-tRNA + 70 EF-Tu.GTP.thrU-tRNA + 30 EF-Tu.GTP.trpT-tRNA + 40 EF-Tu.GTP.tyr1-tRNA + 180 EF-Tu.GTP.val1-tRNA + 80 EF-Tu.GTP.val2-tRNA + 50 EF-Tu.GTP.val3-tRNA + 17750 mg2 + 1 rib_	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187

tl_elo_b1090_10_rib2	Translation elongation 2 b1090 10 ribosome(s)	3540 h2o + 1 rib_70_elo1_b1090_10_cplx --> 3540 EF-G.GDP + 3540 EF-Tu.GDP + 230 ala1_tRNA + 140 ala2_tRNA + 160 arg1_tRNA + 20 argW_tRNA + 30 argX_tRNA + 130 asn1_tRNA + 140 asp1_tRNA + 40 cysT_tRNA + 10 fmet_tRNA + 110 gln1_tRNA + 80 gln2_tRNA + 180 glu1_tRNA + 190 gly1_tRNA + 40 glyT_tRNA + 70 glyU_tRNA + 7080 h + 30 hisR_tRNA + 150 ile1_tRNA + 10 ile2_tRNA + 210 leu1_tRNA + 40 leu2_tRNA + 120 leuU_tRNA + 30 leuW_tRNA + 120 leuZ_tRNA + 170 lys1_tRNA + 70 met1_tRNA + 17750 mg2 + 80 phe1_tRNA + 7080 pi + 10 pro1_tRNA + 70 pro2_tRNA + 30 proL_tRNA + 30 proM_tRNA + 1 rib_70_elo2_b1090_10_cplx + 20 ser1_tRNA + 50 ser2_tRNA + 40 ser3_tRNA + 40 serT_tRNA + 100 serV_tRNA + 20 thr1_tRNA + 30 thr2_tRNA + 60 thr3_tRNA + 70 thrU_tRNA + 30 trpT_tRNA + 40 tyr1_tRNA + 180 val1_tRNA + 80 val2_tRNA + 50 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187
tl_elo_b1090_1_rib1	Translation elongation 1 b1090 1 ribosome(s)	355 EF-G.GTP + 23 EF-Tu.GTP.ala1-tRNA + 14 EF-Tu.GTP.ala2-tRNA + 16 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argW-tRNA + 4 EF-Tu.GTP.argX-tRNA + 13 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 11 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 19 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 21 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuW-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 17 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 10 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 18 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1775 mg2 + 1 rib_ini_b1090_1 --> 1 rib_70_elo1	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187
tl_elo_b1090_1_rib2	Translation elongation 2 b1090 1 ribosome(s)	354 h2o + 1 rib_70_elo1_b1090_1_cplx --> 354 EF-G.GDP + 354 EF-Tu.GDP + 23 ala1_tRNA + 14 ala2_tRNA + 16 arg1_tRNA + 2 argW_tRNA + 3 argX_tRNA + 13 asn1_tRNA + 14 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 11 gln1_tRNA + 8 gln2_tRNA + 18 glu1_tRNA + 19 gly1_tRNA + 4 glyT_tRNA + 7 glyU_tRNA + 708 h + 3 hisR_tRNA + 15 ile1_tRNA + 1 ile2_tRNA + 21 leu1_tRNA + 4 leu2_tRNA + 12 leuU_tRNA + 3 leuW_tRNA + 12 leuZ_tRNA + 17 lys1_tRNA + 7 met1_tRNA + 1775 mg2 + 8 phe1_tRNA + 708 pi + 1 pro1_tRNA + 7 pro2_tRNA + 3 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b1090_1_cplx + 2 ser1_tRNA + 5 ser2_tRNA + 4 ser3_tRNA + 4 serT_tRNA + 10 serV_tRNA + 2 thr1_tRNA + 3 thr2_tRNA + 6 thr3_tRNA + 7 thrU_tRNA + 3 trpT_tRNA + 4 tyr1_tRNA + 18 val1_tRNA + 8 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187
tl_elo_b1090_20_rib1	Translation elongation 1 b1090 20 ribosome(s)	7100 EF-G.GTP + 460 EF-Tu.GTP.ala1-tRNA + 280 EF-Tu.GTP.ala2-tRNA + 320 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.argW-tRNA + 80 EF-Tu.GTP.argX-tRNA + 260 EF-Tu.GTP.asn1-tRNA + 280 EF-Tu.GTP.asp1-tRNA + 80 EF-Tu.GTP.cysT-tRNA + 220 EF-Tu.GTP.gln1-tRNA + 160 EF-Tu.GTP.gln2-tRNA + 360 EF-Tu.GTP.glu1-tRNA + 380 EF-Tu.GTP.gly1-tRNA + 80 EF-Tu.GTP.glyT-tRNA + 140 EF-Tu.GTP.glyU-tRNA + 60 EF-Tu.GTP.hisR-tRNA + 300 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.ile2-tRNA + 420 EF-Tu.GTP.leu1-tRNA + 80 EF-Tu.GTP.leu2-tRNA + 240 EF-Tu.GTP.leuU-tRNA + 60 EF-Tu.GTP.leuW-tRNA + 240 EF-Tu.GTP.leuZ-tRNA + 340 EF-Tu.GTP.lys1-tRNA + 140 EF-Tu.GTP.met1-tRNA + 160 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 140 EF-Tu.GTP.pro2-tRNA + 60 EF-Tu.GTP.proL-tRNA + 60 EF-Tu.GTP.proM-tRNA + 40 EF-Tu.GTP.ser1-tRNA + 100 EF-Tu.GTP.ser2-tRNA + 80 EF-Tu.GTP.ser3-tRNA + 80 EF-Tu.GTP.serT-tRNA + 200 EF-Tu.GTP.serV-tRNA + 40 EF-Tu.GTP.thr1-tRNA + 60 EF-Tu.GTP.thr2-tRNA + 120 EF-Tu.GTP.thr3-tRNA + 140 EF-Tu.GTP.thrU-tRNA + 60 EF-Tu.GTP.trpT-tRNA + 80 EF-Tu.GTP.tyr1-tRNA + 360 EF-Tu.GTP.val1-tRNA + 160 EF-Tu.GTP.val2-tRNA + 100 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187
tl_elo_b1090_20_rib2	Translation elongation 2 b1090 20 ribosome(s)	7080 h2o + 1 rib_70_elo1_b1090_20_cplx --> 7080 EF-G.GDP + 7080 EF-Tu.GDP + 460 ala1_tRNA + 280 ala2_tRNA + 320 arg1_tRNA + 40 argW_tRNA + 60 argX_tRNA + 260 asn1_tRNA + 280 asp1_tRNA + 80 cysT_tRNA + 20 fmet_tRNA + 220 gln1_tRNA + 160 gln2_tRNA + 360 glu1_tRNA + 380 gly1_tRNA + 80 glyT_tRNA + 140 glyU_tRNA + 14160 h + 60 hisR_tRNA + 300 ile1_tRNA + 20 ile2_tRNA + 420 leu1_tRNA + 80 leu2_tRNA + 240 leuU_tRNA + 60 leuW_tRNA + 240 leuZ_tRNA + 340 lys1_tRNA + 140 met1_tRNA + 35500 mg2 + 160 phe1_tRNA + 14160 pi + 20 pro1_tRNA + 140 pro2_tRNA + 60 proL_tRNA + 60 proM_tRNA + 1 rib_70_elo2_b1090_20_cplx + 40 ser1_tRNA + 100 ser2_tRNA + 80 ser3_tRNA + 80 serT_tRNA + 200 serV_tRNA + 40 thr1_tRNA + 60 thr2_tRNA + 120 thr3_tRNA + 140 thrU_tRNA + 60 trpT_tRNA + 80 tyr1_tRNA + 360 val1_tRNA + 160 val2_tRNA + 100 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187
tl_elo_b1091_18_rib1	Translation elongation 1 b1091 18 ribosome(s)	5688 EF-G.GTP + 612 EF-Tu.GTP.ala1-tRNA + 162 EF-Tu.GTP.ala2-tRNA + 234 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argX-tRNA + 198 EF-Tu.GTP.asn1-tRNA + 342 EF-Tu.GTP.asp1-tRNA + 90 EF-Tu.GTP.cysT-tRNA + 72 EF-Tu.GTP.gln1-tRNA + 72 EF-Tu.GTP.gln2-tRNA + 306 EF-Tu.GTP.glu1-tRNA + 378 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.glyT-tRNA + 72 EF-Tu.GTP.glyU-tRNA + 144 EF-Tu.GTP.hisR-tRNA + 378 EF-Tu.GTP.ile1-tRNA + 324 EF-Tu.GTP.leu1-tRNA + 72 EF-Tu.GTP.leu2-tRNA + 54 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 180 EF-Tu.GTP.lys1-tRNA + 126 EF-Tu.GTP.met1-tRNA + 162 EF-Tu.GTP.phe1-tRNA + 108 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.proL-tRNA + 72 EF-Tu.GTP.proM-tRNA + 54 EF-Tu.GTP.ser1-tRNA + 144 EF-Tu.GTP.ser2-tRNA + 36 EF-Tu.GTP.serT-tRNA + 108 EF-Tu.GTP.serV-tRNA + 180 EF-Tu.GTP.thr1-tRNA + 72 EF-Tu.GTP.thr2-tRNA + 162 EF-Tu.GTP.thr3-tRNA + 36 EF-Tu.GTP.thrU-tRNA + 54 EF-Tu.GTP.trpT-tRNA + 108 EF-Tu.GTP.tyr1-tRNA + 234 EF-Tu.GTP.val1-tRNA + 108 EF-Tu.GTP.val2-tRNA + 144 EF-Tu.GTP.val3-tRNA + 28440 mg2 + 1 rib_ini_b1091_18 --> 1 rib_70_elo1_b1091_18_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677

tl_elo_b1091_18_rib2	Translation elongation 2 b1091 18 ribosome(s)	5670 h2o + 1 rib_70_elo1_b1091_18_cplx --> 5670 EF-G.GDP + 5670 EF-Tu.GDP + 612 ala1_tRNA + 162 ala2_tRNA + 234 arg1_tRNA + 18 argX_tRNA + 198 asn1_tRNA + 342 asp1_tRNA + 90 cysT_tRNA + 18 fmet_tRNA + 72 gln1_tRNA + 72 gln2_tRNA + 306 glu1_tRNA + 378 gly1_tRNA + 36 glyT_tRNA + 72 glyU_tRNA + 11340 h + 144 hisR_tRNA + 378 ile1_tRNA + 324 leu1_tRNA + 72 leu2_tRNA + 54 leuU_tRNA + 18 leuZ_tRNA + 180 lys1_tRNA + 126 met1_tRNA + 28440 mg2 + 144 phe1_tRNA + 11340 pi + 108 pro1_tRNA + 18 proL_tRNA + 72 proM_tRNA + 1 rib_70_elo2_b1091_18_cplx + 54 ser1_tRNA + 144 ser2_tRNA + 36 serT_tRNA + 108 serV_tRNA + 180 thr1_tRNA + 72 thr2_tRNA + 162 thr3_tRNA + 36 thrU_tRNA + 54 trpT_tRNA + 108 tyr1_tRNA + 234 val1_tRNA + 108 val2_tRNA + 144 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677
tl_elo_b1091_1_rib1	Translation elongation 1 b1091 1 ribosome(s)	316 EF-G.GTP + 34 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 11 EF-Tu.GTP.asn1-tRNA + 19 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 17 EF-Tu.GTP.glu1-tRNA + 21 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 13 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 1580 mg2 + 1 rib_ini_b1091_1 --> 1 rib_70_elo1_b1091_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677
tl_elo_b1091_1_rib2	Translation elongation 2 b1091 1 ribosome(s)	315 h2o + 1 rib_70_elo1_b1091_1_cplx --> 315 EF-G.GDP + 315 EF-Tu.GDP + 34 ala1_tRNA + 9 ala2_tRNA + 13 arg1_tRNA + 1 argX_tRNA + 11 asn1_tRNA + 19 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 4 gln2_tRNA + 17 glu1_tRNA + 21 gly1_tRNA + 2 glyT_tRNA + 4 glyU_tRNA + 630 h + 8 hisR_tRNA + 21 ile1_tRNA + 18 leu1_tRNA + 4 leu2_tRNA + 3 leuU_tRNA + 1 leuZ_tRNA + 10 lys1_tRNA + 7 met1_tRNA + 1580 mg2 + 8 phe1_tRNA + 630 pi + 6 pro1_tRNA + 1 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b1091_1_cplx + 3 ser1_tRNA + 8 ser2_tRNA + 2 serT_tRNA + 6 serV_tRNA + 10 thr1_tRNA + 4 thr2_tRNA + 9 thr3_tRNA + 2 thrU_tRNA + 3 trpT_tRNA + 6 tyr1_tRNA + 13 val1_tRNA + 6 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677
tl_elo_b1091_9_rib1	Translation elongation 1 b1091 9 ribosome(s)	2844 EF-G.GTP + 306 EF-Tu.GTP.ala1-tRNA + 81 EF-Tu.GTP.ala2-tRNA + 117 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argX-tRNA + 99 EF-Tu.GTP.asn1-tRNA + 171 EF-Tu.GTP.asp1-tRNA + 45 EF-Tu.GTP.cysT-tRNA + 36 EF-Tu.GTP.gln1-tRNA + 36 EF-Tu.GTP.gln2-tRNA + 153 EF-Tu.GTP.glu1-tRNA + 189 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 36 EF-Tu.GTP.glyU-tRNA + 72 EF-Tu.GTP.hisR-tRNA + 189 EF-Tu.GTP.ile1-tRNA + 162 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 27 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuZ-tRNA + 90 EF-Tu.GTP.lys1-tRNA + 63 EF-Tu.GTP.met1-tRNA + 81 EF-Tu.GTP.phe1-tRNA + 54 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.proL-tRNA + 36 EF-Tu.GTP.proM-tRNA + 27 EF-Tu.GTP.ser1-tRNA + 72 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.serT-tRNA + 54 EF-Tu.GTP.serV-tRNA + 90 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 81 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 27 EF-Tu.GTP.trpT-tRNA + 54 EF-Tu.GTP.tyr1-tRNA + 117 EF-Tu.GTP.val1-tRNA + 54 EF-Tu.GTP.val2-tRNA + 72 EF-Tu.GTP.val3-tRNA + 14220 mg2 + 1 rib_ini_b1091_9 --> 1 rib_70_elo1_b1091_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677
tl_elo_b1091_9_rib2	Translation elongation 2 b1091 9 ribosome(s)	2835 h2o + 1 rib_70_elo1_b1091_9_cplx --> 2835 EF-G.GDP + 2835 EF-Tu.GDP + 306 ala1_tRNA + 81 ala2_tRNA + 117 arg1_tRNA + 9 argX_tRNA + 99 asn1_tRNA + 171 asp1_tRNA + 45 cysT_tRNA + 9 fmet_tRNA + 36 gln1_tRNA + 36 gln2_tRNA + 153 glu1_tRNA + 189 gly1_tRNA + 18 glyT_tRNA + 36 glyU_tRNA + 5670 h + 72 hisR_tRNA + 189 ile1_tRNA + 162 leu1_tRNA + 36 leu2_tRNA + 27 leuU_tRNA + 9 leuZ_tRNA + 90 lys1_tRNA + 63 met1_tRNA + 14220 mg2 + 72 phe1_tRNA + 5670 pi + 54 pro1_tRNA + 9 proL_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b1091_9_cplx + 27 ser1_tRNA + 72 ser2_tRNA + 18 serT_tRNA + 54 serV_tRNA + 90 thr1_tRNA + 36 thr2_tRNA + 81 thr3_tRNA + 18 thrU_tRNA + 27 trpT_tRNA + 54 tyr1_tRNA + 117 val1_tRNA + 54 val2_tRNA + 72 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677
tl_elo_b1092_18_rib1	Translation elongation 1 b1092 18 ribosome(s)	5544 EF-G.GTP + 846 EF-Tu.GTP.ala1-tRNA + 126 EF-Tu.GTP.ala2-tRNA + 144 EF-Tu.GTP.arg1-tRNA + 162 EF-Tu.GTP.asn1-tRNA + 198 EF-Tu.GTP.asp1-tRNA + 90 EF-Tu.GTP.cysT-tRNA + 198 EF-Tu.GTP.gln1-tRNA + 90 EF-Tu.GTP.gln2-tRNA + 378 EF-Tu.GTP.glu1-tRNA + 342 EF-Tu.GTP.gly1-tRNA + 54 EF-Tu.GTP.glyT-tRNA + 36 EF-Tu.GTP.glyU-tRNA + 72 EF-Tu.GTP.hisR-tRNA + 162 EF-Tu.GTP.ile1-tRNA + 324 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 72 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 252 EF-Tu.GTP.lys1-tRNA + 180 EF-Tu.GTP.met1-tRNA + 144 EF-Tu.GTP.phe1-tRNA + 144 EF-Tu.GTP.pro1-tRNA + 72 EF-Tu.GTP.pro2-tRNA + 90 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 144 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serT-tRNA + 54 EF-Tu.GTP.serV-tRNA + 126 EF-Tu.GTP.thr1-tRNA + 54 EF-Tu.GTP.thr2-tRNA + 90 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 72 EF-Tu.GTP.trpT-tRNA + 126 EF-Tu.GTP.tyr1-tRNA + 270 EF-Tu.GTP.val1-tRNA + 72 EF-Tu.GTP.val2-tRNA + 216 EF-Tu.GTP.val3-tRNA + 27720 mg2 + 1 rib_ini_b1092_18 --> 1 rib_70_elo1_b1092_18_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807

tl_elo_b1092_18_rib2	Translation elongation 2 b1092 18 ribosome(s)	5526 h2o + 1 rib_70_elo1_b1092_18_cplx --> 5526 EF-G.GDP + 5526 EF-Tu.GDP + 846 ala1_tRNA + 126 ala2_tRNA + 144 arg1_tRNA + 162 asn1_tRNA + 198 asp1_tRNA + 90 cysT_tRNA + 18 fmet_tRNA + 198 gln1_tRNA + 90 gln2_tRNA + 378 glu1_tRNA + 342 gly1_tRNA + 54 glyT_tRNA + 36 glyU_tRNA + 11052 h + 72 hisR_tRNA + 162 ile1_tRNA + 324 leu1_tRNA + 36 leu2_tRNA + 54 leuU_tRNA + 36 leuZ_tRNA + 252 lys1_tRNA + 180 met1_tRNA + 27720 mg2 + 144 phe1_tRNA + 11052 pi + 144 pro1_tRNA + 72 pro2_tRNA + 90 proM_tRNA + 1 rib_70_elo2_b1092_18_cplx + 18 ser1_tRNA + 144 ser2_tRNA + 18 ser3_tRNA + 18 serT_tRNA + 54 serV_tRNA + 126 thr1_tRNA + 54 thr2_tRNA + 90 thr3_tRNA + 18 thrU_tRNA + 72 trpT_tRNA + 126 tyr1_tRNA + 270 val1_tRNA + 72 val2_tRNA + 216 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_elo_b1092_1_rib1	Translation elongation 1 b1092 1 ribosome(s)	308 EF-G.GTP + 47 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 11 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 11 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 21 EF-Tu.GTP.glu1-tRNA + 19 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1540 mg2 + 1 rib_ini_b1092_1 --> 1 rib_70_elo1_b1092_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_elo_b1092_1_rib2	Translation elongation 2 b1092 1 ribosome(s)	307 h2o + 1 rib_70_elo1_b1092_1_cplx --> 307 EF-G.GDP + 307 EF-Tu.GDP + 47 ala1_tRNA + 7 ala2_tRNA + 8 arg1_tRNA + 9 asn1_tRNA + 11 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 11 gln1_tRNA + 5 gln2_tRNA + 21 glu1_tRNA + 19 gly1_tRNA + 3 glyT_tRNA + 2 glyU_tRNA + 614 h + 4 hisR_tRNA + 9 ile1_tRNA + 18 leu1_tRNA + 2 leu2_tRNA + 3 leuU_tRNA + 2 leuZ_tRNA + 14 lys1_tRNA + 10 met1_tRNA + 1540 mg2 + 8 phe1_tRNA + 614 pi + 8 pro1_tRNA + 4 pro2_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b1092_1_cplx + 1 ser1_tRNA + 8 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 3 serV_tRNA + 7 thr1_tRNA + 3 thr2_tRNA + 5 thr3_tRNA + 1 thrU_tRNA + 4 trpT_tRNA + 7 tyr1_tRNA + 15 val1_tRNA + 4 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_elo_b1092_9_rib1	Translation elongation 1 b1092 9 ribosome(s)	2772 EF-G.GTP + 423 EF-Tu.GTP.ala1-tRNA + 63 EF-Tu.GTP.ala2-tRNA + 72 EF-Tu.GTP.arg1-tRNA + 81 EF-Tu.GTP.asn1-tRNA + 99 EF-Tu.GTP.asp1-tRNA + 45 EF-Tu.GTP.cysT-tRNA + 99 EF-Tu.GTP.gln1-tRNA + 45 EF-Tu.GTP.gln2-tRNA + 189 EF-Tu.GTP.glu1-tRNA + 171 EF-Tu.GTP.gly1-tRNA + 27 EF-Tu.GTP.glyT-tRNA + 18 EF-Tu.GTP.glyU-tRNA + 36 EF-Tu.GTP.hisR-tRNA + 81 EF-Tu.GTP.ile1-tRNA + 162 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.leu2-tRNA + 36 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 126 EF-Tu.GTP.lys1-tRNA + 90 EF-Tu.GTP.met1-tRNA + 72 EF-Tu.GTP.phe1-tRNA + 72 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 45 EF-Tu.GTP.proM-tRNA + 9 EF-Tu.GTP.ser1-tRNA + 72 EF-Tu.GTP.ser2-tRNA + 9 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serT-tRNA + 27 EF-Tu.GTP.serV-tRNA + 63 EF-Tu.GTP.thr1-tRNA + 27 EF-Tu.GTP.thr2-tRNA + 45 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 63 EF-Tu.GTP.tyr1-tRNA + 135 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val2-tRNA + 108 EF-Tu.GTP.val3-tRNA + 13860 mg2 + 1 rib_ini_b1092_9 --> 1 rib_70_elo1_b1092_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_elo_b1092_9_rib2	Translation elongation 2 b1092 9 ribosome(s)	2763 h2o + 1 rib_70_elo1_b1092_9_cplx --> 2763 EF-G.GDP + 2763 EF-Tu.GDP + 423 ala1_tRNA + 63 ala2_tRNA + 72 arg1_tRNA + 81 asn1_tRNA + 99 asp1_tRNA + 45 cysT_tRNA + 9 fmet_tRNA + 99 gln1_tRNA + 45 gln2_tRNA + 189 glu1_tRNA + 171 gly1_tRNA + 27 glyT_tRNA + 18 glyU_tRNA + 5526 h + 36 hisR_tRNA + 81 ile1_tRNA + 162 leu1_tRNA + 18 leu2_tRNA + 27 leuU_tRNA + 18 leuZ_tRNA + 126 lys1_tRNA + 90 met1_tRNA + 13860 mg2 + 72 phe1_tRNA + 5526 pi + 72 pro1_tRNA + 36 pro2_tRNA + 45 proM_tRNA + 1 rib_70_elo2_b1092_9_cplx + 9 ser1_tRNA + 72 ser2_tRNA + 9 ser3_tRNA + 9 serT_tRNA + 27 serV_tRNA + 63 thr1_tRNA + 27 thr2_tRNA + 45 thr3_tRNA + 9 thrU_tRNA + 36 trpT_tRNA + 63 tyr1_tRNA + 135 val1_tRNA + 36 val2_tRNA + 108 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_elo_b1093_14_rib1	Translation elongation 1 b1093 14 ribosome(s)	3402 EF-G.GTP + 420 EF-Tu.GTP.ala1-tRNA + 70 EF-Tu.GTP.ala2-tRNA + 210 EF-Tu.GTP.arg1-tRNA + 196 EF-Tu.GTP.asn1-tRNA + 140 EF-Tu.GTP.asp1-tRNA + 70 EF-Tu.GTP.gln1-tRNA + 210 EF-Tu.GTP.glu1-tRNA + 350 EF-Tu.GTP.gly1-tRNA + 42 EF-Tu.GTP.glyT-tRNA + 14 EF-Tu.GTP.glyU-tRNA + 28 EF-Tu.GTP.hisR-tRNA + 280 EF-Tu.GTP.ile1-tRNA + 140 EF-Tu.GTP.leu1-tRNA + 42 EF-Tu.GTP.leu2-tRNA + 42 EF-Tu.GTP.leuU-tRNA + 28 EF-Tu.GTP.leuZ-tRNA + 140 EF-Tu.GTP.lys1-tRNA + 140 EF-Tu.GTP.met1-tRNA + 84 EF-Tu.GTP.phe1-tRNA + 28 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.ser1-tRNA + 56 EF-Tu.GTP.ser2-tRNA + 56 EF-Tu.GTP.serT-tRNA + 70 EF-Tu.GTP.serV-tRNA + 70 EF-Tu.GTP.thr1-tRNA + 70 EF-Tu.GTP.thr2-tRNA + 42 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.thrU-tRNA + 14 EF-Tu.GTP.trpT-tRNA + 56 EF-Tu.GTP.tyr1-tRNA + 98 EF-Tu.GTP.val1-tRNA + 28 EF-Tu.GTP.val2-tRNA + 126 EF-Tu.GTP.val3-tRNA + 17010 mg2 + 1 rib_ini_b1093_14 --> 1 rib_70_elo1_b1093_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107

tl_elo_b1093_14_rib2	Translation elongation 2 b1093 14 ribosome(s)	3388 h2o + 1 rib_70_elo1_b1093_14_cplx --> 3388 EF-G.GDP + 3388 EF-Tu.GDP + 420 ala1_tRNA + 70 ala2_tRNA + 210 arg1_tRNA + 196 asn1_tRNA + 140 asp1_tRNA + 14 fmet_tRNA + 70 gln1_tRNA + 210 glu1_tRNA + 350 gly1_tRNA + 42 glyT_tRNA + 14 glyU_tRNA + 6776 h + 28 hisR_tRNA + 280 ile1_tRNA + 140 leu1_tRNA + 42 leu2_tRNA + 42 leuU_tRNA + 28 leuZ_tRNA + 140 lys1_tRNA + 140 met1_tRNA + 17010 mg2 + 84 phe1_tRNA + 6776 pi + 28 pro1_tRNA + 14 pro2_tRNA + 1 rib_70_elo2_b1093_14_cplx + 14 ser1_tRNA + 56 ser2_tRNA + 56 serT_tRNA + 70 serV_tRNA + 70 thr1_tRNA + 70 thr2_tRNA + 42 thr3_tRNA + 14 thrU_tRNA + 14 trpT_tRNA + 56 tyr1_tRNA + 98 val1_tRNA + 14 val2_tRNA + 126 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107
tl_elo_b1093_1_rib1	Translation elongation 1 b1093 1 ribosome(s)	243 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 15 EF-Tu.GTP.glu1-tRNA + 25 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 1215 mg2 + 1 rib_ini_b1093_1 --> 1 rib_70_elo1_b1093_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107
tl_elo_b1093_1_rib2	Translation elongation 2 b1093 1 ribosome(s)	242 h2o + 1 rib_70_elo1_b1093_1_cplx --> 242 EF-G.GDP + 242 EF-Tu.GDP + 30 ala1_tRNA + 5 ala2_tRNA + 15 arg1_tRNA + 14 asn1_tRNA + 10 asp1_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 15 glu1_tRNA + 25 gly1_tRNA + 3 glyT_tRNA + 1 glyU_tRNA + 484 h + 2 hisR_tRNA + 20 ile1_tRNA + 10 leu1_tRNA + 3 leu2_tRNA + 3 leuU_tRNA + 2 leuZ_tRNA + 10 lys1_tRNA + 10 met1_tRNA + 1215 mg2 + 6 phe1_tRNA + 484 pi + 2 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b1093_1_cplx + 1 ser1_tRNA + 4 ser2_tRNA + 4 serT_tRNA + 5 serV_tRNA + 5 thr1_tRNA + 5 thr2_tRNA + 3 thr3_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 4 tyr1_tRNA + 7 val1_tRNA + 1 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107
tl_elo_b1093_7_rib1	Translation elongation 1 b1093 7 ribosome(s)	1701 EF-G.GTP + 210 EF-Tu.GTP.ala1-tRNA + 35 EF-Tu.GTP.ala2-tRNA + 105 EF-Tu.GTP.arg1-tRNA + 98 EF-Tu.GTP.asn1-tRNA + 70 EF-Tu.GTP.asp1-tRNA + 35 EF-Tu.GTP.gln1-tRNA + 105 EF-Tu.GTP.glu1-tRNA + 175 EF-Tu.GTP.gly1-tRNA + 21 EF-Tu.GTP.glyT-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 14 EF-Tu.GTP.hisR-tRNA + 140 EF-Tu.GTP.ile1-tRNA + 70 EF-Tu.GTP.leu1-tRNA + 21 EF-Tu.GTP.leu2-tRNA + 21 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.leuZ-tRNA + 70 EF-Tu.GTP.lys1-tRNA + 70 EF-Tu.GTP.met1-tRNA + 42 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 28 EF-Tu.GTP.ser2-tRNA + 28 EF-Tu.GTP.serT-tRNA + 35 EF-Tu.GTP.serV-tRNA + 35 EF-Tu.GTP.thr1-tRNA + 35 EF-Tu.GTP.thr2-tRNA + 21 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 28 EF-Tu.GTP.tyr1-tRNA + 49 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 63 EF-Tu.GTP.val3-tRNA + 8505 mg2 + 1 rib_ini_b1093_7 --> 1 rib_70_elo1_b1093_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107
tl_elo_b1093_7_rib2	Translation elongation 2 b1093 7 ribosome(s)	1694 h2o + 1 rib_70_elo1_b1093_7_cplx --> 1694 EF-G.GDP + 1694 EF-Tu.GDP + 210 ala1_tRNA + 35 ala2_tRNA + 105 arg1_tRNA + 98 asn1_tRNA + 70 asp1_tRNA + 7 fmet_tRNA + 35 gln1_tRNA + 105 glu1_tRNA + 175 gly1_tRNA + 21 glyT_tRNA + 7 glyU_tRNA + 3388 h + 14 hisR_tRNA + 140 ile1_tRNA + 70 leu1_tRNA + 21 leu2_tRNA + 21 leuU_tRNA + 14 leuZ_tRNA + 70 lys1_tRNA + 70 met1_tRNA + 8505 mg2 + 42 phe1_tRNA + 3388 pi + 14 pro1_tRNA + 7 pro2_tRNA + 1 rib_70_elo2_b1093_7_cplx + 7 ser1_tRNA + 28 ser2_tRNA + 28 serT_tRNA + 35 serV_tRNA + 35 thr1_tRNA + 35 thr2_tRNA + 21 thr3_tRNA + 7 thrU_tRNA + 7 trpT_tRNA + 28 tyr1_tRNA + 49 val1_tRNA + 7 val2_tRNA + 63 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107
tl_elo_b1114_1_rib1	Translation elongation 1 b1114 1 ribosome(s)	1147 EF-G.GTP + 72 EF-Tu.GTP.ala1-tRNA + 37 EF-Tu.GTP.ala2-tRNA + 82 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 10 EF-Tu.GTP.argX-tRNA + 33 EF-Tu.GTP.asn1-tRNA + 69 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 41 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 93 EF-Tu.GTP.glu1-tRNA + 50 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyT-tRNA + 10 EF-Tu.GTP.glyU-tRNA + 34 EF-Tu.GTP.hisR-tRNA + 61 EF-Tu.GTP.ile1-tRNA + 86 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leu2-tRNA + 30 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuW-tRNA + 7 EF-Tu.GTP.leuZ-tRNA + 43 EF-Tu.GTP.lys1-tRNA + 29 EF-Tu.GTP.met1-tRNA + 46 EF-Tu.GTP.phe1-tRNA + 30 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 13 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serT-tRNA + 26 EF-Tu.GTP.serV-tRNA + 21 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 21 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 27 EF-Tu.GTP.tyr1-tRNA + 42 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 11 EF-Tu.GTP.val3-tRNA + 5735 mg2 + 1 rib_ini_b1114_1 --> 1 rib_70_elo1_b1114_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.63E+01	3.63E+01	0	6.33E+01	63.27289	0	1.18E+00	1.182
tl_elo_b1114_1_rib2	Translation elongation 2 b1114 1 ribosome(s)	1146 h2o + 1 rib_70_elo1_b1114_1_cplx --> 1146 EF-G.GDP + 1146 EF-Tu.GDP + 71 ala1_tRNA + 37 ala2_tRNA + 82 arg1_tRNA + 1 argW_tRNA + 10 argX_tRNA + 33 asn1_tRNA + 69 asp1_tRNA + 7 cysT_tRNA + 1 fmet_tRNA + 41 gln1_tRNA + 18 gln2_tRNA + 93 glu1_tRNA + 50 gly1_tRNA + 6 glyT_tRNA + 10 glyU_tRNA + 2292 h + 34 hisR_tRNA + 61 ile1_tRNA + 86 leu1_tRNA + 14 leu2_tRNA + 30 leuU_tRNA + 3 leuW_tRNA + 7 leuZ_tRNA + 43 lys1_tRNA + 29 met1_tRNA + 5735 mg2 + 46 phe1_tRNA + 2292 pi + 30 pro1_tRNA + 7 pro2_tRNA + 6 proL_tRNA + 13 proM_tRNA + 1 rib_70_elo2_b1114_1_cplx + 3 ser1_tRNA + 1 ser2_tRNA + 12 ser3_tRNA + 5 serT_tRNA + 26 serV_tRNA + 21 thr1_tRNA + 8 thr2_tRNA + 21 thr3_tRNA + 8 thrU_tRNA + 10 trpT_tRNA + 27 tyr1_tRNA + 42 val1_tRNA + 14 val2_tRNA + 11 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.63E+01	3.63E+01	0	6.33E+01	63.27289	0	1.18E+00	1.182

tl_elo_b1114_33_rib1	Translation elongation 1 b1114 33 ribosome(s)	37851 EF-G.GTP + 2376 EF-Tu.GTP.ala1-tRNA + 1221 EF-Tu.GTP.ala2-tRNA + 2706 EF-Tu.GTP.arg1-tRNA + 33 EF-Tu.GTP.argW-tRNA + 330 EF-Tu.GTP.argX-tRNA + 1089 EF-Tu.GTP.asn1-tRNA + 2277 EF-Tu.GTP.asp1-tRNA + 231 EF-Tu.GTP.cysT-tRNA + 1353 EF-Tu.GTP.gln1-tRNA + 594 EF-Tu.GTP.gln2-tRNA + 3069 EF-Tu.GTP.glu1-tRNA + 1650 EF-Tu.GTP.gly1-tRNA + 198 EF-Tu.GTP.glyT-tRNA + 330 EF-Tu.GTP.glyU-tRNA + 1122 EF-Tu.GTP.hisR-tRNA + 2013 EF-Tu.GTP.ile1-tRNA + 2838 EF-Tu.GTP.leu1-tRNA + 462 EF-Tu.GTP.leu2-tRNA + 990 EF-Tu.GTP.leuU-tRNA + 99 EF-Tu.GTP.leuW-tRNA + 231 EF-Tu.GTP.leuZ-tRNA + 1419 EF-Tu.GTP.lys1-tRNA + 957 EF-Tu.GTP.met1-tRNA + 1518 EF-Tu.GTP.phe1-tRNA + 990 EF-Tu.GTP.pro1-tRNA + 231 EF-Tu.GTP.pro2-tRNA + 198 EF-Tu.GTP.proL-tRNA + 429 EF-Tu.GTP.proM-tRNA + 99 EF-Tu.GTP.ser1-tRNA + 33 EF-Tu.GTP.ser2-tRNA + 396 EF-Tu.GTP.ser3-tRNA + 165 EF-Tu.GTP.serT-tRNA + 858 EF-Tu.GTP.serV-tRNA + 693 EF-Tu.GTP.thr1-tRNA + 264 EF-Tu.GTP.thr2-tRNA + 693 EF-Tu.GTP.thr3-tRNA + 264 EF-Tu.GTP.thrU-tRNA + 330 EF-Tu.GTP.trpT-tRNA + 891 EF-Tu.GTP.tyr1-tRNA + 1386 EF-Tu.GTP.val1-tRNA + 462 EF-Tu.GTP.val2-tRNA + 363 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	3.63E+01	3.63E+01	0	6.33E+01	63.27289	0	1.18E+00	1.182
tl_elo_b1114_33_rib2	Translation elongation 2 b1114 33 ribosome(s)	37818 h2o + 1 rib_70_elo1_b1114_33_cplx --> 37818 EF-G.GDP + 37818 EF-Tu.GDP + 2343 ala1_tRNA + 1221 ala2_tRNA + 2706 arg1_tRNA + 33 argW_tRNA + 330 argX_tRNA + 1089 asn1_tRNA + 2277 asp1_tRNA + 231 cysT_tRNA + 33 fmet_tRNA + 1353 gln1_tRNA + 594 gln2_tRNA + 3069 glu1_tRNA + 1650 gly1_tRNA + 198 glyT_tRNA + 330 glyU_tRNA + 75636 h + 1122 hisR_tRNA + 2013 ile1_tRNA + 2838 leu1_tRNA + 462 leu2_tRNA + 990 leuU_tRNA + 99 leuW_tRNA + 231 leuZ_tRNA + 1419 lys1_tRNA + 957 met1_tRNA + 189255 mg2 + 1518 phe1_tRNA + 75636 pi + 990 pro1_tRNA + 231 pro2_tRNA + 198 proL_tRNA + 429 proM_tRNA + rib_70_elo2_b1114_33_cplx + 99 ser1_tRNA + 33 ser2_tRNA + 396 ser3_tRNA + 165 serT_tRNA + 858 serV_tRNA + 693 thr1_tRNA + 264 thr2_tRNA + 693 thr3_tRNA + 264 thrU_tRNA + 330 trpT_tRNA + 891 tyr1_tRNA + 1386 val1_tRNA + 462 val2_tRNA + 363 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.63E+01	3.63E+01	0	6.33E+01	63.27289	0	1.18E+00	1.182
tl_elo_b1114_67_rib1	Translation elongation 1 b1114 67 ribosome(s)	76849 EF-G.GTP + 4824 EF-Tu.GTP.ala1-tRNA + 2479 EF-Tu.GTP.ala2-tRNA + 5494 EF-Tu.GTP.arg1-tRNA + 67 EF-Tu.GTP.argW-tRNA + 670 EF-Tu.GTP.argX-tRNA + 2211 EF-Tu.GTP.asn1-tRNA + 4623 EF-Tu.GTP.asp1-tRNA + 469 EF-Tu.GTP.cysT-tRNA + 2747 EF-Tu.GTP.gln1-tRNA + 1206 EF-Tu.GTP.gln2-tRNA + 6231 EF-Tu.GTP.glu1-tRNA + 3350 EF-Tu.GTP.gly1-tRNA + 402 EF-Tu.GTP.glyT-tRNA + 670 EF-Tu.GTP.glyU-tRNA + 2278 EF-Tu.GTP.hisR-tRNA + 4087 EF-Tu.GTP.ile1-tRNA + 5762 EF-Tu.GTP.leu1-tRNA + 938 EF-Tu.GTP.leu2-tRNA + 2010 EF-Tu.GTP.leuU-tRNA + 201 EF-Tu.GTP.leuW-tRNA + 469 EF-Tu.GTP.leuZ-tRNA + 2881 EF-Tu.GTP.lys1-tRNA + 1943 EF-Tu.GTP.met1-tRNA + 3082 EF-Tu.GTP.phe1-tRNA + 2010 EF-Tu.GTP.pro1-tRNA + 469 EF-Tu.GTP.pro2-tRNA + 402 EF-Tu.GTP.proL-tRNA + 871 EF-Tu.GTP.proM-tRNA + 201 EF-Tu.GTP.ser1-tRNA + 67 EF-Tu.GTP.ser2-tRNA + 804 EF-Tu.GTP.ser3-tRNA + 335 EF-Tu.GTP.serT-tRNA + 1742 EF-Tu.GTP.serV-tRNA + 1407 EF-Tu.GTP.thr1-tRNA + 536 EF-Tu.GTP.thr2-tRNA + 1407 EF-Tu.GTP.thr3-tRNA + 536 EF-Tu.GTP.thrU-tRNA + 670 EF-Tu.GTP.trpT-tRNA + 1809 EF-Tu.GTP.tyr1-tRNA + 2814 EF-Tu.GTP.val1-tRNA + 938 EF-Tu.GTP.val2-tRNA + 737 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	2.91E+01	2.91E+01	0	3.16E+01	31.6391	0	1.18E+00	1.182
tl_elo_b1114_67_rib2	Translation elongation 2 b1114 67 ribosome(s)	76782 h2o + 1 rib_70_elo1_b1114_67_cplx --> 76782 EF-G.GDP + 76782 EF-Tu.GDP + 4757 ala1_tRNA + 2479 ala2_tRNA + 5494 arg1_tRNA + 67 argW_tRNA + 670 argX_tRNA + 2211 asn1_tRNA + 4623 asp1_tRNA + 469 cysT_tRNA + 67 fmet_tRNA + 2747 gln1_tRNA + 1206 gln2_tRNA + 6231 glu1_tRNA + 3350 gly1_tRNA + 402 glyT_tRNA + 670 glyU_tRNA + 153564 h + 2278 hisR_tRNA + 4087 ile1_tRNA + 5762 leu1_tRNA + 938 leu2_tRNA + 2010 leuU_tRNA + 201 leuW_tRNA + 469 leuZ_tRNA + 2881 lys1_tRNA + 1943 met1_tRNA + 384245 mg2 + 3082 phe1_tRNA + 153564 pi + 2010 pro1_tRNA + 469 pro2_tRNA + 402 proL_tRNA + 871 proM_tRNA + 1 rib_70_elo2_b1114_67_cplx + 201 ser1_tRNA + 67 ser2_tRNA + 804 ser3_tRNA + 335 serT_tRNA + 1742 serV_tRNA + 1407 thr1_tRNA + 536 thr2_tRNA + 1407 thr3_tRNA + 536 thrU_tRNA + 670 trpT_tRNA + 1809 tyr1_tRNA + 2814 val1_tRNA + 938 val2_tRNA + 737 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.91E+01	2.91E+01	0	3.16E+01	31.6391	0	1.18E+00	1.182
tl_elo_b1133_10_rib1	Translation elongation 1 b1133 10 ribosome(s)	3670 EF-G.GTP + 140 EF-Tu.GTP.ala1-tRNA + 140 EF-Tu.GTP.ala2-tRNA + 150 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.argX-tRNA + 90 EF-Tu.GTP.asn1-tRNA + 260 EF-Tu.GTP.asp1-tRNA + 70 EF-Tu.GTP.cysT-tRNA + 140 EF-Tu.GTP.gln1-tRNA + 40 EF-Tu.GTP.gln2-tRNA + 310 EF-Tu.GTP.glu1-tRNA + 320 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 20 EF-Tu.GTP.glyU-tRNA + 80 EF-Tu.GTP.hisR-tRNA + 200 EF-Tu.GTP.ile1-tRNA + 200 EF-Tu.GTP.leu1-tRNA + 30 EF-Tu.GTP.leu2-tRNA + 90 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 220 EF-Tu.GTP.lys1-tRNA + 50 EF-Tu.GTP.met1-tRNA + 150 EF-Tu.GTP.phe1-tRNA + 120 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proM-tRNA + 30 EF-Tu.GTP.ser1-tRNA + 50 EF-Tu.GTP.ser2-tRNA + 50 EF-Tu.GTP.serV-tRNA + 120 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr2-tRNA + 40 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.thrU-tRNA + 50 EF-Tu.GTP.trpT-tRNA + 130 EF-Tu.GTP.tyr1-tRNA + 90 EF-Tu.GTP.val1-tRNA + 160 EF-Tu.GTP.val2-tRNA + 40 EF-Tu.GTP.val3-tRNA + 18350 mg2 + 1 rib_ini_b1133_10 --> 1 rib_70_elo1_b1133_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027
tl_elo_b1133_10_rib2	Translation elongation 2 b1133 10 ribosome(s)	3660 h2o + 1 rib_70_elo1_b1133_10_cplx --> 3660 EF-G.GDP + 3660 EF-Tu.GDP + 140 ala1_tRNA + 140 ala2_tRNA + 150 arg1_tRNA + 20 argX_tRNA + 90 asn1_tRNA + 260 asp1_tRNA + 70 cysT_tRNA + 10 fmet_tRNA + 140 gln1_tRNA + 40 gln2_tRNA + 310 glu1_tRNA + 320 gly1_tRNA + 10 glyT_tRNA + 20 glyU_tRNA + 7320 h + 80 hisR_tRNA + 200 ile1_tRNA + 200 leu1_tRNA + 30 leu2_tRNA + 90 leuU_tRNA + 10 leuZ_tRNA + 220 lys1_tRNA + 50 met1_tRNA + 18350 mg2 + 150 phe1_tRNA + 7320 pi + 120 pro1_tRNA + 10 pro2_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b1133_10_cplx + 30 ser1_tRNA + 50 ser2_tRNA + 50 serV_tRNA + 120 thr1_tRNA + 20 thr2_tRNA + 40 thr3_tRNA + 10 thrU_tRNA + 50 trpT_tRNA + 130 tyr1_tRNA + 90 val1_tRNA + 150 val2_tRNA + 40 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027

tl_elo_b1133_1_rib1	Translation elongation 1 b1133 1 ribosome(s)	367 EF-G.GTP + 14 EF-Tu.GTP.ala1-tRNA + 14 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 26 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 14 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 31 EF-Tu.GTP.glu1-tRNA + 32 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 22 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 13 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 16 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1835 mg2 + 1 rib_ini_b1133_1 --> 1 rib_70_elo1_b1133_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027
tl_elo_b1133_1_rib2	Translation elongation 2 b1133 1 ribosome(s)	366 h2o + 1 rib_70_elo1_b1133_1_cplx --> 366 EF-G.GDP + 366 EF-Tu.GDP + 14 ala1_tRNA + 14 ala2_tRNA + 15 arg1_tRNA + 2 argX_tRNA + 9 asn1_tRNA + 26 asp1_tRNA + 7 cysT_tRNA + 1 fmet_tRNA + 14 gln1_tRNA + 4 gln2_tRNA + 31 glu1_tRNA + 32 gly1_tRNA + 1 glyT_tRNA + 2 glyU_tRNA + 732 h + 8 hisR_tRNA + 20 ile1_tRNA + 20 leu1_tRNA + 3 leu2_tRNA + 9 leuU_tRNA + 1 leuZ_tRNA + 22 lys1_tRNA + 5 met1_tRNA + 1835 mg2 + 15 phe1_tRNA + 732 pi + 12 pro1_tRNA + 1 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b1133_1_cplx + 3 ser1_tRNA + 5 ser2_tRNA + 5 serV_tRNA + 12 thr1_tRNA + 2 thr2_tRNA + 4 thr3_tRNA + 1 thrU_tRNA + 5 trpT_tRNA + 13 tyr1_tRNA + 9 val1_tRNA + 15 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027
tl_elo_b1133_21_rib1	Translation elongation 1 b1133 21 ribosome(s)	7707 EF-G.GTP + 294 EF-Tu.GTP.ala1-tRNA + 294 EF-Tu.GTP.ala2-tRNA + 315 EF-Tu.GTP.arg1-tRNA + 42 EF-Tu.GTP.argX-tRNA + 189 EF-Tu.GTP.asn1-tRNA + 546 EF-Tu.GTP.asp1-tRNA + 147 EF-Tu.GTP.cysT-tRNA + 294 EF-Tu.GTP.gln1-tRNA + 84 EF-Tu.GTP.gln2-tRNA + 651 EF-Tu.GTP.glu1-tRNA + 672 EF-Tu.GTP.gly1-tRNA + 21 EF-Tu.GTP.glyT-tRNA + 42 EF-Tu.GTP.glyU-tRNA + 168 EF-Tu.GTP.hisR-tRNA + 420 EF-Tu.GTP.ile1-tRNA + 420 EF-Tu.GTP.leu1-tRNA + 63 EF-Tu.GTP.leu2-tRNA + 189 EF-Tu.GTP.leuU-tRNA + 21 EF-Tu.GTP.leuZ-tRNA + 462 EF-Tu.GTP.lys1-tRNA + 105 EF-Tu.GTP.met1-tRNA + 315 EF-Tu.GTP.phe1-tRNA + 252 EF-Tu.GTP.pro1-tRNA + 21 EF-Tu.GTP.pro2-tRNA + 21 EF-Tu.GTP.proM-tRNA + 63 EF-Tu.GTP.ser1-tRNA + 105 EF-Tu.GTP.ser2-tRNA + 105 EF-Tu.GTP.serV-tRNA + 252 EF-Tu.GTP.thr1-tRNA + 42 EF-Tu.GTP.thr2-tRNA + 84 EF-Tu.GTP.thr3-tRNA + 21 EF-Tu.GTP.thrU-tRNA + 105 EF-Tu.GTP.trpT-tRNA + 273 EF-Tu.GTP.tyr1-tRNA + 189 EF-Tu.GTP.val1-tRNA + 336 EF-Tu.GTP.val2-tRNA + 84 EF-Tu.GTP.val3-tRNA + 38535 mg2 + 1 rib_ini_b1133_21 --> 1 rib_70_elo1_b1133_21_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027
tl_elo_b1133_21_rib2	Translation elongation 2 b1133 21 ribosome(s)	7686 h2o + 1 rib_70_elo1_b1133_21_cplx --> 7686 EF-G.GDP + 7686 EF-Tu.GDP + 294 ala1_tRNA + 294 ala2_tRNA + 315 arg1_tRNA + 42 argX_tRNA + 189 asn1_tRNA + 546 asp1_tRNA + 147 cysT_tRNA + 21 fmet_tRNA + 294 gln1_tRNA + 84 gln2_tRNA + 651 glu1_tRNA + 672 gly1_tRNA + 21 glyT_tRNA + 42 glyU_tRNA + 15372 h + 168 hisR_tRNA + 420 ile1_tRNA + 420 leu1_tRNA + 63 leu2_tRNA + 189 leuU_tRNA + 21 leuZ_tRNA + 462 lys1_tRNA + 10 met1_tRNA + 38535 mg2 + 315 phe1_tRNA + 15372 pi + 252 pro1_tRNA + 21 pro2_tRNA + 21 proM_tRNA + 1 rib_70_elo2_b1133_21_cplx + 63 ser1_tRNA + 105 ser2_tRNA + 105 serV_tRNA + 252 thr1_tRNA + 42 thr2_tRNA + 84 thr3_tRNA + 21 thrU_tRNA + 105 trpT_tRNA + 273 tyr1_tRNA + 189 val1_tRNA + 315 val2_tRNA + 84 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027
tl_elo_b1134_1_rib1	Translation elongation 1 b1134 1 ribosome(s)	152 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 15 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 4 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 5 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 760 mg2 + 1 rib_ini_b1134_1 --> 1 rib_70_elo1_b1134_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_elo_b1134_1_rib2	Translation elongation 2 b1134 1 ribosome(s)	151 h2o + 1 rib_70_elo1_b1134_1_cplx --> 151 EF-G.GDP + 151 EF-Tu.GDP + 7 ala1_tRNA + 7 ala2_tRNA + 7 arg1_tRNA + 4 asn1_tRNA + 6 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 5 gln2_tRNA + 15 glu1_tRNA + 5 gly1_tRNA + 2 glyU_tRNA + 302 h + 6 hisR_tRNA + 9 ile1_tRNA + 1 ile2_tRNA + 4 leu1_tRNA + 1 leu2_tRNA + 3 leuU_tRNA + 4 leuZ_tRNA + 5 lys1_tRNA + 2 met1_tRNA + 760 mg2 + 8 phe1_tRNA + 302 pi + 6 pro1_tRNA + 3 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b1134_1_cplx + 1 ser3_tRNA + 1 serT_tRNA + 5 serV_tRNA + 4 thr1_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 5 trpT_tRNA + 2 tyr1_tRNA + 4 val1_tRNA + 3 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528

tl_elo_b1134_4_rib1	Translation elongation 1 b1134 4 ribosome(s)	608 EF-G.GTP + 28 EF-Tu.GTP.ala1-tRNA + 28 EF-Tu.GTP.ala2-tRNA + 28 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.asn1-tRNA + 24 EF-Tu.GTP.asp1-tRNA + 20 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 60 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 24 EF-Tu.GTP.hisR-tRNA + 40 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.ile2-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 32 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 20 EF-Tu.GTP.serV-tRNA + 16 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 20 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 16 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 3040 mg2 + 1 rib_ini_b1134_4 --> 1 rib_70_elo1_b1134_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_elo_b1134_4_rib2	Translation elongation 2 b1134 4 ribosome(s)	604 h2o + 1 rib_70_elo1_b1134_4_cplx --> 604 EF-G.GDP + 604 EF-Tu.GDP + 28 ala1_tRNA + 28 ala2_tRNA + 28 arg1_tRNA + 16 asn1_tRNA + 24 asp1_tRNA + 20 cysT_tRNA + 4 fmet_tRNA + 16 gln1_tRNA + 20 gln2_tRNA + 60 glu1_tRNA + 20 gly1_tRNA + 8 glyU_tRNA + 1208 h + 24 hisR_tRNA + 36 ile1_tRNA + 4 ile2_tRNA + 16 leu1_tRNA + 4 leu2_tRNA + 12 leuU_tRNA + 16 leuZ_tRNA + 20 lys1_tRNA + 8 met1_tRNA + 3040 mg2 + 32 phe1_tRNA + 1208 pi + 24 pro1_tRNA + 12 pro2_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b1134_4_cplx + 4 ser3_tRNA + 4 serT_tRNA + 20 serV_tRNA + 16 thr1_tRNA + 8 thr3_tRNA + 4 thrU_tRNA + 20 trpT_tRNA + 8 tyr1_tRNA + 16 val1_tRNA + 12 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_elo_b1134_9_rib1	Translation elongation 1 b1134 9 ribosome(s)	1368 EF-G.GTP + 63 EF-Tu.GTP.ala1-tRNA + 63 EF-Tu.GTP.ala2-tRNA + 63 EF-Tu.GTP.arg1-tRNA + 36 EF-Tu.GTP.asn1-tRNA + 54 EF-Tu.GTP.asp1-tRNA + 45 EF-Tu.GTP.cysT-tRNA + 36 EF-Tu.GTP.gln1-tRNA + 45 EF-Tu.GTP.gln2-tRNA + 135 EF-Tu.GTP.glu1-tRNA + 45 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyU-tRNA + 54 EF-Tu.GTP.hisR-tRNA + 90 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.ile2-tRNA + 36 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 27 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 45 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 72 EF-Tu.GTP.phe1-tRNA + 54 EF-Tu.GTP.pro1-tRNA + 27 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.proM-tRNA + 9 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serT-tRNA + 45 EF-Tu.GTP.serV-tRNA + 36 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 45 EF-Tu.GTP.trpT-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 36 EF-Tu.GTP.val1-tRNA + 27 EF-Tu.GTP.val2-tRNA + 27 EF-Tu.GTP.val3-tRNA + 6840 mg2 + 1 rib_ini_b1134_9 --> 1 rib_70_elo1_b1134_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_elo_b1134_9_rib2	Translation elongation 2 b1134 9 ribosome(s)	1359 h2o + 1 rib_70_elo1_b1134_9_cplx --> 1359 EF-G.GDP + 1359 EF-Tu.GDP + 63 ala1_tRNA + 63 ala2_tRNA + 63 arg1_tRNA + 36 asn1_tRNA + 54 asp1_tRNA + 45 cysT_tRNA + 9 fmet_tRNA + 36 gln1_tRNA + 45 gln2_tRNA + 135 glu1_tRNA + 45 gly1_tRNA + 18 glyU_tRNA + 2718 h + 54 hisR_tRNA + 81 ile1_tRNA + 9 ile2_tRNA + 36 leu1_tRNA + 9 leu2_tRNA + 27 leuU_tRNA + 36 leuZ_tRNA + 45 lys1_tRNA + 18 met1_tRNA + 6840 mg2 + 72 phe1_tRNA + 2718 pi + 54 pro1_tRNA + 27 pro2_tRNA + 9 proM_tRNA + 1 rib_70_elo2_b1134_9_cplx + 9 ser3_tRNA + 9 serT_tRNA + 45 serV_tRNA + 36 thr1_tRNA + 18 thr3_tRNA + 9 thrU_tRNA + 45 trpT_tRNA + 18 tyr1_tRNA + 36 val1_tRNA + 27 val2_tRNA + 27 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_elo_b1135_12_rib1	Translation elongation 1 b1135 12 ribosome(s)	2592 EF-G.GTP + 96 EF-Tu.GTP.ala1-tRNA + 60 EF-Tu.GTP.ala2-tRNA + 228 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argU-tRNA + 12 EF-Tu.GTP.argW-tRNA + 24 EF-Tu.GTP.argX-tRNA + 144 EF-Tu.GTP.asn1-tRNA + 120 EF-Tu.GTP.asp1-tRNA + 96 EF-Tu.GTP.gln1-tRNA + 48 EF-Tu.GTP.gln2-tRNA + 156 EF-Tu.GTP.glu1-tRNA + 132 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.glyU-tRNA + 24 EF-Tu.GTP.hisR-tRNA + 108 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.ile2-tRNA + 96 EF-Tu.GTP.leu1-tRNA + 48 EF-Tu.GTP.leu2-tRNA + 48 EF-Tu.GTP.leuU-tRNA + 60 EF-Tu.GTP.leuZ-tRNA + 120 EF-Tu.GTP.lys1-tRNA + 36 EF-Tu.GTP.met1-tRNA + 84 EF-Tu.GTP.phe1-tRNA + 48 EF-Tu.GTP.pro1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 84 EF-Tu.GTP.proL-tRNA + 24 EF-Tu.GTP.proM-tRNA + 48 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 48 EF-Tu.GTP.serV-tRNA + 132 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 24 EF-Tu.GTP.thr3-tRNA + 36 EF-Tu.GTP.thrU-tRNA + 48 EF-Tu.GTP.trpT-tRNA + 84 EF-Tu.GTP.tyr1-tRNA + 84 EF-Tu.GTP.val1-tRNA + 72 EF-Tu.GTP.val3-tRNA + 12960 mg2 + 1 rib_ini_b1135_12 --> 1 rib_70_elo1_b1135_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_elo_b1135_12_rib2	Translation elongation 2 b1135 12 ribosome(s)	2580 h2o + 1 rib_70_elo1_b1135_12_cplx --> 2580 EF-G.GDP + 2580 EF-Tu.GDP + 96 ala1_tRNA + 60 ala2_tRNA + 228 arg1_tRNA + 12 argU_tRNA + 12 argW_tRNA + 24 argX_tRNA + 144 asn1_tRNA + 108 asp1_tRNA + 12 fmet_tRNA + 96 gln1_tRNA + 48 gln2_tRNA + 156 glu1_tRNA + 132 gly1_tRNA + 36 glyT_tRNA + 12 glyU_tRNA + 5160 h + 24 hisR_tRNA + 108 ile1_tRNA + 12 ile2_tRNA + 96 leu1_tRNA + 48 leu2_tRNA + 48 leuU_tRNA + 60 leuZ_tRNA + 120 lys1_tRNA + 36 met1_tRNA + 12960 mg2 + 84 phe1_tRNA + 5160 pi + 48 pro1_tRNA + 24 pro2_tRNA + 84 proL_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b1135_12_cplx + 48 ser2_tRNA + 12 ser3_tRNA + 48 serV_tRNA + 132 thr1_tRNA + 12 thr2_tRNA + 24 thr3_tRNA + 36 thrU_tRNA + 48 trpT_tRNA + 84 tyr1_tRNA + 84 val1_tRNA + 72 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008

tl_elo_b1135_1_rib1	Translation elongation 1 b1135 1 ribosome(s)	216 EF-G.GTP + 8 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 19 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argW-tRNA + 2 EF-Tu.GTP.argX-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 13 EF-Tu.GTP.glu1-tRNA + 11 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1080 mg2 + 1 rib_ini_b1135_1 --> 1 rib_70_elo1_b1135_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_elo_b1135_1_rib2	Translation elongation 2 b1135 1 ribosome(s)	215 h2o + 1 rib_70_elo1_b1135_1_cplx --> 215 EF-G.GDP + 215 EF-Tu.GDP + 8 ala1_tRNA + 5 ala2_tRNA + 19 arg1_tRNA + 1 argU_tRNA + 1 argW_tRNA + 2 argX_tRNA + 12 asn1_tRNA + 9 asp1_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 4 gln2_tRNA + 13 glu1_tRNA + 11 gly1_tRNA + 3 glyT_tRNA + 1 glyU_tRNA + 430 h + 2 hisR_tRNA + 9 ile1_tRNA + 1 ile2_tRNA + 8 leu1_tRNA + 4 leu2_tRNA + 4 leuU_tRNA + 5 leuZ_tRNA + 10 lys1_tRNA + 3 met1_tRNA + 1080 mg2 + 7 phe1_tRNA + 430 pi + 4 pro1_tRNA + 2 pro2_tRNA + 7 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b1135_1_cplx + 4 ser2_tRNA + 1 ser3_tRNA + 4 serV_tRNA + 11 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 3 thrU_tRNA + 4 trpT_tRNA + 7 tyr1_tRNA + 7 val1_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_elo_b1135_6_rib1	Translation elongation 1 b1135 6 ribosome(s)	1296 EF-G.GTP + 48 EF-Tu.GTP.ala1-tRNA + 30 EF-Tu.GTP.ala2-tRNA + 114 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argU-tRNA + 6 EF-Tu.GTP.argW-tRNA + 12 EF-Tu.GTP.argX-tRNA + 72 EF-Tu.GTP.asn1-tRNA + 60 EF-Tu.GTP.asp1-tRNA + 48 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 78 EF-Tu.GTP.glu1-tRNA + 66 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 54 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.ile2-tRNA + 48 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.leu2-tRNA + 24 EF-Tu.GTP.leuU-tRNA + 30 EF-Tu.GTP.leuZ-tRNA + 60 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 42 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.pro2-tRNA + 42 EF-Tu.GTP.proL-tRNA + 12 EF-Tu.GTP.proM-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serV-tRNA + 66 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 42 EF-Tu.GTP.tyr1-tRNA + 42 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val3-tRNA + 6480 mg2 + 1 rib_ini_b1135_6 --> 1 rib_70_elo1_b1135_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_elo_b1135_6_rib2	Translation elongation 2 b1135 6 ribosome(s)	1290 h2o + 1 rib_70_elo1_b1135_6_cplx --> 1290 EF-G.GDP + 1290 EF-Tu.GDP + 48 ala1_tRNA + 30 ala2_tRNA + 114 arg1_tRNA + 6 argU_tRNA + 6 argW_tRNA + 12 argX_tRNA + 72 asn1_tRNA + 54 asp1_tRNA + 6 fmet_tRNA + 48 gln1_tRNA + 24 gln2_tRNA + 78 glu1_tRNA + 66 gly1_tRNA + 18 glyT_tRNA + 6 glyU_tRNA + 2580 h + 12 hisR_tRNA + 54 ile1_tRNA + 6 ile2_tRNA + 48 leu1_tRNA + 24 leu2_tRNA + 24 leuU_tRNA + 30 leuZ_tRNA + 60 lys1_tRNA + 18 met1_tRNA + 6480 mg2 + 42 phe1_tRNA + 2580 pi + 24 pro1_tRNA + 12 pro2_tRNA + 42 proL_tRNA + 12 proM_tRNA + 1 rib_70_elo2_b1135_6_cplx + 24 ser2_tRNA + 6 ser3_tRNA + 24 serV_tRNA + 66 thr1_tRNA + 6 thr2_tRNA + 12 thr3_tRNA + 18 thrU_tRNA + 24 trpT_tRNA + 42 tyr1_tRNA + 42 val1_tRNA + 36 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_elo_b1211_10_rib1	Translation elongation 1 b1211 10 ribosome(s)	3590 EF-G.GTP + 260 EF-Tu.GTP.ala1-tRNA + 110 EF-Tu.GTP.ala2-tRNA + 310 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argX-tRNA + 80 EF-Tu.GTP.asn1-tRNA + 260 EF-Tu.GTP.asp1-tRNA + 30 EF-Tu.GTP.cysT-tRNA + 170 EF-Tu.GTP.gln1-tRNA + 80 EF-Tu.GTP.gln2-tRNA + 370 EF-Tu.GTP.glu1-tRNA + 180 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 40 EF-Tu.GTP.glyU-tRNA + 110 EF-Tu.GTP.hisR-tRNA + 180 EF-Tu.GTP.ile1-tRNA + 190 EF-Tu.GTP.leu1-tRNA + 30 EF-Tu.GTP.leu2-tRNA + 50 EF-Tu.GTP.leuU-tRNA + 50 EF-Tu.GTP.leuZ-tRNA + 130 EF-Tu.GTP.lys1-tRNA + 100 EF-Tu.GTP.met1-tRNA + 80 EF-Tu.GTP.phe1-tRNA + 40 EF-Tu.GTP.pro1-tRNA + 50 EF-Tu.GTP.pro2-tRNA + 30 EF-Tu.GTP.proM-tRNA + 20 EF-Tu.GTP.ser1-tRNA + 40 EF-Tu.GTP.ser2-tRNA + 40 EF-Tu.GTP.ser3-tRNA + 30 EF-Tu.GTP.serT-tRNA + 80 EF-Tu.GTP.serV-tRNA + 90 EF-Tu.GTP.thr1-tRNA + 50 EF-Tu.GTP.thr2-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.trpT-tRNA + 70 EF-Tu.GTP.tyr1-tRNA + 50 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 120 EF-Tu.GTP.val3-tRNA + 17950 mg2 + 1 rib_ini_b1211_10 --> 1 rib_70_elo1_b1211_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_elo_b1211_10_rib2	Translation elongation 2 b1211 10 ribosome(s)	3580 h2o + 1 rib_70_elo1_b1211_10_cplx --> 3580 EF-G.GDP + 3580 EF-Tu.GDP + 260 ala1_tRNA + 110 ala2_tRNA + 310 arg1_tRNA + 10 argX_tRNA + 80 asn1_tRNA + 260 asp1_tRNA + 30 cysT_tRNA + 10 fmet_tRNA + 170 gln1_tRNA + 80 gln2_tRNA + 360 glu1_tRNA + 180 gly1_tRNA + 10 glyT_tRNA + 40 glyU_tRNA + 7160 h + 110 hisR_tRNA + 180 ile1_tRNA + 190 leu1_tRNA + 30 leu2_tRNA + 50 leuU_tRNA + 50 leuZ_tRNA + 130 lys1_tRNA + 100 met1_tRNA + 17950 mg2 + 80 phe1_tRNA + 7160 pi + 40 pro1_tRNA + 50 pro2_tRNA + 30 proM_tRNA + 1 rib_70_elo2_b1211_10_cplx + 20 ser1_tRNA + 40 ser2_tRNA + 40 ser3_tRNA + 30 serT_tRNA + 80 serV_tRNA + 90 thr1_tRNA + 50 thr2_tRNA + 20 thr3_tRNA + 20 trpT_tRNA + 70 tyr1_tRNA + 50 val1_tRNA + 10 val2_tRNA + 120 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708

tl_elo_b1211_1_rib1	Translation elongation 1 b1211 1 ribosome(s)	359 EF-G.GTP + 26 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.ala2-tRNA + 31 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 26 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 17 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 37 EF-Tu.GTP.glu1-tRNA + 18 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 19 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 8 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1795 mg2 + 1 rib_ini_b1211_1 --> 1 rib_70_elo1_b1211_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_elo_b1211_1_rib2	Translation elongation 2 b1211 1 ribosome(s)	358 h2o + 1 rib_70_elo1_b1211_1_cplx --> 358 EF-G.GDP + 358 EF-Tu.GDP + 26 ala1_tRNA + 11 ala2_tRNA + 31 arg1_tRNA + 1 argX_tRNA + 8 asn1_tRNA + 26 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 17 gln1_tRNA + 8 gln2_tRNA + 36 glu1_tRNA + 18 gly1_tRNA + 1 glyT_tRNA + 4 glyU_tRNA + 716 h + 11 hisR_tRNA + 18 ile1_tRNA + 19 leu1_tRNA + 3 leu2_tRNA + 5 leuU_tRNA + 5 leuZ_tRNA + 13 lys1_tRNA + 10 met1_tRNA + 1795 mg2 + 8 phe1_tRNA + 716 pi + 4 pro1_tRNA + 5 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b1211_1_cplx + 2 ser1_tRNA + 4 ser2_tRNA + 4 ser3_tRNA + 3 serT_tRNA + 8 serV_tRNA + 9 thr1_tRNA + 5 thr2_tRNA + 2 thr3_tRNA + 2 trpT_tRNA + 7 tyr1_tRNA + 5 val1_tRNA + 1 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_elo_b1211_21_rib1	Translation elongation 1 b1211 21 ribosome(s)	7539 EF-G.GTP + 546 EF-Tu.GTP.ala1-tRNA + 231 EF-Tu.GTP.ala2-tRNA + 651 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.argX-tRNA + 168 EF-Tu.GTP.asn1-tRNA + 546 EF-Tu.GTP.asp1-tRNA + 63 EF-Tu.GTP.cysT-tRNA + 357 EF-Tu.GTP.gln1-tRNA + 168 EF-Tu.GTP.gln2-tRNA + 777 EF-Tu.GTP.glu1-tRNA + 378 EF-Tu.GTP.gly1-tRNA + 21 EF-Tu.GTP.glyT-tRNA + 84 EF-Tu.GTP.glyU-tRNA + 231 EF-Tu.GTP.hisR-tRNA + 378 EF-Tu.GTP.ile1-tRNA + 399 EF-Tu.GTP.leu1-tRNA + 63 EF-Tu.GTP.leu2-tRNA + 105 EF-Tu.GTP.leuU-tRNA + 105 EF-Tu.GTP.leuZ-tRNA + 273 EF-Tu.GTP.lys1-tRNA + 210 EF-Tu.GTP.met1-tRNA + 168 EF-Tu.GTP.phe1-tRNA + 84 EF-Tu.GTP.pro1-tRNA + 105 EF-Tu.GTP.pro2-tRNA + 63 EF-Tu.GTP.proM-tRNA + 42 EF-Tu.GTP.ser1-tRNA + 84 EF-Tu.GTP.ser2-tRNA + 84 EF-Tu.GTP.ser3-tRNA + 63 EF-Tu.GTP.serT-tRNA + 168 EF-Tu.GTP.serV-tRNA + 189 EF-Tu.GTP.thr1-tRNA + 105 EF-Tu.GTP.thr2-tRNA + 42 EF-Tu.GTP.thr3-tRNA + 42 EF-Tu.GTP.trpT-tRNA + 147 EF-Tu.GTP.tyr1-tRNA + 105 EF-Tu.GTP.val1-tRNA + 21 EF-Tu.GTP.val2-tRNA + 252 EF-Tu.GTP.val3-tRNA + 37695 mg2 + 1 rib_ini_b1211_21 --> 1 rib_70_elo1_b1211_21_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_elo_b1211_21_rib2	Translation elongation 2 b1211 21 ribosome(s)	7518 h2o + 1 rib_70_elo1_b1211_21_cplx --> 7518 EF-G.GDP + 7518 EF-Tu.GDP + 546 ala1_tRNA + 231 ala2_tRNA + 651 arg1_tRNA + 21 argX_tRNA + 168 asn1_tRNA + 546 asp1_tRNA + 63 cysT_tRNA + 21 fmet_tRNA + 357 gln1_tRNA + 168 gln2_tRNA + 756 glu1_tRNA + 378 gly1_tRNA + 21 glyT_tRNA + 84 glyU_tRNA + 15036 h + 231 hisR_tRNA + 378 ile1_tRNA + 399 leu1_tRNA + 63 leu2_tRNA + 105 leuU_tRNA + 105 leuZ_tRNA + 273 lys1_tRNA + 210 met1_tRNA + 37695 mg2 + 168 phe1_tRNA + 15036 pi + 84 pro1_tRNA + 105 pro2_tRNA + 63 proM_tRNA + 1 rib_70_elo2_b1211_21_cplx + 42 ser1_tRNA + 84 ser2_tRNA + 84 ser3_tRNA + 63 serT_tRNA + 168 serV_tRNA + 189 thr1_tRNA + 105 thr2_tRNA + 42 thr3_tRNA + 42 trpT_tRNA + 147 tyr1_tRNA + 105 val1_tRNA + 21 val2_tRNA + 252 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_elo_b1212_16_rib1	Translation elongation 1 b1212 16 ribosome(s)	4416 EF-G.GTP + 416 EF-Tu.GTP.ala1-tRNA + 48 EF-Tu.GTP.ala2-tRNA + 288 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.argU-tRNA + 32 EF-Tu.GTP.argX-tRNA + 80 EF-Tu.GTP.asn1-tRNA + 288 EF-Tu.GTP.asp1-tRNA + 80 EF-Tu.GTP.cysT-tRNA + 176 EF-Tu.GTP.gln1-tRNA + 176 EF-Tu.GTP.gln2-tRNA + 336 EF-Tu.GTP.glu1-tRNA + 176 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 96 EF-Tu.GTP.glyU-tRNA + 144 EF-Tu.GTP.hisR-tRNA + 272 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.ile2-tRNA + 224 EF-Tu.GTP.leu1-tRNA + 32 EF-Tu.GTP.leu2-tRNA + 176 EF-Tu.GTP.leuU-tRNA + 32 EF-Tu.GTP.leuW-tRNA + 64 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 48 EF-Tu.GTP.met1-tRNA + 144 EF-Tu.GTP.phe1-tRNA + 128 EF-Tu.GTP.pro1-tRNA + 64 EF-Tu.GTP.pro2-tRNA + 16 EF-Tu.GTP.proL-tRNA + 16 EF-Tu.GTP.proM-tRNA + 32 EF-Tu.GTP.ser1-tRNA + 48 EF-Tu.GTP.ser3-tRNA + 128 EF-Tu.GTP.serV-tRNA + 80 EF-Tu.GTP.thr1-tRNA + 48 EF-Tu.GTP.thr2-tRNA + 64 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 64 EF-Tu.GTP.trpT-tRNA + 96 EF-Tu.GTP.tyr1-tRNA + 112 EF-Tu.GTP.val1-tRNA + 64 EF-Tu.GTP.val2-tRNA + 48 EF-Tu.GTP.val3-tRNA + 22080 mg2 + 1 rib_ini_b1212_16 --> 1 rib_70_elo1_b1212_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927
tl_elo_b1212_16_rib2	Translation elongation 2 b1212 16 ribosome(s)	4400 h2o + 1 rib_70_elo1_b1212_16_cplx --> 4400 EF-G.GDP + 4400 EF-Tu.GDP + 416 ala1_tRNA + 48 ala2_tRNA + 288 arg1_tRNA + 16 argU_tRNA + 32 argX_tRNA + 80 asn1_tRNA + 288 asp1_tRNA + 80 cysT_tRNA + 16 fmet_tRNA + 176 gln1_tRNA + 160 gln2_tRNA + 336 glu1_tRNA + 176 gly1_tRNA + 16 glyT_tRNA + 96 glyU_tRNA + 8800 h + 144 hisR_tRNA + 272 ile1_tRNA + 16 ile2_tRNA + 224 leu1_tRNA + 32 leu2_tRNA + 176 leuU_tRNA + 32 leuW_tRNA + 64 leuZ_tRNA + 16 lys1_tRNA + 48 met1_tRNA + 22080 mg2 + 144 phe1_tRNA + 8800 pi + 128 pro1_tRNA + 64 pro2_tRNA + 16 proL_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b1212_16_cplx + 32 ser1_tRNA + 48 ser3_tRNA + 128 serV_tRNA + 80 thr1_tRNA + 48 thr2_tRNA + 64 thr3_tRNA + 16 thrU_tRNA + 64 trpT_tRNA + 96 tyr1_tRNA + 112 val1_tRNA + 64 val2_tRNA + 48 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927

tl_elo_b1212_1_rib1	Translation elongation 1 b1212 1 ribosome(s)	276 EF-G.GTP + 26 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 2 EF-Tu.GTP.argX-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 11 EF-Tu.GTP.gln1-tRNA + 11 EF-Tu.GTP.gln2-tRNA + 21 EF-Tu.GTP.glu1-tRNA + 11 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 17 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 14 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 1 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 1380 mg2 + 1 rib_ini_b1212_1 --> 1 rib_70_elo1_b1212_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927
tl_elo_b1212_1_rib2	Translation elongation 2 b1212 1 ribosome(s)	275 h2o + 1 rib_70_elo1_b1212_1_cplx --> 275 EF-G.GDP + 275 EF-Tu.GDP + 26 ala1_tRNA + 3 ala2_tRNA + 18 arg1_tRNA + 1 argU_tRNA + 2 argX_tRNA + 5 asn1_tRNA + 18 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 11 gln1_tRNA + 10 gln2_tRNA + 21 glu1_tRNA + 11 gly1_tRNA + 1 glyT_tRNA + 6 glyU_tRNA + 550 h + 9 hisR_tRNA + 17 ile1_tRNA + 1 ile2_tRNA + 14 leu1_tRNA + 2 leu2_tRNA + 11 leuU_tRNA + 2 leuW_tRNA + 4 leuZ_tRNA + 1 lys1_tRNA + 3 met1_tRNA + 1380 mg2 + 9 phe1_tRNA + 550 pi + 8 pro1_tRNA + 4 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b1212_1_cplx + 2 ser1_tRNA + 3 ser3_tRNA + 8 serV_tRNA + 5 thr1_tRNA + 3 thr2_tRNA + 4 thr3_tRNA + 1 thrU_tRNA + 4 trpT_tRNA + 6 tyr1_tRNA + 7 val1_tRNA + 4 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927
tl_elo_b1212_8_rib1	Translation elongation 1 b1212 8 ribosome(s)	2208 EF-G.GTP + 208 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 144 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.argU-tRNA + 16 EF-Tu.GTP.argX-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 144 EF-Tu.GTP.asp1-tRNA + 40 EF-Tu.GTP.cysT-tRNA + 88 EF-Tu.GTP.gln1-tRNA + 88 EF-Tu.GTP.gln2-tRNA + 168 EF-Tu.GTP.glu1-tRNA + 88 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 48 EF-Tu.GTP.glyU-tRNA + 72 EF-Tu.GTP.hisR-tRNA + 136 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.ile2-tRNA + 112 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 88 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuW-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 72 EF-Tu.GTP.phe1-tRNA + 64 EF-Tu.GTP.pro1-tRNA + 32 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proL-tRNA + 8 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 64 EF-Tu.GTP.serV-tRNA + 40 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr2-tRNA + 32 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 32 EF-Tu.GTP.trpT-tRNA + 48 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 32 EF-Tu.GTP.val2-tRNA + 24 EF-Tu.GTP.val3-tRNA + 11040 mg2 + 1 rib_ini_b1212_8 --> 1 rib_70_elo1_b1212_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927
tl_elo_b1212_8_rib2	Translation elongation 2 b1212 8 ribosome(s)	2200 h2o + 1 rib_70_elo1_b1212_8_cplx --> 2200 EF-G.GDP + 2200 EF-Tu.GDP + 208 ala1_tRNA + 24 ala2_tRNA + 144 arg1_tRNA + 8 argU_tRNA + 16 argX_tRNA + 40 asn1_tRNA + 144 asp1_tRNA + 40 cysT_tRNA + 8 fmet_tRNA + 88 gln1_tRNA + 80 gln2_tRNA + 168 glu1_tRNA + 88 gly1_tRNA + 8 glyT_tRNA + 48 glyU_tRNA + 4400 h + 72 hisR_tRNA + 136 ile1_tRNA + 8 ile2_tRNA + 112 leu1_tRNA + 16 leu2_tRNA + 88 leuU_tRNA + 16 leuW_tRNA + 32 leuZ_tRNA + 8 lys1_tRNA + 24 met1_tRNA + 11040 mg2 + 72 phe1_tRNA + 4400 pi + 64 pro1_tRNA + 32 pro2_tRNA + 8 proL_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b1212_8_cplx + 16 ser1_tRNA + 24 ser3_tRNA + 64 serV_tRNA + 40 thr1_tRNA + 24 thr2_tRNA + 32 thr3_tRNA + 8 thrU_tRNA + 32 trpT_tRNA + 48 tyr1_tRNA + 56 val1_tRNA + 32 val2_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927
tl_elo_b1229_1_rib1	Translation elongation 1 b1229 1 ribosome(s)	32 EF-G.GTP + 3 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argU-tRNA + 2 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.argX-tRNA + 1 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 2 EF-Tu.GTP.glu1-tRNA + 1 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.met1-tRNA + 1 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 160 mg2 + 1 rib_ini_b1229_1 --> 1 rib_70_elo1_b1229_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.59E+02	2.59E+02	0	4.21E+02	421.3748	0	4.82E+01	48.207
tl_elo_b1229_1_rib2	Translation elongation 2 b1229 1 ribosome(s)	31 h2o + 1 rib_70_elo1_b1229_1_cplx --> 31 EF-G.GDP + 31 EF-Tu.GDP + 3 ala1_tRNA + 5 arg1_tRNA + 2 argU_tRNA + 2 argW_tRNA + 1 argX_tRNA + 1 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 2 gln2_tRNA + 2 glu1_tRNA + 1 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 62 h + 1 met1_tRNA + 160 mg2 + 1 phe1_tRNA + 62 pi + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b1229_1_cplx + 1 ser3_tRNA + 2 serV_tRNA + 1 thr2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.59E+02	2.59E+02	0	4.21E+02	421.3748	0	4.82E+01	48.207
tl_elo_b1269_17_rib1	Translation elongation 1 b1269 17 ribosome(s)	4930 EF-G.GTP + 204 EF-Tu.GTP.ala1-tRNA + 102 EF-Tu.GTP.ala2-tRNA + 646 EF-Tu.GTP.arg1-tRNA + 187 EF-Tu.GTP.asn1-tRNA + 238 EF-Tu.GTP.asp1-tRNA + 51 EF-Tu.GTP.cysT-tRNA + 136 EF-Tu.GTP.gln1-tRNA + 17 EF-Tu.GTP.gln2-tRNA + 408 EF-Tu.GTP.glu1-tRNA + 442 EF-Tu.GTP.gly1-tRNA + 51 EF-Tu.GTP.glyT-tRNA + 17 EF-Tu.GTP.glyU-tRNA + 68 EF-Tu.GTP.hisR-tRNA + 238 EF-Tu.GTP.ile1-tRNA + 306 EF-Tu.GTP.leu1-tRNA + 85 EF-Tu.GTP.leu2-tRNA + 34 EF-Tu.GTP.leuU-tRNA + 34 EF-Tu.GTP.leuW-tRNA + 17 EF-Tu.GTP.leuZ-tRNA + 255 EF-Tu.GTP.lys1-tRNA + 34 EF-Tu.GTP.met1-tRNA + 85 EF-Tu.GTP.phe1-tRNA + 68 EF-Tu.GTP.pro1-tRNA + 17 EF-Tu.GTP.pro2-tRNA + 119 EF-Tu.GTP.proM-tRNA + 17 EF-Tu.GTP.ser1-tRNA + 68 EF-Tu.GTP.ser2-tRNA + 17 EF-Tu.GTP.ser3-tRNA + 153 EF-Tu.GTP.serV-tRNA + 136 EF-Tu.GTP.thr1-tRNA + 34 EF-Tu.GTP.thr2-tRNA + 34 EF-Tu.GTP.thr3-tRNA + 68 EF-Tu.GTP.trpT-tRNA + 102 EF-Tu.GTP.tyr1-tRNA + 255 EF-Tu.GTP.val1-tRNA + 17 EF-Tu.GTP.val2-tRNA + 170 EF-Tu.GTP.val3-tRNA + 24650 mg2 + 1 rib_ini_b1269_17 --> 1 rib_70_elo1_b1269_17_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695

tl_elo_b1269_17_rib2	Translation elongation 2 b1269 17 ribosome(s)	4913 h2o + 1 rib_70_elo1_b1269_17_cplx --> 4913 EF-G.GDP + 4913 EF-Tu.GDP + 204 ala1_tRNA + 102 ala2_tRNA + 646 arg1_tRNA + 187 asn1_tRNA + 238 asp1_tRNA + 51 cysT_tRNA + 17 fmet_tRNA + 136 gln1_tRNA + 17 gln2_tRNA + 408 glu1_tRNA + 425 gly1_tRNA + 51 glyT_tRNA + 17 glyU_tRNA + 9826 h + 68 hisR_tRNA + 238 ile1_tRNA + 306 leu1_tRNA + 85 leu2_tRNA + 34 leuU_tRNA + 34 leuW_tRNA + 17 leuZ_tRNA + 255 lys1_tRNA + 34 met1_tRNA + 24650 mg2 + 85 phe1_tRNA + 9826 pi + 68 pro1_tRNA + 17 pro2_tRNA + 119 proM_tRNA + 1 rib_70_elo2_b1269_17_cplx + 17 ser1_tRNA + 68 ser2_tRNA + 17 ser3_tRNA + 153 serV_tRNA + 136 thr1_tRNA + 34 thr2_tRNA + 34 thr3_tRNA + 68 trpT_tRNA + 102 tyr1_tRNA + 255 val1_tRNA + 17 val2_tRNA + 170 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_elo_b1269_1_rib1	Translation elongation 1 b1269 1 ribosome(s)	290 EF-G.GTP + 12 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 38 EF-Tu.GTP.arg1-tRNA + 11 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 26 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 14 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 15 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 1450 mg2 + 1 rib_ini_b1269_1 --> 1 rib_70_elo1_b1269_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_elo_b1269_1_rib2	Translation elongation 2 b1269 1 ribosome(s)	289 h2o + 1 rib_70_elo1_b1269_1_cplx --> 289 EF-G.GDP + 289 EF-Tu.GDP + 12 ala1_tRNA + 6 ala2_tRNA + 38 arg1_tRNA + 11 asn1_tRNA + 14 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 1 gln2_tRNA + 24 glu1_tRNA + 25 gly1_tRNA + 3 glyT_tRNA + 1 glyU_tRNA + 578 h + 4 hisR_tRNA + 14 ile1_tRNA + 18 leu1_tRNA + 5 leu2_tRNA + 2 leuU_tRNA + 2 leuW_tRNA + 1 leuZ_tRNA + 15 lys1_tRNA + 2 met1_tRNA + 1450 mg2 + 5 phe1_tRNA + 578 pi + 4 pro1_tRNA + 1 pro2_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b1269_1_cplx + 1 ser1_tRNA + 4 ser2_tRNA + 1 ser3_tRNA + 9 serV_tRNA + 8 thr1_tRNA + 2 thr2_tRNA + 2 thr3_tRNA + 4 trpT_tRNA + 6 tyr1_tRNA + 15 val1_tRNA + 1 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_elo_b1269_8_rib1	Translation elongation 1 b1269 8 ribosome(s)	2320 EF-G.GTP + 96 EF-Tu.GTP.ala1-tRNA + 48 EF-Tu.GTP.ala2-tRNA + 304 EF-Tu.GTP.arg1-tRNA + 88 EF-Tu.GTP.asn1-tRNA + 112 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.cysT-tRNA + 64 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 192 EF-Tu.GTP.glu1-tRNA + 208 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 32 EF-Tu.GTP.hisR-tRNA + 112 EF-Tu.GTP.ile1-tRNA + 144 EF-Tu.GTP.leu1-tRNA + 40 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuW-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 120 EF-Tu.GTP.lys1-tRNA + 16 EF-Tu.GTP.met1-tRNA + 40 EF-Tu.GTP.phe1-tRNA + 32 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 56 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 32 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 72 EF-Tu.GTP.serV-tRNA + 64 EF-Tu.GTP.thr1-tRNA + 16 EF-Tu.GTP.thr2-tRNA + 16 EF-Tu.GTP.thr3-tRNA + 32 EF-Tu.GTP.trpT-tRNA + 48 EF-Tu.GTP.tyr1-tRNA + 120 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 80 EF-Tu.GTP.val3-tRNA + 11600 mg2 + 1 rib_ini_b1269_8 --> 1 rib_70_elo1_b1269_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_elo_b1269_8_rib2	Translation elongation 2 b1269 8 ribosome(s)	2312 h2o + 1 rib_70_elo1_b1269_8_cplx --> 2312 EF-G.GDP + 2312 EF-Tu.GDP + 96 ala1_tRNA + 48 ala2_tRNA + 304 arg1_tRNA + 88 asn1_tRNA + 112 asp1_tRNA + 24 cysT_tRNA + 8 fmet_tRNA + 64 gln1_tRNA + 8 gln2_tRNA + 192 glu1_tRNA + 200 gly1_tRNA + 24 glyT_tRNA + 8 glyU_tRNA + 4624 h + 32 hisR_tRNA + 112 ile1_tRNA + 144 leu1_tRNA + 40 leu2_tRNA + 16 leuU_tRNA + 16 leuW_tRNA + 8 leuZ_tRNA + 120 lys1_tRNA + 16 met1_tRNA + 11600 mg2 + 40 phe1_tRNA + 4624 pi + 32 pro1_tRNA + 8 pro2_tRNA + 56 proM_tRNA + 1 rib_70_elo2_b1269_8_cplx + 8 ser1_tRNA + 32 ser2_tRNA + 8 ser3_tRNA + 72 serV_tRNA + 64 thr1_tRNA + 16 thr2_tRNA + 16 thr3_tRNA + 32 trpT_tRNA + 48 tyr1_tRNA + 120 val1_tRNA + 8 val2_tRNA + 80 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_elo_b1286_18_rib1	Translation elongation 1 b1286 18 ribosome(s)	11574 EF-G.GTP + 828 EF-Tu.GTP.ala1-tRNA + 432 EF-Tu.GTP.ala2-tRNA + 882 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argX-tRNA + 324 EF-Tu.GTP.asn1-tRNA + 900 EF-Tu.GTP.asp1-tRNA + 126 EF-Tu.GTP.cysT-tRNA + 216 EF-Tu.GTP.gln1-tRNA + 162 EF-Tu.GTP.gln2-tRNA + 936 EF-Tu.GTP.glu1-tRNA + 630 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.glyU-tRNA + 288 EF-Tu.GTP.hisR-tRNA + 720 EF-Tu.GTP.ile1-tRNA + 630 EF-Tu.GTP.leu1-tRNA + 72 EF-Tu.GTP.leu2-tRNA + 270 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuW-tRNA + 54 EF-Tu.GTP.leuZ-tRNA + 576 EF-Tu.GTP.lys1-tRNA + 252 EF-Tu.GTP.met1-tRNA + 522 EF-Tu.GTP.phe1-tRNA + 252 EF-Tu.GTP.pro1-tRNA + 162 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proL-tRNA + 126 EF-Tu.GTP.proM-tRNA + 72 EF-Tu.GTP.ser1-tRNA + 54 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 36 EF-Tu.GTP.serT-tRNA + 198 EF-Tu.GTP.serV-tRNA + 234 EF-Tu.GTP.thr1-tRNA + 180 EF-Tu.GTP.thr2-tRNA + 108 EF-Tu.GTP.thr3-tRNA + 54 EF-Tu.GTP.thrU-tRNA + 162 EF-Tu.GTP.trpT-tRNA + 198 EF-Tu.GTP.tyr1-tRNA + 288 EF-Tu.GTP.val1-tRNA + 252 EF-Tu.GTP.val2-tRNA + 252 EF-Tu.GTP.val3-tRNA + 57870 mg2 + 1 rib_ini_b1286_18 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.11E+02	111.1142	0	3.39E+00	3.39

tl_elo_b1286_18_rib2	Translation elongation 2 b1286 18 ribosome(s)	11556 h2o + 1 rib_70_elo1_b1286_18_cplx --> 11556 EF-G.GDP + 11556 EF-Tu.GDP + 810 ala1_tRNA + 432 ala2_tRNA + 882 arg1_tRNA + 18 argX_tRNA + 324 asn1_tRNA + 900 asp1_tRNA + 126 cysT_tRNA + 18 fmet_tRNA + 216 gln1_tRNA + 162 gln2_tRNA + 936 glu1_tRNA + 630 gly1_tRNA + 36 glyU_tRNA + 23112 h + 288 hisR_tRNA + 720 ile1_tRNA + 630 leu1_tRNA + 72 leu2_tRNA + 270 leuU_tRNA + 36 leuW_tRNA + 54 leuZ_tRNA + 576 lys1_tRNA + 252 met1_tRNA + 57870 mg2 + 522 phe1_tRNA + 23112 pi + 252 pro1_tRNA + 162 pro2_tRNA + 18 proL_tRNA + 126 proM_tRNA + 1 rib_70_elo2_b1286_18_cplx + 72 ser1_tRNA + 54 ser2_tRNA + 18 ser3_tRNA + 36 serT_tRNA + 198 serV_tRNA + 234 thr1_tRNA + 180 thr2_tRNA + 108 thr3_tRNA + 54 thrU_tRNA + 162 trpT_tRNA + 198 tyr1_tRNA + 288 val1_tRNA + 252 val2_tRNA + 252 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.11E+02	111.1142	0	3.39E+00	3.39
tl_elo_b1286_1_rib1	Translation elongation 1 b1286 1 ribosome(s)	643 EF-G.GTP + 46 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 49 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 50 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 9 EF-Tu.GTP.gln2-tRNA + 52 EF-Tu.GTP.glu1-tRNA + 35 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 40 EF-Tu.GTP.ile1-tRNA + 35 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 15 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 32 EF-Tu.GTP.lys1-tRNA + 14 EF-Tu.GTP.met1-tRNA + 29 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 7 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 11 EF-Tu.GTP.serV-tRNA + 13 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 9 EF-Tu.GTP.trpT-tRNA + 11 EF-Tu.GTP.tyr1-tRNA + 16 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 14 EF-Tu.GTP.val3-tRNA + 3215 mg2 + 1 rib_ini_b1286_1 --> 1 rib_70_elo1_b1286_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.11E+02	111.1142	0	3.39E+00	3.39
tl_elo_b1286_1_rib2	Translation elongation 2 b1286 1 ribosome(s)	642 h2o + 1 rib_70_elo1_b1286_1_cplx --> 642 EF-G.GDP + 642 EF-Tu.GDP + 45 ala1_tRNA + 24 ala2_tRNA + 49 arg1_tRNA + 1 argX_tRNA + 18 asn1_tRNA + 50 asp1_tRNA + 7 cysT_tRNA + 1 fmet_tRNA + 12 gln1_tRNA + 9 gln2_tRNA + 52 glu1_tRNA + 35 gly1_tRNA + 2 glyU_tRNA + 1284 h + 16 hisR_tRNA + 40 ile1_tRNA + 35 leu1_tRNA + 4 leu2_tRNA + 15 leuU_tRNA + 2 leuW_tRNA + 3 leuZ_tRNA + 32 lys1_tRNA + 14 met1_tRNA + 3215 mg2 + 29 phe1_tRNA + 1284 pi + 14 pro1_tRNA + 9 pro2_tRNA + 1 proL_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b1286_1_cplx + 4 ser1_tRNA + 3 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 11 serV_tRNA + 13 thr1_tRNA + 10 thr2_tRNA + 6 thr3_tRNA + 3 thrU_tRNA + 9 trpT_tRNA + 11 tyr1_tRNA + 16 val1_tRNA + 14 val2_tRNA + 14 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.11E+02	111.1142	0	3.39E+00	3.39
tl_elo_b1286_37_rib1	Translation elongation 1 b1286 37 ribosome(s)	23791 EF-G.GTP + 1702 EF-Tu.GTP.ala1-tRNA + 888 EF-Tu.GTP.ala2-tRNA + 1813 EF-Tu.GTP.arg1-tRNA + 37 EF-Tu.GTP.argX-tRNA + 666 EF-Tu.GTP.asn1-tRNA + 1850 EF-Tu.GTP.asp1-tRNA + 259 EF-Tu.GTP.cysT-tRNA + 444 EF-Tu.GTP.gln1-tRNA + 333 EF-Tu.GTP.gln2-tRNA + 1924 EF-Tu.GTP.glu1-tRNA + 1295 EF-Tu.GTP.gly1-tRNA + 74 EF-Tu.GTP.glyU-tRNA + 592 EF-Tu.GTP.hisR-tRNA + 1480 EF-Tu.GTP.ile1-tRNA + 1295 EF-Tu.GTP.leu1-tRNA + 148 EF-Tu.GTP.leu2-tRNA + 555 EF-Tu.GTP.leuU-tRNA + 74 EF-Tu.GTP.leuW-tRNA + 111 EF-Tu.GTP.leuZ-tRNA + 1184 EF-Tu.GTP.lys1-tRNA + 518 EF-Tu.GTP.met1-tRNA + 1073 EF-Tu.GTP.phe1-tRNA + 518 EF-Tu.GTP.pro1-tRNA + 333 EF-Tu.GTP.pro2-tRNA + 37 EF-Tu.GTP.proL-tRNA + 259 EF-Tu.GTP.proM-tRNA + 148 EF-Tu.GTP.ser1-tRNA + 111 EF-Tu.GTP.ser2-tRNA + 37 EF-Tu.GTP.ser3-tRNA + 74 EF-Tu.GTP.serT-tRNA + 407 EF-Tu.GTP.serV-tRNA + 481 EF-Tu.GTP.thr1-tRNA + 370 EF-Tu.GTP.thr2-tRNA + 222 EF-Tu.GTP.thr3-tRNA + 111 EF-Tu.GTP.thrU-tRNA + 333 EF-Tu.GTP.trpT-tRNA + 407 EF-Tu.GTP.tyr1-tRNA + 592 EF-Tu.GTP.val1-tRNA + 518 EF-Tu.GTP.val2-tRNA + 518 EF-Tu.GTP.val3-tRNA + 118955 mg2 + 1 rib_ini_b1286_37 --> 1 rib_70_	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.02E+02	102.4653	0	3.39E+00	3.39
tl_elo_b1286_37_rib2	Translation elongation 2 b1286 37 ribosome(s)	23754 h2o + 1 rib_70_elo1_b1286_37_cplx --> 23754 EF-G.GDP + 23754 EF-Tu.GDP + 1665 ala1_tRNA + 888 ala2_tRNA + 1813 arg1_tRNA + 37 argX_tRNA + 666 asn1_tRNA + 1850 asp1_tRNA + 259 cysT_tRNA + 37 fmet_tRNA + 444 gln1_tRNA + 333 gln2_tRNA + 1924 glu1_tRNA + 1295 gly1_tRNA + 74 glyU_tRNA + 47508 h + 592 hisR_tRNA + 1480 ile1_tRNA + 1295 leu1_tRNA + 148 leu2_tRNA + 555 leuU_tRNA + 74 leuW_tRNA + 111 leuZ_tRNA + 1184 lys1_tRNA + 518 met1_tRNA + 118955 mg2 + 1073 phe1_tRNA + 47508 pi + 518 pro1_tRNA + 333 pro2_tRNA + 37 proL_tRNA + 259 proM_tRNA + 1 rib_70_elo2_b1286_37_cplx + 148 ser1_tRNA + 111 ser2_tRNA + 37 ser3_tRNA + 74 serT_tRNA + 407 serV_tRNA + 481 thr1_tRNA + 370 thr2_tRNA + 222 thr3_tRNA + 111 thrU_tRNA + 333 trpT_tRNA + 407 tyr1_tRNA + 592 val1_tRNA + 518 val2_tRNA + 518 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.02E+02	102.4653	0	3.39E+00	3.39
tl_elo_b1344_18_rib1	Translation elongation 1 b1344 18 ribosome(s)	5580 EF-G.GTP + 216 EF-Tu.GTP.ala1-tRNA + 54 EF-Tu.GTP.ala2-tRNA + 324 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argX-tRNA + 306 EF-Tu.GTP.asn1-tRNA + 342 EF-Tu.GTP.asp1-tRNA + 144 EF-Tu.GTP.cysT-tRNA + 126 EF-Tu.GTP.gln1-tRNA + 198 EF-Tu.GTP.gln2-tRNA + 450 EF-Tu.GTP.glu1-tRNA + 306 EF-Tu.GTP.gly1-tRNA + 72 EF-Tu.GTP.glyU-tRNA + 108 EF-Tu.GTP.hisR-tRNA + 378 EF-Tu.GTP.ile1-tRNA + 324 EF-Tu.GTP.leu1-tRNA + 90 EF-Tu.GTP.leu2-tRNA + 90 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuW-tRNA + 54 EF-Tu.GTP.leuZ-tRNA + 378 EF-Tu.GTP.lys1-tRNA + 180 EF-Tu.GTP.met1-tRNA + 198 EF-Tu.GTP.phe1-tRNA + 144 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proL-tRNA + 90 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 36 EF-Tu.GTP.ser3-tRNA + 36 EF-Tu.GTP.serT-tRNA + 72 EF-Tu.GTP.serV-tRNA + 90 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 72 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 162 EF-Tu.GTP.tyr1-tRNA + 162 EF-Tu.GTP.val1-tRNA + 144 EF-Tu.GTP.val3-tRNA + 27900 mg2 + 1 rib_ini_b1344_18 --> 1 rib_70_elo1_b1344_18_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289

tl_elo_b1344_18_rib2	Translation elongation 2 b1344 18 ribosome(s)	5562 h2o + 1 rib_70_elo1_b1344_18_cplx --> 5562 EF-G.GDP + 5562 EF-Tu.GDP + 216 ala1_tRNA + 54 ala2_tRNA + 324 arg1_tRNA + 18 argX_tRNA + 306 asn1_tRNA + 342 asp1_tRNA + 144 cysT_tRNA + 18 fmet_tRNA + 126 gln1_tRNA + 198 gln2_tRNA + 450 glu1_tRNA + 306 gly1_tRNA + 72 glyU_tRNA + 11124 h + 108 hisR_tRNA + 378 ile1_tRNA + 324 leu1_tRNA + 90 leu2_tRNA + 90 leuU_tRNA + 18 leuW_tRNA + 54 leuZ_tRNA + 360 lys1_tRNA + 180 met1_tRNA + 27900 mg2 + 198 phe1_tRNA + 11124 pi + 144 pro1_tRNA + 36 pro2_tRNA + 18 proL_tRNA + 90 proM_tRNA + 1 rib_70_elo2_b1344_18_cplx + 18 ser1_tRNA + 36 ser2_tRNA + 36 ser3_tRNA + 36 serT_tRNA + 72 serV_tRNA + 90 thr1_tRNA + 36 thr2_tRNA + 72 thr3_tRNA + 18 thrU_tRNA + 36 trpT_tRNA + 162 tyr1_tRNA + 162 val1_tRNA + 144 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_elo_b1344_1_rib1	Translation elongation 1 b1344 1 ribosome(s)	310 EF-G.GTP + 12 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 17 EF-Tu.GTP.asn1-tRNA + 19 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 11 EF-Tu.GTP.gln2-tRNA + 25 EF-Tu.GTP.glu1-tRNA + 17 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 21 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 11 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val3-tRNA + 1550 mg2 + 1 rib_ini_b1344_1 --> 1 rib_70_elo1_b1344_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_elo_b1344_1_rib2	Translation elongation 2 b1344 1 ribosome(s)	309 h2o + 1 rib_70_elo1_b1344_1_cplx --> 309 EF-G.GDP + 309 EF-Tu.GDP + 12 ala1_tRNA + 3 ala2_tRNA + 18 arg1_tRNA + 1 argX_tRNA + 17 asn1_tRNA + 19 asp1_tRNA + 8 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 11 gln2_tRNA + 25 glu1_tRNA + 17 gly1_tRNA + 4 glyU_tRNA + 618 h + 6 hisR_tRNA + 21 ile1_tRNA + 18 leu1_tRNA + 5 leu2_tRNA + 5 leuU_tRNA + 1 leuW_tRNA + 3 leuZ_tRNA + 20 lys1_tRNA + 10 met1_tRNA + 1550 mg2 + 11 phe1_tRNA + 618 pi + 8 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b1344_1_cplx + 1 ser1_tRNA + 2 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 4 serV_tRNA + 5 thr1_tRNA + 2 thr2_tRNA + 4 thr3_tRNA + 1 thrU_tRNA + 2 trpT_tRNA + 9 tyr1_tRNA + 9 val1_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_elo_b1344_9_rib1	Translation elongation 1 b1344 9 ribosome(s)	2790 EF-G.GTP + 108 EF-Tu.GTP.ala1-tRNA + 27 EF-Tu.GTP.ala2-tRNA + 162 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argX-tRNA + 153 EF-Tu.GTP.asn1-tRNA + 171 EF-Tu.GTP.asp1-tRNA + 72 EF-Tu.GTP.cysT-tRNA + 63 EF-Tu.GTP.gln1-tRNA + 99 EF-Tu.GTP.gln2-tRNA + 225 EF-Tu.GTP.glu1-tRNA + 153 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.glyU-tRNA + 54 EF-Tu.GTP.hisR-tRNA + 189 EF-Tu.GTP.ile1-tRNA + 162 EF-Tu.GTP.leu1-tRNA + 45 EF-Tu.GTP.leu2-tRNA + 45 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuW-tRNA + 27 EF-Tu.GTP.leuZ-tRNA + 189 EF-Tu.GTP.lys1-tRNA + 90 EF-Tu.GTP.met1-tRNA + 99 EF-Tu.GTP.phe1-tRNA + 72 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.proL-tRNA + 45 EF-Tu.GTP.proM-tRNA + 9 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serT-tRNA + 36 EF-Tu.GTP.serV-tRNA + 45 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 36 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 18 EF-Tu.GTP.trpT-tRNA + 81 EF-Tu.GTP.tyr1-tRNA + 81 EF-Tu.GTP.val1-tRNA + 72 EF-Tu.GTP.val3-tRNA + 13950 mg2 + 1 rib_ini_b1344_9 --> 1 rib_70_elo1_b1344_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_elo_b1344_9_rib2	Translation elongation 2 b1344 9 ribosome(s)	2781 h2o + 1 rib_70_elo1_b1344_9_cplx --> 2781 EF-G.GDP + 2781 EF-Tu.GDP + 108 ala1_tRNA + 27 ala2_tRNA + 162 arg1_tRNA + 9 argX_tRNA + 153 asn1_tRNA + 171 asp1_tRNA + 72 cysT_tRNA + 9 fmet_tRNA + 63 gln1_tRNA + 99 gln2_tRNA + 225 glu1_tRNA + 153 gly1_tRNA + 36 glyU_tRNA + 5562 h + 54 hisR_tRNA + 189 ile1_tRNA + 162 leu1_tRNA + 45 leu2_tRNA + 45 leuU_tRNA + 9 leuW_tRNA + 27 leuZ_tRNA + 180 lys1_tRNA + 90 met1_tRNA + 13950 mg2 + 99 phe1_tRNA + 5562 pi + 72 pro1_tRNA + 18 pro2_tRNA + 9 proL_tRNA + 45 proM_tRNA + 1 rib_70_elo2_b1344_9_cplx + 9 ser1_tRNA + 18 ser2_tRNA + 18 ser3_tRNA + 18 serT_tRNA + 36 serV_tRNA + 45 thr1_tRNA + 18 thr2_tRNA + 36 thr3_tRNA + 9 thrU_tRNA + 18 trpT_tRNA + 81 tyr1_tRNA + 81 val1_tRNA + 72 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_elo_b1427_10_rib1	Translation elongation 1 b1427 10 ribosome(s)	1780 EF-G.GTP + 80 EF-Tu.GTP.ala1-tRNA + 30 EF-Tu.GTP.ala2-tRNA + 60 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argU-tRNA + 10 EF-Tu.GTP.argX-tRNA + 110 EF-Tu.GTP.asn1-tRNA + 80 EF-Tu.GTP.asp1-tRNA + 30 EF-Tu.GTP.cysT-tRNA + 120 EF-Tu.GTP.gln1-tRNA + 40 EF-Tu.GTP.gln2-tRNA + 140 EF-Tu.GTP.glu1-tRNA + 70 EF-Tu.GTP.gly1-tRNA + 20 EF-Tu.GTP.glyU-tRNA + 60 EF-Tu.GTP.hisR-tRNA + 120 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.ile2-tRNA + 50 EF-Tu.GTP.leu1-tRNA + 30 EF-Tu.GTP.leu2-tRNA + 50 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuW-tRNA + 40 EF-Tu.GTP.leuZ-tRNA + 100 EF-Tu.GTP.lys1-tRNA + 30 EF-Tu.GTP.met1-tRNA + 70 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proM-tRNA + 30 EF-Tu.GTP.ser2-tRNA + 20 EF-Tu.GTP.ser3-tRNA + 20 EF-Tu.GTP.serT-tRNA + 30 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 30 EF-Tu.GTP.thr3-tRNA + 30 EF-Tu.GTP.trpT-tRNA + 60 EF-Tu.GTP.tyr1-tRNA + 60 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 30 EF-Tu.GTP.val3-tRNA + 8900 mg2 + 1 rib_ini_b1427_10 --> 1 rib_70_elo1_b1427_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975

tl_elo_b1427_10_rib2	Translation elongation 2 b1427 10 ribosome(s)	1770 h2o + 1 rib_70_elo1_b1427_10_cplx --> 1770 EF-G.GDP + 1770 EF-Tu.GDP + 80 ala1_tRNA + 30 ala2_tRNA + 60 arg1_tRNA + 10 argU_tRNA + 10 argX_tRNA + 110 asn1_tRNA + 80 asp1_tRNA + 30 cysT_tRNA + 10 fmet_tRNA + 120 gln1_tRNA + 30 gln2_tRNA + 140 glu1_tRNA + 70 gly1_tRNA + 20 glyU_tRNA + 3540 h + 60 hisR_tRNA + 120 ile1_tRNA + 20 ile2_tRNA + 50 leu1_tRNA + 30 leu2_tRNA + 50 leuU_tRNA + 10 leuW_tRNA + 40 leuZ_tRNA + 100 lys1_tRNA + 30 met1_tRNA + 8900 mg2 + 70 phe1_tRNA + 3540 pi + 20 pro1_tRNA + 10 pro2_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b1427_10_cplx + 30 ser2_tRNA + 20 ser3_tRNA + 20 serT_tRNA + 30 serV_tRNA + 20 thr1_tRNA + 10 thr2_tRNA + 30 thr3_tRNA + 30 trpT_tRNA + 60 tyr1_tRNA + 60 val1_tRNA + 20 val2_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_elo_b1427_1_rib1	Translation elongation 1 b1427 1 ribosome(s)	178 EF-G.GTP + 8 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argX-tRNA + 11 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 7 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 890 mg2 + 1 rib_ini_b1427_1 --> 1 rib_70_elo1_b1427_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_elo_b1427_1_rib2	Translation elongation 2 b1427 1 ribosome(s)	177 h2o + 1 rib_70_elo1_b1427_1_cplx --> 177 EF-G.GDP + 177 EF-Tu.GDP + 8 ala1_tRNA + 3 ala2_tRNA + 6 arg1_tRNA + 1 argU_tRNA + 1 argX_tRNA + 11 asn1_tRNA + 8 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 12 gln1_tRNA + 3 gln2_tRNA + 14 glu1_tRNA + 7 gly1_tRNA + 2 glyU_tRNA + 354 h + 6 hisR_tRNA + 12 ile1_tRNA + 2 ile2_tRNA + 5 leu1_tRNA + 3 leu2_tRNA + 5 leuU_tRNA + 1 leuW_tRNA + 4 leuZ_tRNA + 10 lys1_tRNA + 3 met1_tRNA + 890 mg2 + 7 phe1_tRNA + 354 pi + 2 pro1_tRNA + 1 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b1427_1_cplx + 3 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 3 serV_tRNA + 2 thr1_tRNA + 1 thr2_tRNA + 3 thr3_tRNA + 3 trpT_tRNA + 6 tyr1_tRNA + 6 val1_tRNA + 2 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_elo_b1427_5_rib1	Translation elongation 1 b1427 5 ribosome(s)	890 EF-G.GTP + 40 EF-Tu.GTP.ala1-tRNA + 15 EF-Tu.GTP.ala2-tRNA + 30 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argU-tRNA + 5 EF-Tu.GTP.argX-tRNA + 55 EF-Tu.GTP.asn1-tRNA + 40 EF-Tu.GTP.asp1-tRNA + 15 EF-Tu.GTP.cysT-tRNA + 60 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 70 EF-Tu.GTP.glu1-tRNA + 35 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyU-tRNA + 30 EF-Tu.GTP.hisR-tRNA + 60 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.ile2-tRNA + 25 EF-Tu.GTP.leu1-tRNA + 15 EF-Tu.GTP.leu2-tRNA + 25 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuW-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 50 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 35 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proM-tRNA + 15 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serT-tRNA + 15 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 15 EF-Tu.GTP.thr3-tRNA + 15 EF-Tu.GTP.trpT-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 30 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 15 EF-Tu.GTP.val3-tRNA + 4450 mg2 + 1 rib_ini_b1427_5 --> 1 rib_70_elo1_b1427_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_elo_b1427_5_rib2	Translation elongation 2 b1427 5 ribosome(s)	885 h2o + 1 rib_70_elo1_b1427_5_cplx --> 885 EF-G.GDP + 885 EF-Tu.GDP + 40 ala1_tRNA + 15 ala2_tRNA + 30 arg1_tRNA + 5 argU_tRNA + 5 argX_tRNA + 55 asn1_tRNA + 40 asp1_tRNA + 15 cysT_tRNA + 5 fmet_tRNA + 60 gln1_tRNA + 15 gln2_tRNA + 70 glu1_tRNA + 35 gly1_tRNA + 10 glyU_tRNA + 1770 h + 30 hisR_tRNA + 60 ile1_tRNA + 10 ile2_tRNA + 25 leu1_tRNA + 15 leu2_tRNA + 25 leuU_tRNA + 5 leuW_tRNA + 20 leuZ_tRNA + 50 lys1_tRNA + 15 met1_tRNA + 4450 mg2 + 35 phe1_tRNA + 1770 pi + 10 pro1_tRNA + 5 pro2_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b1427_5_cplx + 15 ser2_tRNA + 10 ser3_tRNA + 10 serT_tRNA + 15 serV_tRNA + 10 thr1_tRNA + 5 thr2_tRNA + 15 thr3_tRNA + 15 trpT_tRNA + 30 tyr1_tRNA + 30 val1_tRNA + 10 val2_tRNA + 15 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_elo_b1480_1_rib1	Translation elongation 1 b1480 1 ribosome(s)	44 EF-G.GTP + 2 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 2 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.glu1-tRNA + 2 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 2 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 1 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val3-tRNA + 220 mg2 + 1 rib_ini_b1480_1 --> 1 rib_70_elo1_b1480_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b1480_1_rib2	Translation elongation 2 b1480 1 ribosome(s)	43 h2o + 1 rib_70_elo1_b1480_1_cplx --> 43 EF-G.GDP + 43 EF-Tu.GDP + 2 ala1_tRNA + 4 arg1_tRNA + 1 argU_tRNA + 4 asn1_tRNA + 2 asp1_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 2 glu1_tRNA + 2 gly1_tRNA + 1 glyT_tRNA + 86 h + 2 hisR_tRNA + 2 ile1_tRNA + 1 ile2_tRNA + 1 leu1_tRNA + 1 leuU_tRNA + 5 lys1_tRNA + 220 mg2 + 86 pi + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b1480_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 1 ser3_tRNA + 1 serV_tRNA + 2 thr1_tRNA + 2 val1_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88

tl_elo_b1480_2_rib1	Translation elongation 1 b1480 2 ribosome(s)	88 EF-G.GTP + 4 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argU-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 4 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 2 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val3-tRNA + 440 mg2 + 1 rib_ini_b1480_2 --> 1 rib_70_elo1_b1480_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b1480_2_rib2	Translation elongation 2 b1480 2 ribosome(s)	86 h2o + 1 rib_70_elo1_b1480_2_cplx --> 86 EF-G.GDP + 86 EF-Tu.GDP + 4 ala1_tRNA + 8 arg1_tRNA + 2 argU_tRNA + 8 asn1_tRNA + 4 asp1_tRNA + 2 fmet_tRNA + 4 gln1_tRNA + 4 glu1_tRNA + 4 gly1_tRNA + 2 glyT_tRNA + 172 h + 4 hisR_tRNA + 4 ile1_tRNA + 2 ile2_tRNA + 2 leu1_tRNA + 2 leuU_tRNA + 10 lys1_tRNA + 440 mg2 + 172 pi + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b1480_2_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 2 ser3_tRNA + 2 serV_tRNA + 4 thr1_tRNA + 4 val1_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b1481_1_rib1	Translation elongation 1 b1481 1 ribosome(s)	70 EF-G.GTP + 5 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 1 EF-Tu.GTP.argX-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 3 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 5 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 1 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 2 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 1 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 350 mg2 + 1 rib_ini_b1481_1 --> 1 rib_70_elo1_b1481_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_elo_b1481_1_rib2	Translation elongation 2 b1481 1 ribosome(s)	69 h2o + 1 rib_70_elo1_b1481_1_cplx --> 69 EF-G.GDP + 69 EF-Tu.GDP + 5 ala1_tRNA + 1 ala2_tRNA + 1 argX_tRNA + 4 asn1_tRNA + 5 asp1_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 2 gln2_tRNA + 6 glu1_tRNA + 3 gly1_tRNA + 138 h + 2 hisR_tRNA + 5 ile1_tRNA + 2 leu1_tRNA + 3 leuU_tRNA + 1 lys1_tRNA + 1 met1_tRNA + 350 mg2 + 1 phe1_tRNA + 138 pi + 1 pro2_tRNA + 1 proL_tRNA + 1 rib_70_elo2_b1481_1_cplx + 1 ser2_tRNA + 1 serT_tRNA + 2 serV_tRNA + 1 thr1_tRNA + 2 thr2_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 4 tyr1_tRNA + 1 val1_tRNA + 2 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_elo_b1481_2_rib1	Translation elongation 1 b1481 2 ribosome(s)	140 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 2 EF-Tu.GTP.argX-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 700 mg2 + 1 rib_ini_b1481_2 --> 1 rib_70_elo1_b1481_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_elo_b1481_2_rib2	Translation elongation 2 b1481 2 ribosome(s)	138 h2o + 1 rib_70_elo1_b1481_2_cplx --> 138 EF-G.GDP + 138 EF-Tu.GDP + 10 ala1_tRNA + 2 ala2_tRNA + 2 argX_tRNA + 8 asn1_tRNA + 10 asp1_tRNA + 2 fmet_tRNA + 8 gln1_tRNA + 4 gln2_tRNA + 12 glu1_tRNA + 6 gly1_tRNA + 276 h + 4 hisR_tRNA + 10 ile1_tRNA + 4 leu1_tRNA + 6 leuU_tRNA + 2 lys1_tRNA + 2 met1_tRNA + 700 mg2 + 2 phe1_tRNA + 276 pi + 2 pro2_tRNA + 2 proL_tRNA + 1 rib_70_elo2_b1481_2_cplx + 2 ser2_tRNA + 2 serT_tRNA + 4 serV_tRNA + 2 thr1_tRNA + 4 thr2_tRNA + 4 thr3_tRNA + 2 thrU_tRNA + 2 trpT_tRNA + 8 tyr1_tRNA + 2 val1_tRNA + 4 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_elo_b1481_4_rib1	Translation elongation 1 b1481 4 ribosome(s)	280 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 4 EF-Tu.GTP.argX-tRNA + 16 EF-Tu.GTP.asn1-tRNA + 20 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serT-tRNA + 8 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 16 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1400 mg2 + 1 rib_ini_b1481_4 --> 1 rib_70_elo1_b1481_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_elo_b1481_4_rib2	Translation elongation 2 b1481 4 ribosome(s)	276 h2o + 1 rib_70_elo1_b1481_4_cplx --> 276 EF-G.GDP + 276 EF-Tu.GDP + 20 ala1_tRNA + 4 ala2_tRNA + 4 argX_tRNA + 16 asn1_tRNA + 20 asp1_tRNA + 4 fmet_tRNA + 16 gln1_tRNA + 8 gln2_tRNA + 24 glu1_tRNA + 12 gly1_tRNA + 552 h + 8 hisR_tRNA + 20 ile1_tRNA + 8 leu1_tRNA + 12 leuU_tRNA + 4 lys1_tRNA + 4 met1_tRNA + 1400 mg2 + 4 phe1_tRNA + 552 pi + 4 pro2_tRNA + 4 proL_tRNA + 1 rib_70_elo2_b1481_4_cplx + 4 ser2_tRNA + 4 serT_tRNA + 8 serV_tRNA + 4 thr1_tRNA + 8 thr2_tRNA + 8 thr3_tRNA + 4 thrU_tRNA + 4 trpT_tRNA + 16 tyr1_tRNA + 4 val1_tRNA + 8 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489

tl_elo_b1636_16_rib1	Translation elongation 1 b1636 16 ribosome(s)	4576 EF-G.GTP + 416 EF-Tu.GTP.ala1-tRNA + 128 EF-Tu.GTP.ala2-tRNA + 160 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.argX-tRNA + 144 EF-Tu.GTP.asn1-tRNA + 144 EF-Tu.GTP.asp1-tRNA + 80 EF-Tu.GTP.cysT-tRNA + 144 EF-Tu.GTP.gln1-tRNA + 96 EF-Tu.GTP.gln2-tRNA + 320 EF-Tu.GTP.glu1-tRNA + 288 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 32 EF-Tu.GTP.glyU-tRNA + 224 EF-Tu.GTP.hisR-tRNA + 240 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.ile2-tRNA + 256 EF-Tu.GTP.leu1-tRNA + 32 EF-Tu.GTP.leu2-tRNA + 96 EF-Tu.GTP.leuU-tRNA + 64 EF-Tu.GTP.leuZ-tRNA + 176 EF-Tu.GTP.lys1-tRNA + 128 EF-Tu.GTP.met1-tRNA + 112 EF-Tu.GTP.phe1-tRNA + 144 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.pro2-tRNA + 16 EF-Tu.GTP.proL-tRNA + 48 EF-Tu.GTP.proM-tRNA + 32 EF-Tu.GTP.ser2-tRNA + 16 EF-Tu.GTP.ser3-tRNA + 128 EF-Tu.GTP.serV-tRNA + 128 EF-Tu.GTP.thr1-tRNA + 16 EF-Tu.GTP.thr2-tRNA + 32 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 48 EF-Tu.GTP.trpT-tRNA + 128 EF-Tu.GTP.tyr1-tRNA + 256 EF-Tu.GTP.val1-tRNA + 96 EF-Tu.GTP.val2-tRNA + 128 EF-Tu.GTP.val3-tRNA + 22880 mg2 + 1 rib_ini_b1636_16 --> 1 rib_70_elo1_b1636_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744
tl_elo_b1636_16_rib2	Translation elongation 2 b1636 16 ribosome(s)	4560 h2o + 1 rib_70_elo1_b1636_16_cplx --> 4560 EF-G.GDP + 4560 EF-Tu.GDP + 416 ala1_tRNA + 128 ala2_tRNA + 160 arg1_tRNA + 16 argX_tRNA + 144 asn1_tRNA + 144 asp1_tRNA + 80 cysT_tRNA + 16 fmet_tRNA + 144 gln1_tRNA + 96 gln2_tRNA + 320 glu1_tRNA + 288 gly1_tRNA + 16 glyT_tRNA + 32 glyU_tRNA + 9120 h + 224 hisR_tRNA + 240 ile1_tRNA + 16 ile2_tRNA + 256 leu1_tRNA + 32 leu2_tRNA + 80 leuU_tRNA + 64 leuZ_tRNA + 176 lys1_tRNA + 128 met1_tRNA + 22880 mg2 + 112 phe1_tRNA + 9120 pi + 144 pro1_tRNA + 16 pro2_tRNA + 16 proL_tRNA + 48 proM_tRNA + 1 rib_70_elo2_b1636_16_cplx + 32 ser2_tRNA + 16 ser3_tRNA + 128 serV_tRNA + 128 thr1_tRNA + 16 thr2_tRNA + 32 thr3_tRNA + 16 thrU_tRNA + 48 trpT_tRNA + 128 tyr1_tRNA + 256 val1_tRNA + 96 val2_tRNA + 128 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744
tl_elo_b1636_1_rib1	Translation elongation 1 b1636 1 ribosome(s)	286 EF-G.GTP + 26 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 9 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 18 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 14 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 16 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 1430 mg2 + 1 rib_ini_b1636_1 --> 1 rib_70_elo1_b1636_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744
tl_elo_b1636_1_rib2	Translation elongation 2 b1636 1 ribosome(s)	285 h2o + 1 rib_70_elo1_b1636_1_cplx --> 285 EF-G.GDP + 285 EF-Tu.GDP + 26 ala1_tRNA + 8 ala2_tRNA + 10 arg1_tRNA + 1 argX_tRNA + 9 asn1_tRNA + 9 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 9 gln1_tRNA + 6 gln2_tRNA + 20 glu1_tRNA + 18 gly1_tRNA + 1 glyT_tRNA + 2 glyU_tRNA + 570 h + 14 hisR_tRNA + 15 ile1_tRNA + 1 ile2_tRNA + 16 leu1_tRNA + 2 leu2_tRNA + 5 leuU_tRNA + 4 leuZ_tRNA + 11 lys1_tRNA + 8 met1_tRNA + 1430 mg2 + 7 phe1_tRNA + 570 pi + 9 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b1636_1_cplx + 2 ser2_tRNA + 1 ser3_tRNA + 8 serV_tRNA + 8 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 3 trpT_tRNA + 8 tyr1_tRNA + 16 val1_tRNA + 6 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744
tl_elo_b1636_8_rib1	Translation elongation 1 b1636 8 ribosome(s)	2288 EF-G.GTP + 208 EF-Tu.GTP.ala1-tRNA + 64 EF-Tu.GTP.ala2-tRNA + 80 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.argX-tRNA + 72 EF-Tu.GTP.asn1-tRNA + 72 EF-Tu.GTP.asp1-tRNA + 40 EF-Tu.GTP.cysT-tRNA + 72 EF-Tu.GTP.gln1-tRNA + 48 EF-Tu.GTP.gln2-tRNA + 160 EF-Tu.GTP.glu1-tRNA + 144 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 16 EF-Tu.GTP.glyU-tRNA + 112 EF-Tu.GTP.hisR-tRNA + 120 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.ile2-tRNA + 128 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 48 EF-Tu.GTP.leuU-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 88 EF-Tu.GTP.lys1-tRNA + 64 EF-Tu.GTP.met1-tRNA + 56 EF-Tu.GTP.phe1-tRNA + 72 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proL-tRNA + 24 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 64 EF-Tu.GTP.serV-tRNA + 64 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 16 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 64 EF-Tu.GTP.tyr1-tRNA + 128 EF-Tu.GTP.val1-tRNA + 48 EF-Tu.GTP.val2-tRNA + 64 EF-Tu.GTP.val3-tRNA + 11440 mg2 + 1 rib_ini_b1636_8 --> 1 rib_70_elo1_b1636_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744
tl_elo_b1636_8_rib2	Translation elongation 2 b1636 8 ribosome(s)	2280 h2o + 1 rib_70_elo1_b1636_8_cplx --> 2280 EF-G.GDP + 2280 EF-Tu.GDP + 208 ala1_tRNA + 64 ala2_tRNA + 80 arg1_tRNA + 8 argX_tRNA + 72 asn1_tRNA + 72 asp1_tRNA + 40 cysT_tRNA + 8 fmet_tRNA + 72 gln1_tRNA + 48 gln2_tRNA + 160 glu1_tRNA + 144 gly1_tRNA + 8 glyT_tRNA + 16 glyU_tRNA + 4560 h + 112 hisR_tRNA + 120 ile1_tRNA + 8 ile2_tRNA + 128 leu1_tRNA + 16 leu2_tRNA + 40 leuU_tRNA + 32 leuZ_tRNA + 88 lys1_tRNA + 64 met1_tRNA + 11440 mg2 + 56 phe1_tRNA + 4560 pi + 72 pro1_tRNA + 8 pro2_tRNA + 8 proL_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b1636_8_cplx + 16 ser2_tRNA + 8 ser3_tRNA + 64 serV_tRNA + 64 thr1_tRNA + 8 thr2_tRNA + 16 thr3_tRNA + 8 thrU_tRNA + 24 trpT_tRNA + 64 tyr1_tRNA + 128 val1_tRNA + 48 val2_tRNA + 64 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744

tl_elo_b1637_12_rib1	Translation elongation 1 b1637 12 ribosome(s)	5076 EF-G.GTP + 324 EF-Tu.GTP.ala1-tRNA + 108 EF-Tu.GTP.ala2-tRNA + 228 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argX-tRNA + 240 EF-Tu.GTP.asn1-tRNA + 288 EF-Tu.GTP.asp1-tRNA + 84 EF-Tu.GTP.cysT-tRNA + 264 EF-Tu.GTP.gln1-tRNA + 60 EF-Tu.GTP.gln2-tRNA + 372 EF-Tu.GTP.glu1-tRNA + 360 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyT-tRNA + 36 EF-Tu.GTP.glyU-tRNA + 72 EF-Tu.GTP.hisR-tRNA + 240 EF-Tu.GTP.ile1-tRNA + 336 EF-Tu.GTP.leu1-tRNA + 96 EF-Tu.GTP.leu2-tRNA + 48 EF-Tu.GTP.leuU-tRNA + 48 EF-Tu.GTP.leuZ-tRNA + 336 EF-Tu.GTP.lys1-tRNA + 72 EF-Tu.GTP.met1-tRNA + 300 EF-Tu.GTP.phe1-tRNA + 108 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proM-tRNA + 60 EF-Tu.GTP.ser1-tRNA + 60 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 120 EF-Tu.GTP.serV-tRNA + 132 EF-Tu.GTP.thr1-tRNA + 96 EF-Tu.GTP.thr2-tRNA + 24 EF-Tu.GTP.thr3-tRNA + 72 EF-Tu.GTP.trpT-tRNA + 132 EF-Tu.GTP.tyr1-tRNA + 132 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val2-tRNA + 120 EF-Tu.GTP.val3-tRNA + 25380 mg2 + 1 rib_ini_b1637_12 --> 1 rib_70_elo1_b1637_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_elo_b1637_12_rib2	Translation elongation 2 b1637 12 ribosome(s)	5064 h2o + 1 rib_70_elo1_b1637_12_cplx --> 5064 EF-G.GDP + 5064 EF-Tu.GDP + 324 ala1_tRNA + 108 ala2_tRNA + 228 arg1_tRNA + 12 argX_tRNA + 240 asn1_tRNA + 288 asp1_tRNA + 84 cysT_tRNA + 12 fmet_tRNA + 264 gln1_tRNA + 60 gln2_tRNA + 372 glu1_tRNA + 360 gly1_tRNA + 12 glyT_tRNA + 36 glyU_tRNA + 10128 h + 72 hisR_tRNA + 240 ile1_tRNA + 336 leu1_tRNA + 96 leu2_tRNA + 48 leuU_tRNA + 48 leuZ_tRNA + 324 lys1_tRNA + 72 met1_tRNA + 25380 mg2 + 300 phe1_tRNA + 10128 pi + 108 pro1_tRNA + 36 pro2_tRNA + 12 proM_tRNA + 1 rib_70_elo2_b1637_12_cplx + 60 ser1_tRNA + 60 ser2_tRNA + 12 ser3_tRNA + 120 serV_tRNA + 132 thr1_tRNA + 96 thr2_tRNA + 24 thr3_tRNA + 72 trpT_tRNA + 132 tyr1_tRNA + 132 val1_tRNA + 24 val2_tRNA + 120 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_elo_b1637_1_rib1	Translation elongation 1 b1637 1 ribosome(s)	423 EF-G.GTP + 27 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 19 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 24 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 22 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 31 EF-Tu.GTP.glu1-tRNA + 30 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 28 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 28 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 25 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 11 EF-Tu.GTP.tyr1-tRNA + 11 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 2115 mg2 + 1 rib_ini_b1637_1 --> 1 rib_70_elo1_b1637_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_elo_b1637_1_rib2	Translation elongation 2 b1637 1 ribosome(s)	422 h2o + 1 rib_70_elo1_b1637_1_cplx --> 422 EF-G.GDP + 422 EF-Tu.GDP + 27 ala1_tRNA + 9 ala2_tRNA + 19 arg1_tRNA + 1 argX_tRNA + 20 asn1_tRNA + 24 asp1_tRNA + 7 cysT_tRNA + 1 fmet_tRNA + 22 gln1_tRNA + 5 gln2_tRNA + 31 glu1_tRNA + 30 gly1_tRNA + 1 glyT_tRNA + 3 glyU_tRNA + 844 h + 6 hisR_tRNA + 20 ile1_tRNA + 28 leu1_tRNA + 8 leu2_tRNA + 4 leuU_tRNA + 4 leuZ_tRNA + 27 lys1_tRNA + 6 met1_tRNA + 2115 mg2 + 25 phe1_tRNA + 844 pi + 9 pro1_tRNA + 3 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b1637_1_cplx + 5 ser1_tRNA + 5 ser2_tRNA + 1 ser3_tRNA + 10 serV_tRNA + 11 thr1_tRNA + 8 thr2_tRNA + 2 thr3_tRNA + 6 trpT_tRNA + 11 tyr1_tRNA + 11 val1_tRNA + 2 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_elo_b1637_24_rib1	Translation elongation 1 b1637 24 ribosome(s)	10152 EF-G.GTP + 648 EF-Tu.GTP.ala1-tRNA + 216 EF-Tu.GTP.ala2-tRNA + 456 EF-Tu.GTP.arg1-tRNA + 24 EF-Tu.GTP.argX-tRNA + 480 EF-Tu.GTP.asn1-tRNA + 576 EF-Tu.GTP.asp1-tRNA + 168 EF-Tu.GTP.cysT-tRNA + 528 EF-Tu.GTP.gln1-tRNA + 120 EF-Tu.GTP.gln2-tRNA + 744 EF-Tu.GTP.glu1-tRNA + 720 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.glyT-tRNA + 72 EF-Tu.GTP.glyU-tRNA + 144 EF-Tu.GTP.hisR-tRNA + 480 EF-Tu.GTP.ile1-tRNA + 672 EF-Tu.GTP.leu1-tRNA + 192 EF-Tu.GTP.leu2-tRNA + 96 EF-Tu.GTP.leuU-tRNA + 96 EF-Tu.GTP.leuZ-tRNA + 672 EF-Tu.GTP.lys1-tRNA + 144 EF-Tu.GTP.met1-tRNA + 600 EF-Tu.GTP.phe1-tRNA + 216 EF-Tu.GTP.pro1-tRNA + 72 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proM-tRNA + 120 EF-Tu.GTP.ser1-tRNA + 120 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 240 EF-Tu.GTP.serV-tRNA + 264 EF-Tu.GTP.thr1-tRNA + 192 EF-Tu.GTP.thr2-tRNA + 48 EF-Tu.GTP.thr3-tRNA + 144 EF-Tu.GTP.trpT-tRNA + 264 EF-Tu.GTP.tyr1-tRNA + 264 EF-Tu.GTP.val1-tRNA + 48 EF-Tu.GTP.val2-tRNA + 240 EF-Tu.GTP.val3-tRNA + 50760 mg2 + 1 rib_ini_b1637_24 --> 1 rib_70_elo1_b1637_24_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_elo_b1637_24_rib2	Translation elongation 2 b1637 24 ribosome(s)	10128 h2o + 1 rib_70_elo1_b1637_24_cplx --> 10128 EF-G.GDP + 10128 EF-Tu.GDP + 648 ala1_tRNA + 216 ala2_tRNA + 456 arg1_tRNA + 24 argX_tRNA + 480 asn1_tRNA + 576 asp1_tRNA + 168 cysT_tRNA + 24 fmet_tRNA + 528 gln1_tRNA + 120 gln2_tRNA + 744 glu1_tRNA + 720 gly1_tRNA + 24 glyT_tRNA + 72 glyU_tRNA + 20256 h + 144 hisR_tRNA + 480 ile1_tRNA + 672 leu1_tRNA + 192 leu2_tRNA + 96 leuU_tRNA + 96 leuZ_tRNA + 648 lys1_tRNA + 144 met1_tRNA + 50760 mg2 + 600 phe1_tRNA + 20256 pi + 216 pro1_tRNA + 72 pro2_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b1637_24_cplx + 120 ser1_tRNA + 120 ser2_tRNA + 24 ser3_tRNA + 240 serV_tRNA + 264 thr1_tRNA + 192 thr2_tRNA + 48 thr3_tRNA + 144 trpT_tRNA + 264 tyr1_tRNA + 264 val1_tRNA + 48 val2_tRNA + 240 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964

tl_elo_b1638_12_rib1	Translation elongation 1 b1638 12 ribosome(s)	2604 EF-G.GTP + 120 EF-Tu.GTP.ala1-tRNA + 36 EF-Tu.GTP.ala2-tRNA + 240 EF-Tu.GTP.arg1-tRNA + 60 EF-Tu.GTP.asn1-tRNA + 132 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 144 EF-Tu.GTP.gln1-tRNA + 36 EF-Tu.GTP.gln2-tRNA + 204 EF-Tu.GTP.glu1-tRNA + 144 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyU-tRNA + 96 EF-Tu.GTP.hisR-tRNA + 108 EF-Tu.GTP.ile1-tRNA + 84 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 132 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 144 EF-Tu.GTP.lys1-tRNA + 48 EF-Tu.GTP.met1-tRNA + 120 EF-Tu.GTP.phe1-tRNA + 48 EF-Tu.GTP.pro1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proL-tRNA + 24 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 96 EF-Tu.GTP.serV-tRNA + 72 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 72 EF-Tu.GTP.trpT-tRNA + 72 EF-Tu.GTP.tyr1-tRNA + 84 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val2-tRNA + 36 EF-Tu.GTP.val3-tRNA + 13020 mg2 + 1 rib_ini_b1638_12 --> 1 rib_70_elo1_b1638_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094
tl_elo_b1638_12_rib2	Translation elongation 2 b1638 12 ribosome(s)	2592 h2o + 1 rib_70_elo1_b1638_12_cplx --> 2592 EF-G.GDP + 2592 EF-Tu.GDP + 120 ala1_tRNA + 36 ala2_tRNA + 240 arg1_tRNA + 60 asn1_tRNA + 132 asp1_tRNA + 12 cysT_tRNA + 12 fmet_tRNA + 144 gln1_tRNA + 36 gln2_tRNA + 204 glu1_tRNA + 144 gly1_tRNA + 12 glyU_tRNA + 5184 h + 96 hisR_tRNA + 108 ile1_tRNA + 84 leu1_tRNA + 36 leu2_tRNA + 132 leuU_tRNA + 36 leuZ_tRNA + 144 lys1_tRNA + 48 met1_tRNA + 13020 mg2 + 120 phe1_tRNA + 5184 pi + 48 pro1_tRNA + 24 pro2_tRNA + 12 proL_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b1638_12_cplx + 12 ser1_tRNA + 36 ser2_tRNA + 24 ser3_tRNA + 96 serV_tRNA + 72 thr1_tRNA + 12 thr2_tRNA + 72 trpT_tRNA + 72 tyr1_tRNA + 84 val1_tRNA + 24 val2_tRNA + 36 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094
tl_elo_b1638_1_rib1	Translation elongation 1 b1638 1 ribosome(s)	217 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 11 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 17 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 1085 mg2 + 1 rib_ini_b1638_1 --> 1 rib_70_elo1_b1638_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094
tl_elo_b1638_1_rib2	Translation elongation 2 b1638 1 ribosome(s)	216 h2o + 1 rib_70_elo1_b1638_1_cplx --> 216 EF-G.GDP + 216 EF-Tu.GDP + 10 ala1_tRNA + 3 ala2_tRNA + 20 arg1_tRNA + 5 asn1_tRNA + 11 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 12 gln1_tRNA + 3 gln2_tRNA + 17 glu1_tRNA + 12 gly1_tRNA + 1 glyU_tRNA + 432 h + 8 hisR_tRNA + 9 ile1_tRNA + 7 leu1_tRNA + 3 leu2_tRNA + 11 leuU_tRNA + 3 leuZ_tRNA + 12 lys1_tRNA + 4 met1_tRNA + 1085 mg2 + 10 phe1_tRNA + 432 pi + 4 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b1638_1_cplx + 1 ser1_tRNA + 3 ser2_tRNA + 2 ser3_tRNA + 8 serV_tRNA + 6 thr1_tRNA + 1 thr2_tRNA + 6 trpT_tRNA + 6 tyr1_tRNA + 7 val1_tRNA + 2 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094
tl_elo_b1638_6_rib1	Translation elongation 1 b1638 6 ribosome(s)	1302 EF-G.GTP + 60 EF-Tu.GTP.ala1-tRNA + 18 EF-Tu.GTP.ala2-tRNA + 120 EF-Tu.GTP.arg1-tRNA + 30 EF-Tu.GTP.asn1-tRNA + 66 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 72 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 102 EF-Tu.GTP.glu1-tRNA + 72 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 48 EF-Tu.GTP.hisR-tRNA + 54 EF-Tu.GTP.ile1-tRNA + 42 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.leu2-tRNA + 66 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 72 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 60 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proL-tRNA + 12 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 48 EF-Tu.GTP.serV-tRNA + 36 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 36 EF-Tu.GTP.tyr1-tRNA + 42 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 18 EF-Tu.GTP.val3-tRNA + 6510 mg2 + 1 rib_ini_b1638_6 --> 1 rib_70_elo1_b1638_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094
tl_elo_b1638_6_rib2	Translation elongation 2 b1638 6 ribosome(s)	1296 h2o + 1 rib_70_elo1_b1638_6_cplx --> 1296 EF-G.GDP + 1296 EF-Tu.GDP + 60 ala1_tRNA + 18 ala2_tRNA + 120 arg1_tRNA + 30 asn1_tRNA + 66 asp1_tRNA + 6 cysT_tRNA + 6 fmet_tRNA + 72 gln1_tRNA + 18 gln2_tRNA + 102 glu1_tRNA + 72 gly1_tRNA + 6 glyU_tRNA + 2592 h + 48 hisR_tRNA + 54 ile1_tRNA + 42 leu1_tRNA + 18 leu2_tRNA + 66 leuU_tRNA + 18 leuZ_tRNA + 72 lys1_tRNA + 24 met1_tRNA + 6510 mg2 + 60 phe1_tRNA + 2592 pi + 24 pro1_tRNA + 12 pro2_tRNA + 6 proL_tRNA + 12 proM_tRNA + 1 rib_70_elo2_b1638_6_cplx + 6 ser1_tRNA + 18 ser2_tRNA + 12 ser3_tRNA + 48 serV_tRNA + 36 thr1_tRNA + 6 thr2_tRNA + 36 trpT_tRNA + 36 tyr1_tRNA + 42 val1_tRNA + 12 val2_tRNA + 18 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094

tl_elo_b1652_12_rib1	Translation elongation 1 b1652 12 ribosome(s)	2568 EF-G.GTP + 192 EF-Tu.GTP.ala1-tRNA + 180 EF-Tu.GTP.ala2-tRNA + 120 EF-Tu.GTP.arg1-tRNA + 120 EF-Tu.GTP.asn1-tRNA + 168 EF-Tu.GTP.asp1-tRNA + 48 EF-Tu.GTP.cysT-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 48 EF-Tu.GTP.gln2-tRNA + 156 EF-Tu.GTP.glu1-tRNA + 120 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.glyU-tRNA + 84 EF-Tu.GTP.hisR-tRNA + 96 EF-Tu.GTP.ile1-tRNA + 132 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.leu2-tRNA + 48 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuW-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 96 EF-Tu.GTP.lys1-tRNA + 72 EF-Tu.GTP.met1-tRNA + 168 EF-Tu.GTP.phe1-tRNA + 48 EF-Tu.GTP.pro1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proL-tRNA + 24 EF-Tu.GTP.proM-tRNA + 24 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.serT-tRNA + 48 EF-Tu.GTP.serV-tRNA + 96 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 24 EF-Tu.GTP.thrU-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 36 EF-Tu.GTP.tyr1-tRNA + 72 EF-Tu.GTP.val1-tRNA + 48 EF-Tu.GTP.val2-tRNA + 36 EF-Tu.GTP.val3-tRNA + 12840 mg2 + 1 rib_ini_b1652_12 --> 1 rib_70_elo1_b1652_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_elo_b1652_12_rib2	Translation elongation 2 b1652 12 ribosome(s)	2556 h2o + 1 rib_70_elo1_b1652_12_cplx --> 2556 EF-G.GDP + 2556 EF-Tu.GDP + 192 ala1_tRNA + 180 ala2_tRNA + 120 arg1_tRNA + 120 asn1_tRNA + 168 asp1_tRNA + 48 cysT_tRNA + 12 fmet_tRNA + 24 gln1_tRNA + 48 gln2_tRNA + 156 glu1_tRNA + 120 gly1_tRNA + 36 glyT_tRNA + 12 glyU_tRNA + 5112 h + 84 hisR_tRNA + 96 ile1_tRNA + 132 leu1_tRNA + 24 leu2_tRNA + 48 leuU_tRNA + 12 leuW_tRNA + 12 leuZ_tRNA + 96 lys1_tRNA + 72 met1_tRNA + 12840 mg2 + 168 phe1_tRNA + 5112 pi + 48 pro1_tRNA + 24 pro2_tRNA + 12 proL_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b1652_12_cplx + 24 ser1_tRNA + 12 ser2_tRNA + 24 serT_tRNA + 48 serV_tRNA + 96 thr1_tRNA + 36 thr2_tRNA + 24 thrU_tRNA + 36 trpT_tRNA + 36 tyr1_tRNA + 60 val1_tRNA + 48 val2_tRNA + 36 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_elo_b1652_1_rib1	Translation elongation 1 b1652 1 ribosome(s)	214 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 15 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 13 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 14 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 1070 mg2 + 1 rib_ini_b1652_1 --> 1 rib_70_elo1_b1652_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_elo_b1652_1_rib2	Translation elongation 2 b1652 1 ribosome(s)	213 h2o + 1 rib_70_elo1_b1652_1_cplx --> 213 EF-G.GDP + 213 EF-Tu.GDP + 16 ala1_tRNA + 15 ala2_tRNA + 10 arg1_tRNA + 10 asn1_tRNA + 14 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 4 gln2_tRNA + 13 glu1_tRNA + 10 gly1_tRNA + 3 glyT_tRNA + 1 glyU_tRNA + 426 h + 7 hisR_tRNA + 8 ile1_tRNA + 11 leu1_tRNA + 2 leu2_tRNA + 4 leuU_tRNA + 1 leuW_tRNA + 1 leuZ_tRNA + 8 lys1_tRNA + 6 met1_tRNA + 1070 mg2 + 14 phe1_tRNA + 426 pi + 4 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b1652_1_cplx + 2 ser1_tRNA + 1 ser2_tRNA + 2 serT_tRNA + 4 serV_tRNA + 8 thr1_tRNA + 3 thr2_tRNA + 2 thrU_tRNA + 3 trpT_tRNA + 3 tyr1_tRNA + 5 val1_tRNA + 4 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_elo_b1652_6_rib1	Translation elongation 1 b1652 6 ribosome(s)	1284 EF-G.GTP + 96 EF-Tu.GTP.ala1-tRNA + 90 EF-Tu.GTP.ala2-tRNA + 60 EF-Tu.GTP.arg1-tRNA + 60 EF-Tu.GTP.asn1-tRNA + 84 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 78 EF-Tu.GTP.glu1-tRNA + 60 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 42 EF-Tu.GTP.hisR-tRNA + 48 EF-Tu.GTP.ile1-tRNA + 66 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 24 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.leuW-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 48 EF-Tu.GTP.lys1-tRNA + 36 EF-Tu.GTP.met1-tRNA + 84 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 12 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.serT-tRNA + 24 EF-Tu.GTP.serV-tRNA + 48 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.thrU-tRNA + 18 EF-Tu.GTP.trpT-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 36 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val2-tRNA + 18 EF-Tu.GTP.val3-tRNA + 6420 mg2 + 1 rib_ini_b1652_6 --> 1 rib_70_elo1_b1652_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_elo_b1652_6_rib2	Translation elongation 2 b1652 6 ribosome(s)	1278 h2o + 1 rib_70_elo1_b1652_6_cplx --> 1278 EF-G.GDP + 1278 EF-Tu.GDP + 96 ala1_tRNA + 90 ala2_tRNA + 60 arg1_tRNA + 60 asn1_tRNA + 84 asp1_tRNA + 24 cysT_tRNA + 6 fmet_tRNA + 12 gln1_tRNA + 24 gln2_tRNA + 78 glu1_tRNA + 60 gly1_tRNA + 18 glyT_tRNA + 6 glyU_tRNA + 2556 h + 42 hisR_tRNA + 48 ile1_tRNA + 66 leu1_tRNA + 12 leu2_tRNA + 24 leuU_tRNA + 6 leuW_tRNA + 6 leuZ_tRNA + 48 lys1_tRNA + 36 met1_tRNA + 6420 mg2 + 84 phe1_tRNA + 2556 pi + 24 pro1_tRNA + 12 pro2_tRNA + 6 proL_tRNA + 12 proM_tRNA + 1 rib_70_elo2_b1652_6_cplx + 12 ser1_tRNA + 6 ser2_tRNA + 12 serT_tRNA + 24 serV_tRNA + 48 thr1_tRNA + 18 thr2_tRNA + 12 thrU_tRNA + 18 trpT_tRNA + 18 tyr1_tRNA + 30 val1_tRNA + 24 val2_tRNA + 18 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541

tl_elo_b1653_1_rib1	Translation elongation 1 b1653 1 ribosome(s)	1537 EF-G.GTP + 113 EF-Tu.GTP.ala1-tRNA + 53 EF-Tu.GTP.ala2-tRNA + 110 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argU-tRNA + 4 EF-Tu.GTP.argW-tRNA + 27 EF-Tu.GTP.argX-tRNA + 32 EF-Tu.GTP.asn1-tRNA + 80 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 35 EF-Tu.GTP.gln1-tRNA + 35 EF-Tu.GTP.gln2-tRNA + 104 EF-Tu.GTP.glu1-tRNA + 79 EF-Tu.GTP.gly1-tRNA + 15 EF-Tu.GTP.glyT-tRNA + 19 EF-Tu.GTP.glyU-tRNA + 29 EF-Tu.GTP.hisR-tRNA + 65 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.ile2-tRNA + 78 EF-Tu.GTP.leu1-tRNA + 23 EF-Tu.GTP.leu2-tRNA + 51 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuW-tRNA + 24 EF-Tu.GTP.leuZ-tRNA + 26 EF-Tu.GTP.lys1-tRNA + 26 EF-Tu.GTP.met1-tRNA + 42 EF-Tu.GTP.phe1-tRNA + 38 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.pro2-tRNA + 19 EF-Tu.GTP.proL-tRNA + 18 EF-Tu.GTP.proM-tRNA + 15 EF-Tu.GTP.ser1-tRNA + 14 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 16 EF-Tu.GTP.serT-tRNA + 36 EF-Tu.GTP.serV-tRNA + 38 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 25 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 25 EF-Tu.GTP.trpT-tRNA + 27 EF-Tu.GTP.tyr1-tRNA + 52 EF-Tu.GTP.val1-tRNA + 35 EF-Tu.GTP.val2-tRNA + 22 EF-Tu.GTP.val3-tRNA + 7685 mg2 + 1 rib_ini_b1653_1 -->	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.89E+01	38.89407	0	1.20E+00	1.201
tl_elo_b1653_1_rib2	Translation elongation 2 b1653 1 ribosome(s)	1536 h2o + 1 rib_70_elo1_b1653_1_cplx --> 1536 EF-G.GDP + 1536 EF-Tu.GDP + 113 ala1_tRNA + 53 ala2_tRNA + 110 arg1_tRNA + 6 argU_tRNA + 4 argW_tRNA + 27 argX_tRNA + 32 asn1_tRNA + 80 asp1_tRNA + 7 cysT_tRNA + 1 fmet_tRNA + 35 gln1_tRNA + 35 gln2_tRNA + 104 glu1_tRNA + 79 gly1_tRNA + 14 glyT_tRNA + 19 glyU_tRNA + 3072 h + 29 hisR_tRNA + 65 ile1_tRNA + 8 ile2_tRNA + 78 leu1_tRNA + 23 leu2_tRNA + 51 leuU_tRNA + 9 leuW_tRNA + 24 leuZ_tRNA + 26 lys1_tRNA + 26 met1_tRNA + 7685 mg2 + 42 phe1_tRNA + 3072 pi + 38 pro1_tRNA + 12 pro2_tRNA + 19 proL_tRNA + 18 proM_tRNA + 1 rib_70_elo2_b1653_1_cplx + 15 ser1_tRNA + 14 ser2_tRNA + 24 ser3_tRNA + 16 serT_tRNA + 36 serV_tRNA + 38 thr1_tRNA + 12 thr2_tRNA + 25 thr3_tRNA + 9 thrU_tRNA + 25 trpT_tRNA + 27 tyr1_tRNA + 52 val1_tRNA + 35 val2_tRNA + 22 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.89E+01	38.89407	0	1.20E+00	1.201
tl_elo_b1653_45_rib1	Translation elongation 1 b1653 45 ribosome(s)	69165 EF-G.GTP + 5085 EF-Tu.GTP.ala1-tRNA + 2385 EF-Tu.GTP.ala2-tRNA + 4950 EF-Tu.GTP.arg1-tRNA + 270 EF-Tu.GTP.argU-tRNA + 180 EF-Tu.GTP.argW-tRNA + 1215 EF-Tu.GTP.argX-tRNA + 1440 EF-Tu.GTP.asn1-tRNA + 3600 EF-Tu.GTP.asp1-tRNA + 315 EF-Tu.GTP.cysT-tRNA + 1575 EF-Tu.GTP.gln1-tRNA + 1575 EF-Tu.GTP.gln2-tRNA + 4680 EF-Tu.GTP.glu1-tRNA + 3555 EF-Tu.GTP.gly1-tRNA + 675 EF-Tu.GTP.glyT-tRNA + 855 EF-Tu.GTP.glyU-tRNA + 1305 EF-Tu.GTP.hisR-tRNA + 2925 EF-Tu.GTP.ile1-tRNA + 360 EF-Tu.GTP.ile2-tRNA + 3510 EF-Tu.GTP.leu1-tRNA + 1035 EF-Tu.GTP.leu2-tRNA + 2295 EF-Tu.GTP.leuU-tRNA + 405 EF-Tu.GTP.leuW-tRNA + 1080 EF-Tu.GTP.leuZ-tRNA + 1170 EF-Tu.GTP.lys1-tRNA + 1170 EF-Tu.GTP.met1-tRNA + 1890 EF-Tu.GTP.phe1-tRNA + 1710 EF-Tu.GTP.pro1-tRNA + 540 EF-Tu.GTP.pro2-tRNA + 855 EF-Tu.GTP.proL-tRNA + 810 EF-Tu.GTP.proM-tRNA + 675 EF-Tu.GTP.ser1-tRNA + 630 EF-Tu.GTP.ser2-tRNA + 1080 EF-Tu.GTP.ser3-tRNA + 720 EF-Tu.GTP.serT-tRNA + 1620 EF-Tu.GTP.serV-tRNA + 1710 EF-Tu.GTP.thr1-tRNA + 540 EF-Tu.GTP.thr2-tRNA + 1125 EF-Tu.GTP.thr3-tRNA + 405 EF-Tu.GTP.thrU-tRNA + 1125 EF-Tu.GTP.trpT-tRNA + 1215 EF-Tu.GTP.tyr1-tRNA + 2340 EF-Tu.GTP	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.39E+01	33.88332	0	1.20E+00	1.201
tl_elo_b1653_45_rib2	Translation elongation 2 b1653 45 ribosome(s)	69120 h2o + 1 rib_70_elo1_b1653_45_cplx --> 69120 EF-G.GDP + 69120 EF-Tu.GDP + 5085 ala1_tRNA + 2385 ala2_tRNA + 4950 arg1_tRNA + 270 argU_tRNA + 180 argW_tRNA + 1215 argX_tRNA + 1440 asn1_tRNA + 3600 asp1_tRNA + 315 cysT_tRNA + 45 fmet_tRNA + 1575 gln1_tRNA + 1575 gln2_tRNA + 4680 glu1_tRNA + 3555 gly1_tRNA + 630 glyT_tRNA + 855 glyU_tRNA + 138240 h + 1305 hisR_tRNA + 2925 ile1_tRNA + 360 ile2_tRNA + 3510 leu1_tRNA + 1035 leu2_tRNA + 2295 leuU_tRNA + 405 leuW_tRNA + 1080 leuZ_tRNA + 1170 lys1_tRNA + 1170 met1_tRNA + 345825 mg2 + 1890 phe1_tRNA + 138240 pi + 1710 pro1_tRNA + 540 pro2_tRNA + 855 proL_tRNA + 810 proM_tRNA + 1 rib_70_elo2_b1653_45_cplx + 675 ser1_tRNA + 630 ser2_tRNA + 1080 ser3_tRNA + 720 serT_tRNA + 1620 serV_tRNA + 1710 thr1_tRNA + 540 thr2_tRNA + 1125 thr3_tRNA + 405 thrU_tRNA + 1125 trpT_tRNA + 1215 tyr1_tRNA + 2340 val1_tRNA + 1575 val2_tRNA + 990 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.39E+01	33.88332	0	1.20E+00	1.201
tl_elo_b1653_90_rib1	Translation elongation 1 b1653 90 ribosome(s)	138330 EF-G.GTP + 10170 EF-Tu.GTP.ala1-tRNA + 4770 EF-Tu.GTP.ala2-tRNA + 9900 EF-Tu.GTP.arg1-tRNA + 540 EF-Tu.GTP.argU-tRNA + 360 EF-Tu.GTP.argW-tRNA + 2430 EF-Tu.GTP.argX-tRNA + 2880 EF-Tu.GTP.asn1-tRNA + 7200 EF-Tu.GTP.asp1-tRNA + 630 EF-Tu.GTP.cysT-tRNA + 3150 EF-Tu.GTP.gln1-tRNA + 3150 EF-Tu.GTP.gln2-tRNA + 9360 EF-Tu.GTP.glu1-tRNA + 7110 EF-Tu.GTP.gly1-tRNA + 1350 EF-Tu.GTP.glyT-tRNA + 1710 EF-Tu.GTP.glyU-tRNA + 2610 EF-Tu.GTP.hisR-tRNA + 5850 EF-Tu.GTP.ile1-tRNA + 720 EF-Tu.GTP.ile2-tRNA + 7020 EF-Tu.GTP.leu1-tRNA + 2070 EF-Tu.GTP.leu2-tRNA + 4590 EF-Tu.GTP.leuU-tRNA + 810 EF-Tu.GTP.leuW-tRNA + 2160 EF-Tu.GTP.leuZ-tRNA + 2340 EF-Tu.GTP.lys1-tRNA + 2340 EF-Tu.GTP.met1-tRNA + 3780 EF-Tu.GTP.phe1-tRNA + 3420 EF-Tu.GTP.pro1-tRNA + 1080 EF-Tu.GTP.pro2-tRNA + 1710 EF-Tu.GTP.proL-tRNA + 1620 EF-Tu.GTP.proM-tRNA + 1350 EF-Tu.GTP.ser1-tRNA + 1260 EF-Tu.GTP.ser2-tRNA + 2160 EF-Tu.GTP.ser3-tRNA + 1440 EF-Tu.GTP.serT-tRNA + 3240 EF-Tu.GTP.serV-tRNA + 3420 EF-Tu.GTP.thr1-tRNA + 1080 EF-Tu.GTP.thr2-tRNA + 2250 EF-Tu.GTP.thr3-tRNA + 810 EF-Tu.GTP.thrU-tRNA + 2250 EF-Tu.GTP.trpT-tRNA + 2430 EF-Tu.GTP.tyr1-tRNA + 4680 EF-Tu.GTP	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	1.70E+01	16.95446	0	1.20E+00	1.201
tl_elo_b1653_90_rib2	Translation elongation 2 b1653 90 ribosome(s)	138240 h2o + 1 rib_70_elo1_b1653_90_cplx --> 138240 EF-G.GDP + 138240 EF-Tu.GDP + 10170 ala1_tRNA + 4770 ala2_tRNA + 9900 arg1_tRNA + 540 argU_tRNA + 360 argW_tRNA + 2430 argX_tRNA + 2880 asn1_tRNA + 7200 asp1_tRNA + 630 cysT_tRNA + 90 fmet_tRNA + 3150 gln1_tRNA + 3150 gln2_tRNA + 9360 glu1_tRNA + 7110 gly1_tRNA + 1260 glyT_tRNA + 1710 glyU_tRNA + 276480 h + 2610 hisR_tRNA + 5850 ile1_tRNA + 720 ile2_tRNA + 7020 leu1_tRNA + 2070 leu2_tRNA + 4590 leuU_tRNA + 810 leuW_tRNA + 2160 leuZ_tRNA + 2340 lys1_tRNA + 2340 met1_tRNA + 691650 mg2 + 3780 phe1_tRNA + 276480 pi + 3420 pro1_tRNA + 1080 pro2_tRNA + 1710 proL_tRNA + 1620 proM_tRNA + 1 rib_70_elo2_b1653_90_cplx + 1350 ser1_tRNA + 1260 ser2_tRNA + 2160 ser3_tRNA + 1440 serT_tRNA + 3240 serV_tRNA + 3420 thr1_tRNA + 1080 thr2_tRNA + 2250 thr3_tRNA + 810 thrU_tRNA + 2250 trpT_tRNA + 2430 tyr1_tRNA + 4680 val1_tRNA + 3150 val2_tRNA + 1980 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	1.70E+01	16.95446	0	1.20E+00	1.201

tl_elo_b1712_1_rib1	Translation elongation 1 b1712 1 ribosome(s)	98 EF-G.GTP + 5 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 3 EF-Tu.GTP.argX-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 11 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 2 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 1 EF-Tu.GTP.val3-tRNA + 490 mg2 + 1 rib_ini_b1712_1 --> 1 rib_70_elo1_b1712_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_elo_b1712_1_rib2	Translation elongation 2 b1712 1 ribosome(s)	97 h2o + 1 rib_70_elo1_b1712_1_cplx --> 97 EF-G.GDP + 97 EF-Tu.GDP + 5 ala1_tRNA + 1 ala2_tRNA + 6 arg1_tRNA + 1 argU_tRNA + 3 argX_tRNA + 5 asn1_tRNA + 6 asp1_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 1 gln2_tRNA + 10 glu1_tRNA + 4 gly1_tRNA + 1 glyT_tRNA + 2 glyU_tRNA + 194 h + 3 ile1_tRNA + 5 leu1_tRNA + 4 leuU_tRNA + 1 leuZ_tRNA + 10 lys1_tRNA + 1 met1_tRNA + 490 mg2 + 6 phe1_tRNA + 194 pi + 2 pro1_tRNA + 3 proL_tRNA + 1 rib_70_elo2_b1712_1_cplx + 1 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 2 serV_tRNA + 1 thr1_tRNA + 1 thr3_tRNA + 2 thrU_tRNA + 1 tyr1_tRNA + 3 val1_tRNA + 1 val2_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_elo_b1712_2_rib1	Translation elongation 1 b1712 2 ribosome(s)	196 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argU-tRNA + 6 EF-Tu.GTP.argX-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 22 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 980 mg2 + 1 rib_ini_b1712_2 --> 1 rib_70_elo1_b1712_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_elo_b1712_2_rib2	Translation elongation 2 b1712 2 ribosome(s)	194 h2o + 1 rib_70_elo1_b1712_2_cplx --> 194 EF-G.GDP + 194 EF-Tu.GDP + 10 ala1_tRNA + 2 ala2_tRNA + 12 arg1_tRNA + 2 argU_tRNA + 6 argX_tRNA + 10 asn1_tRNA + 12 asp1_tRNA + 2 fmet_tRNA + 4 gln1_tRNA + 2 gln2_tRNA + 20 glu1_tRNA + 8 gly1_tRNA + 2 glyT_tRNA + 4 glyU_tRNA + 388 h + 6 ile1_tRNA + 10 leu1_tRNA + 8 leuU_tRNA + 2 leuZ_tRNA + 20 lys1_tRNA + 2 met1_tRNA + 980 mg2 + 12 phe1_tRNA + 388 pi + 4 pro1_tRNA + 6 proL_tRNA + 1 rib_70_elo2_b1712_2_cplx + 2 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 4 serV_tRNA + 2 thr1_tRNA + 2 thr3_tRNA + 4 thrU_tRNA + 2 tyr1_tRNA + 6 val1_tRNA + 2 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_elo_b1712_5_rib1	Translation elongation 1 b1712 5 ribosome(s)	490 EF-G.GTP + 25 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 30 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argU-tRNA + 15 EF-Tu.GTP.argX-tRNA + 25 EF-Tu.GTP.asn1-tRNA + 30 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 55 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 10 EF-Tu.GTP.glyU-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 25 EF-Tu.GTP.leu1-tRNA + 20 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 50 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 30 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 15 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serT-tRNA + 10 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 2450 mg2 + 1 rib_ini_b1712_5 --> 1 rib_70_elo1_b1712_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_elo_b1712_5_rib2	Translation elongation 2 b1712 5 ribosome(s)	485 h2o + 1 rib_70_elo1_b1712_5_cplx --> 485 EF-G.GDP + 485 EF-Tu.GDP + 25 ala1_tRNA + 5 ala2_tRNA + 30 arg1_tRNA + 5 argU_tRNA + 15 argX_tRNA + 25 asn1_tRNA + 30 asp1_tRNA + 5 fmet_tRNA + 10 gln1_tRNA + 5 gln2_tRNA + 50 glu1_tRNA + 20 gly1_tRNA + 5 glyT_tRNA + 10 glyU_tRNA + 970 h + 15 ile1_tRNA + 25 leu1_tRNA + 20 leuU_tRNA + 5 leuZ_tRNA + 50 lys1_tRNA + 5 met1_tRNA + 2450 mg2 + 30 phe1_tRNA + 970 pi + 10 pro1_tRNA + 15 proL_tRNA + 1 rib_70_elo2_b1712_5_cplx + 5 ser2_tRNA + 5 ser3_tRNA + 5 serT_tRNA + 10 serV_tRNA + 5 thr1_tRNA + 5 thr3_tRNA + 10 thrU_tRNA + 5 tyr1_tRNA + 15 val1_tRNA + 5 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_elo_b1713_1_rib1	Translation elongation 1 b1713 1 ribosome(s)	794 EF-G.GTP + 60 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 51 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.argX-tRNA + 31 EF-Tu.GTP.asn1-tRNA + 52 EF-Tu.GTP.asp1-tRNA + 13 EF-Tu.GTP.cysT-tRNA + 19 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 65 EF-Tu.GTP.glu1-tRNA + 57 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 17 EF-Tu.GTP.hisR-tRNA + 49 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 59 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 14 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 7 EF-Tu.GTP.leuZ-tRNA + 35 EF-Tu.GTP.lys1-tRNA + 13 EF-Tu.GTP.met1-tRNA + 19 EF-Tu.GTP.phe1-tRNA + 27 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 15 EF-Tu.GTP.serV-tRNA + 17 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 14 EF-Tu.GTP.tyr1-tRNA + 40 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 30 EF-Tu.GTP.val3-tRNA + 3970 mg2 + 1 rib_ini_b1713_1 --> 1 rib_70_elo1	irreversible	Translation	0.00E+00	1.00E+09	0	3.43E+01	3.43E+01	0	5.88E+01	58.77924	0	2.33E+00	2.3288

tl_elo_b1713_1_rib2	Translation elongation 2 b1713 1 ribosome(s)	793 h2o + 1 rib_70_elo1_b1713_1_cplx --> 793 EF-G.GDP + 793 EF-Tu.GDP + 60 ala1_tRNA + 10 ala2_tRNA + 51 arg1_tRNA + 1 argW_tRNA + 1 argX_tRNA + 31 asn1_tRNA + 51 asp1_tRNA + 13 cysT_tRNA + 1 fmet_tRNA + 19 gln1_tRNA + 5 gln2_tRNA + 65 glu1_tRNA + 57 gly1_tRNA + 5 glyU_tRNA + 1586 h + 17 hisR_tRNA + 49 ile1_tRNA + 1 ile2_tRNA + 59 leu1_tRNA + 3 leu2_tRNA + 14 leuU_tRNA + 1 leuW_tRNA + 7 leuZ_tRNA + 35 lys1_tRNA + 13 met1_tRNA + 3970 mg2 + 19 phe1_tRNA + 1586 pi + 27 pro1_tRNA + 3 pro2_tRNA + 1 proL_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b1713_1_cplx + 4 ser1_tRNA + 10 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 15 serV_tRNA + 17 thr1_tRNA + 10 thr2_tRNA + 5 thr3_tRNA + 4 thrU_tRNA + 8 trpT_tRNA + 14 tyr1_tRNA + 40 val1_tRNA + 9 val2_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.43E+01	3.43E+01	0	5.88E+01	58.77924	0	2.33E+00	2.3288
tl_elo_b1713_23_rib1	Translation elongation 1 b1713 23 ribosome(s)	18262 EF-G.GTP + 1380 EF-Tu.GTP.ala1-tRNA + 230 EF-Tu.GTP.ala2-tRNA + 1173 EF-Tu.GTP.arg1-tRNA + 23 EF-Tu.GTP.argW-tRNA + 23 EF-Tu.GTP.argX-tRNA + 713 EF-Tu.GTP.asn1-tRNA + 1196 EF-Tu.GTP.asp1-tRNA + 299 EF-Tu.GTP.cysT-tRNA + 437 EF-Tu.GTP.gln1-tRNA + 115 EF-Tu.GTP.gln2-tRNA + 1495 EF-Tu.GTP.glu1-tRNA + 1311 EF-Tu.GTP.gly1-tRNA + 115 EF-Tu.GTP.glyU-tRNA + 391 EF-Tu.GTP.hisR-tRNA + 1127 EF-Tu.GTP.ile1-tRNA + 23 EF-Tu.GTP.ile2-tRNA + 1357 EF-Tu.GTP.leu1-tRNA + 69 EF-Tu.GTP.leu2-tRNA + 322 EF-Tu.GTP.leuU-tRNA + 23 EF-Tu.GTP.leuW-tRNA + 161 EF-Tu.GTP.leuZ-tRNA + 805 EF-Tu.GTP.lys1-tRNA + 299 EF-Tu.GTP.met1-tRNA + 437 EF-Tu.GTP.phe1-tRNA + 621 EF-Tu.GTP.pro1-tRNA + 69 EF-Tu.GTP.pro2-tRNA + 23 EF-Tu.GTP.proL-tRNA + 138 EF-Tu.GTP.proM-tRNA + 92 EF-Tu.GTP.ser1-tRNA + 230 EF-Tu.GTP.ser2-tRNA + 23 EF-Tu.GTP.ser3-tRNA + 46 EF-Tu.GTP.serT-tRNA + 345 EF-Tu.GTP.serV-tRNA + 391 EF-Tu.GTP.thr1-tRNA + 230 EF-Tu.GTP.thr2-tRNA + 115 EF-Tu.GTP.thr3-tRNA + 92 EF-Tu.GTP.thrU-tRNA + 184 EF-Tu.GTP.trpT-tRNA + 322 EF-Tu.GTP.tyr1-tRNA + 920 EF-Tu.GTP.val1-tRNA + 207 EF-Tu.GTP.val2-tRNA + 690 EF-Tu.GTP.v	irreversible	Translation	0.00E+00	1.00E+09	0	3.16E+01	3.16E+01	0	5.17E+01	51.68256	0	2.33E+00	2.3288
tl_elo_b1713_23_rib2	Translation elongation 2 b1713 23 ribosome(s)	18239 h2o + 1 rib_70_elo1_b1713_23_cplx --> 18239 EF-G.GDP + 18239 EF-Tu.GDP + 1380 ala1_tRNA + 230 ala2_tRNA + 1173 arg1_tRNA + 23 argW_tRNA + 23 argX_tRNA + 713 asn1_tRNA + 1173 asp1_tRNA + 299 cysT_tRNA + 23 fmet_tRNA + 437 gln1_tRNA + 115 gln2_tRNA + 1495 glu1_tRNA + 1311 gly1_tRNA + 115 glyU_tRNA + 36478 h + 391 hisR_tRNA + 1127 ile1_tRNA + 23 ile2_tRNA + 1357 leu1_tRNA + 69 leu2_tRNA + 322 leuU_tRNA + 23 leuW_tRNA + 161 leuZ_tRNA + 805 lys1_tRNA + 299 met1_tRNA + 91310 mg2 + 437 phe1_tRNA + 36478 pi + 621 pro1_tRNA + 69 pro2_tRNA + 23 proL_tRNA + 138 proM_tRNA + 1 rib_70_elo2_b1713_23_cplx + 92 ser1_tRNA + 230 ser2_tRNA + 23 ser3_tRNA + 46 serT_tRNA + 345 serV_tRNA + 391 thr1_tRNA + 230 thr2_tRNA + 115 thr3_tRNA + 92 thrU_tRNA + 184 trpT_tRNA + 322 tyr1_tRNA + 920 val1_tRNA + 207 val2_tRNA + 690 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.16E+01	3.16E+01	0	5.17E+01	51.68256	0	2.33E+00	2.3288
tl_elo_b1713_46_rib1	Translation elongation 1 b1713 46 ribosome(s)	36524 EF-G.GTP + 2760 EF-Tu.GTP.ala1-tRNA + 460 EF-Tu.GTP.ala2-tRNA + 2346 EF-Tu.GTP.arg1-tRNA + 46 EF-Tu.GTP.argW-tRNA + 46 EF-Tu.GTP.argX-tRNA + 1426 EF-Tu.GTP.asn1-tRNA + 2392 EF-Tu.GTP.asp1-tRNA + 598 EF-Tu.GTP.cysT-tRNA + 874 EF-Tu.GTP.gln1-tRNA + 230 EF-Tu.GTP.gln2-tRNA + 2990 EF-Tu.GTP.glu1-tRNA + 2622 EF-Tu.GTP.gly1-tRNA + 230 EF-Tu.GTP.glyU-tRNA + 782 EF-Tu.GTP.hisR-tRNA + 2254 EF-Tu.GTP.ile1-tRNA + 46 EF-Tu.GTP.ile2-tRNA + 2714 EF-Tu.GTP.leu1-tRNA + 138 EF-Tu.GTP.leu2-tRNA + 644 EF-Tu.GTP.leuU-tRNA + 46 EF-Tu.GTP.leuW-tRNA + 322 EF-Tu.GTP.leuZ-tRNA + 1610 EF-Tu.GTP.lys1-tRNA + 598 EF-Tu.GTP.met1-tRNA + 874 EF-Tu.GTP.phe1-tRNA + 1242 EF-Tu.GTP.pro1-tRNA + 138 EF-Tu.GTP.pro2-tRNA + 46 EF-Tu.GTP.proL-tRNA + 276 EF-Tu.GTP.proM-tRNA + 184 EF-Tu.GTP.ser1-tRNA + 460 EF-Tu.GTP.ser2-tRNA + 46 EF-Tu.GTP.ser3-tRNA + 92 EF-Tu.GTP.serT-tRNA + 690 EF-Tu.GTP.serV-tRNA + 782 EF-Tu.GTP.thr1-tRNA + 460 EF-Tu.GTP.thr2-tRNA + 230 EF-Tu.GTP.thr3-tRNA + 184 EF-Tu.GTP.thrU-tRNA + 368 EF-Tu.GTP.trpT-tRNA + 644 EF-Tu.GTP.tyr1-tRNA + 1840 EF-Tu.GTP.val1-tRNA + 414 EF-Tu.GTP.val2-tRNA + 1380 EF-Tu.GTP.v	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+01	1.55E+01	0	2.53E+01	25.26703	0	2.33E+00	2.3288
tl_elo_b1713_46_rib2	Translation elongation 2 b1713 46 ribosome(s)	36478 h2o + 1 rib_70_elo1_b1713_46_cplx --> 36478 EF-G.GDP + 36478 EF-Tu.GDP + 2760 ala1_tRNA + 460 ala2_tRNA + 2346 arg1_tRNA + 46 argW_tRNA + 46 argX_tRNA + 1426 asn1_tRNA + 2346 asp1_tRNA + 598 cysT_tRNA + 46 fmet_tRNA + 874 gln1_tRNA + 230 gln2_tRNA + 2990 glu1_tRNA + 2622 gly1_tRNA + 230 glyU_tRNA + 72956 h + 782 hisR_tRNA + 2254 ile1_tRNA + 46 ile2_tRNA + 2714 leu1_tRNA + 138 leu2_tRNA + 644 leuU_tRNA + 46 leuW_tRNA + 322 leuZ_tRNA + 1610 lys1_tRNA + 598 met1_tRNA + 182620 mg2 + 874 phe1_tRNA + 72956 pi + 1242 pro1_tRNA + 138 pro2_tRNA + 46 proL_tRNA + 276 proM_tRNA + 1 rib_70_elo2_b1713_46_cplx + 184 ser1_tRNA + 460 ser2_tRNA + 46 ser3_tRNA + 92 serT_tRNA + 690 serV_tRNA + 782 thr1_tRNA + 460 thr2_tRNA + 230 thr3_tRNA + 184 thrU_tRNA + 368 trpT_tRNA + 644 tyr1_tRNA + 1840 val1_tRNA + 414 val2_tRNA + 1380 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+01	1.55E+01	0	2.53E+01	25.26703	0	2.33E+00	2.3288
tl_elo_b1714_19_rib1	Translation elongation 1 b1714 19 ribosome(s)	6194 EF-G.GTP + 437 EF-Tu.GTP.ala1-tRNA + 95 EF-Tu.GTP.ala2-tRNA + 456 EF-Tu.GTP.arg1-tRNA + 285 EF-Tu.GTP.asn1-tRNA + 361 EF-Tu.GTP.asp1-tRNA + 19 EF-Tu.GTP.cysT-tRNA + 247 EF-Tu.GTP.gln1-tRNA + 456 EF-Tu.GTP.glu1-tRNA + 342 EF-Tu.GTP.gly1-tRNA + 95 EF-Tu.GTP.glyU-tRNA + 209 EF-Tu.GTP.hisR-tRNA + 304 EF-Tu.GTP.ile1-tRNA + 399 EF-Tu.GTP.leu1-tRNA + 76 EF-Tu.GTP.leu2-tRNA + 76 EF-Tu.GTP.leuU-tRNA + 38 EF-Tu.GTP.leuZ-tRNA + 209 EF-Tu.GTP.lys1-tRNA + 171 EF-Tu.GTP.met1-tRNA + 380 EF-Tu.GTP.phe1-tRNA + 190 EF-Tu.GTP.pro1-tRNA + 76 EF-Tu.GTP.pro2-tRNA + 57 EF-Tu.GTP.proM-tRNA + 19 EF-Tu.GTP.ser1-tRNA + 76 EF-Tu.GTP.ser2-tRNA + 57 EF-Tu.GTP.serT-tRNA + 95 EF-Tu.GTP.serV-tRNA + 266 EF-Tu.GTP.thr1-tRNA + 76 EF-Tu.GTP.thr2-tRNA + 76 EF-Tu.GTP.thr3-tRNA + 38 EF-Tu.GTP.trpT-tRNA + 133 EF-Tu.GTP.tyr1-tRNA + 133 EF-Tu.GTP.val1-tRNA + 76 EF-Tu.GTP.val2-tRNA + 171 EF-Tu.GTP.val3-tRNA + 30970 mg2 + 1 rib_ini_b1714_19 --> 1 rib_70_elo1_b1714_19_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	5.64E+00	5.638148

tl_elo_b1714_19_rib2	Translation elongation 2 b1714 19 ribosome(s)	6175 h2o + 1 rib_70_elo1_b1714_19_cplx --> 6175 EF-G.GDP + 6175 EF-Tu.GDP + 437 ala1_tRNA + 95 ala2_tRNA + 456 arg1_tRNA + 285 asn1_tRNA + 361 asp1_tRNA + 19 cysT_tRNA + 19 fmet_tRNA + 247 gln1_tRNA + 456 glu1_tRNA + 342 gly1_tRNA + 95 glyU_tRNA + 12350 h + 209 hisR_tRNA + 304 ile1_tRNA + 399 leu1_tRNA + 76 leu2_tRNA + 76 leuU_tRNA + 38 leuZ_tRNA + 190 lys1_tRNA + 171 met1_tRNA + 30970 mg2 + 380 phe1_tRNA + 12350 pi + 190 pro1_tRNA + 76 pro2_tRNA + 57 proM_tRNA + 1 rib_70_elo2_b1714_19_cplx + 19 ser1_tRNA + 76 ser2_tRNA + 57 serT_tRNA + 95 serV_tRNA + 266 thr1_tRNA + 76 thr2_tRNA + 76 thr3_tRNA + 38 trpT_tRNA + 133 tyr1_tRNA + 133 val1_tRNA + 76 val2_tRNA + 171 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	5.64E+00	5.638148
tl_elo_b1714_1_rib1	Translation elongation 1 b1714 1 ribosome(s)	326 EF-G.GTP + 23 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 19 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 13 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 18 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 21 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 20 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 1630 mg2 + 1 rib_ini_b1714_1 --> 1 rib_70_elo1_b1714_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	6.37E+00	6.3688
tl_elo_b1714_1_rib2	Translation elongation 2 b1714 1 ribosome(s)	325 h2o + 1 rib_70_elo1_b1714_1_cplx --> 325 EF-G.GDP + 325 EF-Tu.GDP + 23 ala1_tRNA + 5 ala2_tRNA + 24 arg1_tRNA + 15 asn1_tRNA + 19 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 13 gln1_tRNA + 24 glu1_tRNA + 18 gly1_tRNA + 5 glyU_tRNA + 650 h + 11 hisR_tRNA + 16 ile1_tRNA + 21 leu1_tRNA + 4 leu2_tRNA + 4 leuU_tRNA + 2 leuZ_tRNA + 10 lys1_tRNA + 9 met1_tRNA + 1630 mg2 + 20 phe1_tRNA + 650 pi + 10 pro1_tRNA + 4 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b1714_1_cplx + 1 ser1_tRNA + 4 ser2_tRNA + 3 serT_tRNA + 5 serV_tRNA + 14 thr1_tRNA + 4 thr2_tRNA + 4 thr3_tRNA + 2 trpT_tRNA + 7 tyr1_tRNA + 7 val1_tRNA + 4 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	6.37E+00	6.3688
tl_elo_b1714_9_rib1	Translation elongation 1 b1714 9 ribosome(s)	2934 EF-G.GTP + 207 EF-Tu.GTP.ala1-tRNA + 45 EF-Tu.GTP.ala2-tRNA + 216 EF-Tu.GTP.arg1-tRNA + 135 EF-Tu.GTP.asn1-tRNA + 171 EF-Tu.GTP.asp1-tRNA + 9 EF-Tu.GTP.cysT-tRNA + 117 EF-Tu.GTP.gln1-tRNA + 216 EF-Tu.GTP.glu1-tRNA + 162 EF-Tu.GTP.gly1-tRNA + 45 EF-Tu.GTP.glyU-tRNA + 99 EF-Tu.GTP.hisR-tRNA + 144 EF-Tu.GTP.ile1-tRNA + 189 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 36 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 99 EF-Tu.GTP.lys1-tRNA + 81 EF-Tu.GTP.met1-tRNA + 180 EF-Tu.GTP.phe1-tRNA + 90 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 27 EF-Tu.GTP.proM-tRNA + 9 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 27 EF-Tu.GTP.serT-tRNA + 45 EF-Tu.GTP.serV-tRNA + 126 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 36 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.trpT-tRNA + 63 EF-Tu.GTP.tyr1-tRNA + 63 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val2-tRNA + 81 EF-Tu.GTP.val3-tRNA + 14670 mg2 + 1 rib_ini_b1714_9 --> 1 rib_70_elo1_b1714_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	6.37E+00	6.3688
tl_elo_b1714_9_rib2	Translation elongation 2 b1714 9 ribosome(s)	2925 h2o + 1 rib_70_elo1_b1714_9_cplx --> 2925 EF-G.GDP + 2925 EF-Tu.GDP + 207 ala1_tRNA + 45 ala2_tRNA + 216 arg1_tRNA + 135 asn1_tRNA + 171 asp1_tRNA + 9 cysT_tRNA + 9 fmet_tRNA + 117 gln1_tRNA + 216 glu1_tRNA + 162 gly1_tRNA + 45 glyU_tRNA + 5850 h + 99 hisR_tRNA + 144 ile1_tRNA + 189 leu1_tRNA + 36 leu2_tRNA + 36 leuU_tRNA + 18 leuZ_tRNA + 90 lys1_tRNA + 81 met1_tRNA + 14670 mg2 + 180 phe1_tRNA + 5850 pi + 90 pro1_tRNA + 36 pro2_tRNA + 27 proM_tRNA + 1 rib_70_elo2_b1714_9_cplx + 9 ser1_tRNA + 36 ser2_tRNA + 27 serT_tRNA + 45 serV_tRNA + 126 thr1_tRNA + 36 thr2_tRNA + 36 thr3_tRNA + 18 trpT_tRNA + 63 tyr1_tRNA + 63 val1_tRNA + 36 val2_tRNA + 81 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	6.37E+00	6.3688
tl_elo_b1715_1_rib1	Translation elongation 1 b1715 1 ribosome(s)	13 EF-G.GTP + 2 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.asn1-tRNA + 1 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 65 mg2 + 1 rib_ini_b1715_1 --> 1 rib_70_elo1_b1715_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.19E+02	2.19E+02	0	2.24E+02	224.2242	0	1.13E+02	113.3448
tl_elo_b1715_1_rib2	Translation elongation 2 b1715 1 ribosome(s)	12 h2o + 1 rib_70_elo1_b1715_1_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 2 ala1_tRNA + 1 arg1_tRNA + 1 asn1_tRNA + 1 fmet_tRNA + 24 h + 1 ile1_tRNA + 65 mg2 + 5 phe1_tRNA + 24 pi + 1 rib_70_elo2_b1715_1_cplx + 1 serV_tRNA + 1 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.19E+02	2.19E+02	0	2.24E+02	224.2242	0	1.13E+02	113.3448
tl_elo_b1716_1_rib1	Translation elongation 1 b1716 1 ribosome(s)	117 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 16 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 4 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 2 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val3-tRNA + 585 mg2 + 1 rib_ini_b1716_1 --> 1 rib_70_elo1_b1716_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	1.91E+01	19.086
tl_elo_b1716_1_rib2	Translation elongation 2 b1716 1 ribosome(s)	116 h2o + 1 rib_70_elo1_b1716_1_cplx --> 116 EF-G.GDP + 116 EF-Tu.GDP + 19 ala1_tRNA + 2 ala2_tRNA + 16 arg1_tRNA + 3 asn1_tRNA + 4 asp1_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 3 gln2_tRNA + 2 glu1_tRNA + 6 gly1_tRNA + 232 h + 1 hisR_tRNA + 10 ile1_tRNA + 5 leu1_tRNA + 1 leu2_tRNA + 14 lys1_tRNA + 585 mg2 + 5 phe1_tRNA + 232 pi + 1 rib_70_elo2_b1716_1_cplx + 3 ser2_tRNA + 1 serV_tRNA + 1 thr1_tRNA + 1 trpT_tRNA + 6 tyr1_tRNA + 4 val1_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	1.91E+01	19.086

tl_elo_b1716_3_rib1	Translation elongation 1 b1716 3 ribosome(s)	351 EF-G.GTP + 60 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 48 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 9 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 18 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 30 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 42 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 15 EF-Tu.GTP.val3-tRNA + 1755 mg2 + 1 rib_ini_b1716_3 --> 1 rib_70_elo1_b1716_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.72E+01	3.72E+01	0	2.76E+01	27.62667	0	2.63E+01	26.265
tl_elo_b1716_3_rib2	Translation elongation 2 b1716 3 ribosome(s)	348 h2o + 1 rib_70_elo1_b1716_3_cplx --> 348 EF-G.GDP + 348 EF-Tu.GDP + 57 ala1_tRNA + 6 ala2_tRNA + 48 arg1_tRNA + 9 asn1_tRNA + 12 asp1_tRNA + 3 fmet_tRNA + 12 gln1_tRNA + 9 gln2_tRNA + 6 glu1_tRNA + 18 gly1_tRNA + 696 h + 3 hisR_tRNA + 30 ile1_tRNA + 15 leu1_tRNA + 3 leu2_tRNA + 42 lys1_tRNA + 1755 mg2 + 15 phe1_tRNA + 696 pi + 1 rib_70_elo2_b1716_3_cplx + 9 ser2_tRNA + 3 serV_tRNA + 3 thr1_tRNA + 3 trpT_tRNA + 18 tyr1_tRNA + 12 val1_tRNA + 15 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.72E+01	3.72E+01	0	2.76E+01	27.62667	0	2.63E+01	26.265
tl_elo_b1716_6_rib1	Translation elongation 1 b1716 6 ribosome(s)	702 EF-G.GTP + 120 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 96 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 24 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 36 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 60 EF-Tu.GTP.ile1-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 84 EF-Tu.GTP.lys1-tRNA + 30 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 36 EF-Tu.GTP.tyr1-tRNA + 24 EF-Tu.GTP.val1-tRNA + 30 EF-Tu.GTP.val3-tRNA + 3510 mg2 + 1 rib_ini_b1716_6 --> 1 rib_70_elo1_b1716_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b1716_6_rib2	Translation elongation 2 b1716 6 ribosome(s)	696 h2o + 1 rib_70_elo1_b1716_6_cplx --> 696 EF-G.GDP + 696 EF-Tu.GDP + 114 ala1_tRNA + 12 ala2_tRNA + 96 arg1_tRNA + 18 asn1_tRNA + 24 asp1_tRNA + 6 fmet_tRNA + 24 gln1_tRNA + 18 gln2_tRNA + 12 glu1_tRNA + 36 gly1_tRNA + 1392 h + 6 hisR_tRNA + 60 ile1_tRNA + 30 leu1_tRNA + 6 leu2_tRNA + 84 lys1_tRNA + 3510 mg2 + 30 phe1_tRNA + 1392 pi + 1 rib_70_elo2_b1716_6_cplx + 18 ser2_tRNA + 6 serV_tRNA + 6 thr1_tRNA + 6 trpT_tRNA + 36 tyr1_tRNA + 24 val1_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b1717_1_rib1	Translation elongation 1 b1717 1 ribosome(s)	64 EF-G.GTP + 6 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.asn1-tRNA + 1 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 3 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val3-tRNA + 320 mg2 + 1 rib_ini_b1717_1 --> 1 rib_70_elo1_b1717_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.72E+01	9.72E+01	0	8.29E+01	82.88	0	7.34E+01	73.365
tl_elo_b1717_1_rib2	Translation elongation 2 b1717 1 ribosome(s)	63 h2o + 1 rib_70_elo1_b1717_1_cplx --> 63 EF-G.GDP + 63 EF-Tu.GDP + 5 ala1_tRNA + 1 ala2_tRNA + 6 arg1_tRNA + 1 asn1_tRNA + 1 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 6 gly1_tRNA + 126 h + 4 hisR_tRNA + 3 ile1_tRNA + 6 leu1_tRNA + 14 lys1_tRNA + 1 met1_tRNA + 320 mg2 + 2 phe1_tRNA + 126 pi + 2 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b1717_1_cplx + 1 ser1_tRNA + 4 thr1_tRNA + 1 tyr1_tRNA + 2 val1_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.72E+01	9.72E+01	0	8.29E+01	82.88	0	7.34E+01	73.365
tl_elo_b1717_3_rib1	Translation elongation 1 b1717 3 ribosome(s)	192 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 18 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 42 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val3-tRNA + 960 mg2 + 1 rib_ini_b1717_3 --> 1 rib_70_elo1_b1717_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b1717_3_rib2	Translation elongation 2 b1717 3 ribosome(s)	189 h2o + 1 rib_70_elo1_b1717_3_cplx --> 189 EF-G.GDP + 189 EF-Tu.GDP + 15 ala1_tRNA + 3 ala2_tRNA + 18 arg1_tRNA + 3 asn1_tRNA + 3 asp1_tRNA + 3 cysT_tRNA + 3 fmet_tRNA + 18 gly1_tRNA + 378 h + 12 hisR_tRNA + 9 ile1_tRNA + 18 leu1_tRNA + 42 lys1_tRNA + 3 met1_tRNA + 960 mg2 + 6 phe1_tRNA + 378 pi + 6 pro1_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b1717_3_cplx + 3 ser1_tRNA + 12 thr1_tRNA + 3 tyr1_tRNA + 6 val1_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b1718_10_rib1	Translation elongation 1 b1718 10 ribosome(s)	1790 EF-G.GTP + 60 EF-Tu.GTP.ala1-tRNA + 40 EF-Tu.GTP.ala2-tRNA + 140 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argU-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 70 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.cysT-tRNA + 80 EF-Tu.GTP.gln1-tRNA + 40 EF-Tu.GTP.gln2-tRNA + 210 EF-Tu.GTP.glu1-tRNA + 120 EF-Tu.GTP.gly1-tRNA + 20 EF-Tu.GTP.glyT-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 110 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.ile2-tRNA + 60 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 60 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 210 EF-Tu.GTP.lys1-tRNA + 50 EF-Tu.GTP.met1-tRNA + 50 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 40 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proM-tRNA + 10 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 40 EF-Tu.GTP.serV-tRNA + 30 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.thrU-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 70 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 50 EF-Tu.GTP.val3-tRNA + 8950 mg2 + 1 rib_ini_b1718_10 --> 1 rib_70_elo1_b1718_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.96E+01	29.622

tl_elo_b1718_10_rib2	Translation elongation 2 b1718 10 ribosome(s)	1780 h2o + 1 rib_70_elo1_b1718_10_cplx --> 1780 EF-G.GDP + 1780 EF-Tu.GDP + 60 ala1_tRNA + 40 ala2_tRNA + 140 arg1_tRNA + 10 argU_tRNA + 40 asn1_tRNA + 70 asp1_tRNA + 10 cysT_tRNA + 10 fmet_tRNA + 70 gln1_tRNA + 40 gln2_tRNA + 210 glu1_tRNA + 120 gly1_tRNA + 20 glyT_tRNA + 3560 h + 10 hisR_tRNA + 110 ile1_tRNA + 10 ile2_tRNA + 60 leu1_tRNA + 10 leu2_tRNA + 60 leuU_tRNA + 20 leuZ_tRNA + 210 lys1_tRNA + 50 met1_tRNA + 8950 mg2 + 50 phe1_tRNA + 3560 pi + 20 pro1_tRNA + 40 pro2_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b1718_10_cplx + 10 ser1_tRNA + 20 ser2_tRNA + 40 serV_tRNA + 30 thr3_tRNA + 20 thrU_tRNA + 30 tyr1_tRNA + 70 val1_tRNA + 20 val2_tRNA + 50 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.96E+01	29.622
tl_elo_b1718_1_rib1	Translation elongation 1 b1718 1 ribosome(s)	179 EF-G.GTP + 6 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 7 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 21 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 21 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 895 mg2 + 1 rib_ini_b1718_1 --> 1 rib_70_elo1_b1718_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.60E+01	26.00667
tl_elo_b1718_1_rib2	Translation elongation 2 b1718 1 ribosome(s)	178 h2o + 1 rib_70_elo1_b1718_1_cplx --> 178 EF-G.GDP + 178 EF-Tu.GDP + 6 ala1_tRNA + 4 ala2_tRNA + 14 arg1_tRNA + 1 argU_tRNA + 4 asn1_tRNA + 7 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 4 gln2_tRNA + 21 glu1_tRNA + 12 gly1_tRNA + 2 glyT_tRNA + 356 h + 1 hisR_tRNA + 11 ile1_tRNA + 1 ile2_tRNA + 6 leu1_tRNA + 1 leu2_tRNA + 6 leuU_tRNA + 2 leuZ_tRNA + 21 lys1_tRNA + 5 met1_tRNA + 895 mg2 + 5 phe1_tRNA + 356 pi + 2 pro1_tRNA + 4 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b1718_1_cplx + 1 ser1_tRNA + 2 ser2_tRNA + 4 serV_tRNA + 3 thr3_tRNA + 2 thrU_tRNA + 3 tyr1_tRNA + 7 val1_tRNA + 2 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.60E+01	26.00667
tl_elo_b1718_5_rib1	Translation elongation 1 b1718 5 ribosome(s)	895 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 70 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argU-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 35 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 40 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 105 EF-Tu.GTP.glu1-tRNA + 60 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 55 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.ile2-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 30 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 105 EF-Tu.GTP.lys1-tRNA + 25 EF-Tu.GTP.met1-tRNA + 25 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 20 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 20 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.thrU-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 35 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 25 EF-Tu.GTP.val3-tRNA + 4475 mg2 + 1 rib_ini_b1718_5 --> 1 rib_70_elo1_b1718_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.96E+01	29.622
tl_elo_b1718_5_rib2	Translation elongation 2 b1718 5 ribosome(s)	890 h2o + 1 rib_70_elo1_b1718_5_cplx --> 890 EF-G.GDP + 890 EF-Tu.GDP + 30 ala1_tRNA + 20 ala2_tRNA + 70 arg1_tRNA + 5 argU_tRNA + 20 asn1_tRNA + 35 asp1_tRNA + 5 cysT_tRNA + 5 fmet_tRNA + 35 gln1_tRNA + 20 gln2_tRNA + 105 glu1_tRNA + 60 gly1_tRNA + 10 glyT_tRNA + 1780 h + 5 hisR_tRNA + 55 ile1_tRNA + 5 ile2_tRNA + 30 leu1_tRNA + 5 leu2_tRNA + 30 leuU_tRNA + 10 leuZ_tRNA + 105 lys1_tRNA + 25 met1_tRNA + 4475 mg2 + 25 phe1_tRNA + 1780 pi + 10 pro1_tRNA + 20 pro2_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b1718_5_cplx + 5 ser1_tRNA + 10 ser2_tRNA + 20 serV_tRNA + 15 thr3_tRNA + 10 thrU_tRNA + 15 tyr1_tRNA + 35 val1_tRNA + 10 val2_tRNA + 25 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.96E+01	29.622
tl_elo_b1719_18_rib1	Translation elongation 1 b1719 18 ribosome(s)	11538 EF-G.GTP + 612 EF-Tu.GTP.ala1-tRNA + 126 EF-Tu.GTP.ala2-tRNA + 738 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argU-tRNA + 18 EF-Tu.GTP.argX-tRNA + 450 EF-Tu.GTP.asn1-tRNA + 774 EF-Tu.GTP.asp1-tRNA + 234 EF-Tu.GTP.cysT-tRNA + 216 EF-Tu.GTP.gln1-tRNA + 198 EF-Tu.GTP.gln2-tRNA + 1026 EF-Tu.GTP.glu1-tRNA + 612 EF-Tu.GTP.gly1-tRNA + 54 EF-Tu.GTP.glyT-tRNA + 108 EF-Tu.GTP.glyU-tRNA + 414 EF-Tu.GTP.hisR-tRNA + 648 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.ile2-tRNA + 540 EF-Tu.GTP.leu1-tRNA + 108 EF-Tu.GTP.leu2-tRNA + 216 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuW-tRNA + 54 EF-Tu.GTP.leuZ-tRNA + 720 EF-Tu.GTP.lys1-tRNA + 396 EF-Tu.GTP.met1-tRNA + 450 EF-Tu.GTP.phe1-tRNA + 288 EF-Tu.GTP.pro1-tRNA + 54 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proL-tRNA + 54 EF-Tu.GTP.proM-tRNA + 54 EF-Tu.GTP.ser1-tRNA + 144 EF-Tu.GTP.ser2-tRNA + 54 EF-Tu.GTP.ser3-tRNA + 72 EF-Tu.GTP.serT-tRNA + 216 EF-Tu.GTP.serV-tRNA + 216 EF-Tu.GTP.thr1-tRNA + 108 EF-Tu.GTP.thr2-tRNA + 72 EF-Tu.GTP.thr3-tRNA + 36 EF-Tu.GTP.thrU-tRNA + 198 EF-Tu.GTP.trpT-tRNA + 432 EF-Tu.GTP.tyr1-tRNA + 234 EF-Tu.GTP.val1-tRNA + 198 EF-Tu.GTP.val2-tRNA + 306 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_elo_b1719_18_rib2	Translation elongation 2 b1719 18 ribosome(s)	11520 h2o + 1 rib_70_elo1_b1719_18_cplx --> 11520 EF-G.GDP + 11520 EF-Tu.GDP + 612 ala1_tRNA + 126 ala2_tRNA + 738 arg1_tRNA + 18 argU_tRNA + 18 argX_tRNA + 450 asn1_tRNA + 774 asp1_tRNA + 234 cysT_tRNA + 18 fmet_tRNA + 216 gln1_tRNA + 198 gln2_tRNA + 1008 glu1_tRNA + 612 gly1_tRNA + 54 glyT_tRNA + 108 glyU_tRNA + 23040 h + 414 hisR_tRNA + 648 ile1_tRNA + 18 ile2_tRNA + 540 leu1_tRNA + 108 leu2_tRNA + 216 leuU_tRNA + 36 leuW_tRNA + 54 leuZ_tRNA + 720 lys1_tRNA + 396 met1_tRNA + 57690 mg2 + 450 phe1_tRNA + 23040 pi + 288 pro1_tRNA + 54 pro2_tRNA + 18 proL_tRNA + 54 proM_tRNA + 1 rib_70_elo2_b1719_18_cplx + 54 ser1_tRNA + 144 ser2_tRNA + 54 ser3_tRNA + 72 serT_tRNA + 216 serV_tRNA + 216 thr1_tRNA + 108 thr2_tRNA + 72 thr3_tRNA + 36 thrU_tRNA + 198 trpT_tRNA + 432 tyr1_tRNA + 234 val1_tRNA + 198 val2_tRNA + 306 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595

tl_elo_b1719_1_rib1	Translation elongation 1 b1719 1 ribosome(s)	641 EF-G.GTP + 34 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 41 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argX-tRNA + 25 EF-Tu.GTP.asn1-tRNA + 43 EF-Tu.GTP.asp1-tRNA + 13 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 11 EF-Tu.GTP.gln2-tRNA + 57 EF-Tu.GTP.glu1-tRNA + 34 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 23 EF-Tu.GTP.hisR-tRNA + 36 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 40 EF-Tu.GTP.lys1-tRNA + 22 EF-Tu.GTP.met1-tRNA + 25 EF-Tu.GTP.phe1-tRNA + 16 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 12 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 11 EF-Tu.GTP.trpT-tRNA + 24 EF-Tu.GTP.tyr1-tRNA + 13 EF-Tu.GTP.val1-tRNA + 11 EF-Tu.GTP.val2-tRNA + 17 EF-Tu.GTP.val3-tRNA + 3205 mg2 + 1 ri	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_elo_b1719_1_rib2	Translation elongation 2 b1719 1 ribosome(s)	640 h2o + 1 rib_70_elo1_b1719_1_cplx --> 640 EF-G.GDP + 640 EF-Tu.GDP + 34 ala1_tRNA + 7 ala2_tRNA + 41 arg1_tRNA + 1 argU_tRNA + 1 argX_tRNA + 25 asn1_tRNA + 43 asp1_tRNA + 13 cysT_tRNA + 1 fmet_tRNA + 12 gln1_tRNA + 11 gln2_tRNA + 56 glu1_tRNA + 34 gly1_tRNA + 3 glyT_tRNA + 6 glyU_tRNA + 1280 h + 23 hisR_tRNA + 36 ile1_tRNA + 1 ile2_tRNA + 30 leu1_tRNA + 6 leu2_tRNA + 12 leuU_tRNA + 2 leuW_tRNA + 3 leuZ_tRNA + 40 lys1_tRNA + 22 met1_tRNA + 3205 mg2 + 25 phe1_tRNA + 1280 pi + 16 pro1_tRNA + 3 pro2_tRNA + 1 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b1719_1_cplx + 3 ser1_tRNA + 8 ser2_tRNA + 3 ser3_tRNA + 4 serT_tRNA + 12 serV_tRNA + 12 thr1_tRNA + 6 thr2_tRNA + 4 thr3_tRNA + 2 thrU_tRNA + 11 trpT_tRNA + 24 tyr1_tRNA + 13 val1_tRNA + 11 val2_tRNA + 17 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_elo_b1719_37_rib1	Translation elongation 1 b1719 37 ribosome(s)	23717 EF-G.GTP + 1258 EF-Tu.GTP.ala1-tRNA + 259 EF-Tu.GTP.ala2-tRNA + 1517 EF-Tu.GTP.arg1-tRNA + 37 EF-Tu.GTP.argU-tRNA + 37 EF-Tu.GTP.argX-tRNA + 925 EF-Tu.GTP.asn1-tRNA + 1591 EF-Tu.GTP.asp1-tRNA + 481 EF-Tu.GTP.cysT-tRNA + 444 EF-Tu.GTP.gln1-tRNA + 407 EF-Tu.GTP.gln2-tRNA + 2109 EF-Tu.GTP.glu1-tRNA + 1258 EF-Tu.GTP.gly1-tRNA + 111 EF-Tu.GTP.glyT-tRNA + 222 EF-Tu.GTP.glyU-tRNA + 851 EF-Tu.GTP.hisR-tRNA + 1332 EF-Tu.GTP.ile1-tRNA + 37 EF-Tu.GTP.ile2-tRNA + 1110 EF-Tu.GTP.leu1-tRNA + 222 EF-Tu.GTP.leu2-tRNA + 444 EF-Tu.GTP.leuU-tRNA + 74 EF-Tu.GTP.leuW-tRNA + 111 EF-Tu.GTP.leuZ-tRNA + 1480 EF-Tu.GTP.lys1-tRNA + 814 EF-Tu.GTP.met1-tRNA + 925 EF-Tu.GTP.phe1-tRNA + 592 EF-Tu.GTP.pro1-tRNA + 111 EF-Tu.GTP.pro2-tRNA + 37 EF-Tu.GTP.proL-tRNA + 111 EF-Tu.GTP.proM-tRNA + 111 EF-Tu.GTP.ser1-tRNA + 296 EF-Tu.GTP.ser2-tRNA + 111 EF-Tu.GTP.ser3-tRNA + 148 EF-Tu.GTP.serT-tRNA + 444 EF-Tu.GTP.serV-tRNA + 444 EF-Tu.GTP.thr1-tRNA + 222 EF-Tu.GTP.thr2-tRNA + 148 EF-Tu.GTP.thr3-tRNA + 74 EF-Tu.GTP.thrU-tRNA + 407 EF-Tu.GTP.trpT-tRNA + 888 EF-Tu.GTP.tyr1-tRNA + 481 EF-Tu.GTP.val1-tRNA + 407 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_elo_b1719_37_rib2	Translation elongation 2 b1719 37 ribosome(s)	23680 h2o + 1 rib_70_elo1_b1719_37_cplx --> 23680 EF-G.GDP + 23680 EF-Tu.GDP + 1258 ala1_tRNA + 259 ala2_tRNA + 1517 arg1_tRNA + 37 argU_tRNA + 37 argX_tRNA + 925 asn1_tRNA + 1591 asp1_tRNA + 481 cysT_tRNA + 37 fmet_tRNA + 444 gln1_tRNA + 407 gln2_tRNA + 2072 glu1_tRNA + 1258 gly1_tRNA + 111 glyT_tRNA + 222 glyU_tRNA + 47360 h + 851 hisR_tRNA + 1331 ile1_tRNA + 37 ile2_tRNA + 1110 leu1_tRNA + 222 leu2_tRNA + 444 leuU_tRNA + 74 leuW_tRNA + 111 leuZ_tRNA + 1480 lys1_tRNA + 814 met1_tRNA + 118585 mg2 + 925 phe1_tRNA + 47360 pi + 592 pro1_tRNA + 111 pro2_tRNA + 37 proL_tRNA + 111 proM_tRNA + 1 rib_70_elo2_b1719_37_cplx + 111 ser1_tRNA + 296 ser2_tRNA + 111 ser3_tRNA + 148 serT_tRNA + 444 serV_tRNA + 444 thr1_tRNA + 222 thr2_tRNA + 148 thr3_tRNA + 74 thrU_tRNA + 407 trpT_tRNA + 888 tyr1_tRNA + 481 val1_tRNA + 407 val2_tRNA + 629 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_elo_b1804_11_rib1	Translation elongation 1 b1804 11 ribosome(s)	4114 EF-G.GTP + 264 EF-Tu.GTP.ala1-tRNA + 143 EF-Tu.GTP.ala2-tRNA + 253 EF-Tu.GTP.arg1-tRNA + 11 EF-Tu.GTP.argU-tRNA + 11 EF-Tu.GTP.argX-tRNA + 110 EF-Tu.GTP.asn1-tRNA + 231 EF-Tu.GTP.asp1-tRNA + 55 EF-Tu.GTP.cysT-tRNA + 88 EF-Tu.GTP.gln1-tRNA + 110 EF-Tu.GTP.gln2-tRNA + 319 EF-Tu.GTP.glu1-tRNA + 143 EF-Tu.GTP.gly1-tRNA + 22 EF-Tu.GTP.glyT-tRNA + 22 EF-Tu.GTP.glyU-tRNA + 77 EF-Tu.GTP.hisR-tRNA + 176 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.ile2-tRNA + 330 EF-Tu.GTP.leu1-tRNA + 88 EF-Tu.GTP.leu2-tRNA + 77 EF-Tu.GTP.leuU-tRNA + 33 EF-Tu.GTP.leuW-tRNA + 99 EF-Tu.GTP.leuZ-tRNA + 143 EF-Tu.GTP.lys1-tRNA + 121 EF-Tu.GTP.met1-tRNA + 121 EF-Tu.GTP.phe1-tRNA + 176 EF-Tu.GTP.pro1-tRNA + 11 EF-Tu.GTP.pro2-tRNA + 11 EF-Tu.GTP.proL-tRNA + 22 EF-Tu.GTP.proM-tRNA + 66 EF-Tu.GTP.ser1-tRNA + 11 EF-Tu.GTP.ser2-tRNA + 44 EF-Tu.GTP.ser3-tRNA + 22 EF-Tu.GTP.serT-tRNA + 77 EF-Tu.GTP.serV-tRNA + 66 EF-Tu.GTP.thr1-tRNA + 33 EF-Tu.GTP.thr2-tRNA + 77 EF-Tu.GTP.thr3-tRNA + 33 EF-Tu.GTP.thrU-tRNA + 132 EF-Tu.GTP.trpT-tRNA + 99 EF-Tu.GTP.tyr1-tRNA + 88 EF-Tu.GTP.val1-tRNA + 55 EF-Tu.GTP.val2-tRNA + 33 EF-Tu.GTP.val3-tRNA + 20570 mg2 + 1 rib_	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.98E+02	198.3151	0	3.32E+00	3.3245
tl_elo_b1804_11_rib2	Translation elongation 2 b1804 11 ribosome(s)	4103 h2o + 1 rib_70_elo1_b1804_11_cplx --> 4103 EF-G.GDP + 4103 EF-Tu.GDP + 264 ala1_tRNA + 143 ala2_tRNA + 253 arg1_tRNA + 11 argU_tRNA + 11 argX_tRNA + 110 asn1_tRNA + 231 asp1_tRNA + 55 cysT_tRNA + 11 fmet_tRNA + 77 gln1_tRNA + 110 gln2_tRNA + 319 glu1_tRNA + 143 gly1_tRNA + 22 glyT_tRNA + 22 glyU_tRNA + 8206 h + 77 hisR_tRNA + 176 ile1_tRNA + 11 ile2_tRNA + 330 leu1_tRNA + 88 leu2_tRNA + 77 leuU_tRNA + 33 leuW_tRNA + 99 leuZ_tRNA + 143 lys1_tRNA + 121 met1_tRNA + 20570 mg2 + 121 phe1_tRNA + 8206 pi + 176 pro1_tRNA + 11 pro2_tRNA + 11 proL_tRNA + 22 proM_tRNA + 1 rib_70_elo2_b1804_11_cplx + 66 ser1_tRNA + 11 ser2_tRNA + 44 ser3_tRNA + 22 serT_tRNA + 77 serV_tRNA + 66 thr1_tRNA + 33 thr2_tRNA + 77 thr3_tRNA + 33 thrU_tRNA + 132 trpT_tRNA + 99 tyr1_tRNA + 88 val1_tRNA + 55 val2_tRNA + 33 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.98E+02	198.3151	0	3.32E+00	3.3245

tl_elo_b1804_1_rib1	Translation elongation 1 b1804 1 ribosome(s)	374 EF-G.GTP + 24 EF-Tu.GTP.ala1-tRNA + 13 EF-Tu.GTP.ala2-tRNA + 23 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argX-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 21 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 29 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuW-tRNA + 9 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 11 EF-Tu.GTP.met1-tRNA + 11 EF-Tu.GTP.phe1-tRNA + 16 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 1870 mg2 + 1 rib_ini_b1804_1 --> 1 rib_70_elo1_b1804_1_c	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.98E+02	198.3151	0	3.32E+00	3.3245
tl_elo_b1804_1_rib2	Translation elongation 2 b1804 1 ribosome(s)	373 h2o + 1 rib_70_elo1_b1804_1_cplx --> 373 EF-G.GDP + 373 EF-Tu.GDP + 24 ala1_tRNA + 13 ala2_tRNA + 23 arg1_tRNA + 1 argU_tRNA + 1 argX_tRNA + 10 asn1_tRNA + 21 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 10 gln2_tRNA + 29 glu1_tRNA + 13 gly1_tRNA + 2 glyT_tRNA + 2 glyU_tRNA + 746 h + 7 hisR_tRNA + 16 ile1_tRNA + 1 ile2_tRNA + 30 leu1_tRNA + 8 leu2_tRNA + 7 leuU_tRNA + 3 leuW_tRNA + 9 leuZ_tRNA + 13 lys1_tRNA + 11 met1_tRNA + 1870 mg2 + 11 phe1_tRNA + 746 pi + 16 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b1804_1_cplx + 6 ser1_tRNA + 1 ser2_tRNA + 4 ser3_tRNA + 2 serT_tRNA + 7 serV_tRNA + 6 thr1_tRNA + 3 thr2_tRNA + 7 thr3_tRNA + 3 thrU_tRNA + 12 trpT_tRNA + 9 tyr1_tRNA + 8 val1_tRNA + 5 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.98E+02	198.3151	0	3.32E+00	3.3245
tl_elo_b1804_22_rib1	Translation elongation 1 b1804 22 ribosome(s)	8228 EF-G.GTP + 528 EF-Tu.GTP.ala1-tRNA + 286 EF-Tu.GTP.ala2-tRNA + 506 EF-Tu.GTP.arg1-tRNA + 22 EF-Tu.GTP.argU-tRNA + 22 EF-Tu.GTP.argX-tRNA + 220 EF-Tu.GTP.asn1-tRNA + 462 EF-Tu.GTP.asp1-tRNA + 110 EF-Tu.GTP.cysT-tRNA + 176 EF-Tu.GTP.gln1-tRNA + 220 EF-Tu.GTP.gln2-tRNA + 638 EF-Tu.GTP.glu1-tRNA + 286 EF-Tu.GTP.gly1-tRNA + 44 EF-Tu.GTP.glyT-tRNA + 44 EF-Tu.GTP.glyU-tRNA + 154 EF-Tu.GTP.hisR-tRNA + 352 EF-Tu.GTP.ile1-tRNA + 22 EF-Tu.GTP.ile2-tRNA + 660 EF-Tu.GTP.leu1-tRNA + 176 EF-Tu.GTP.leu2-tRNA + 154 EF-Tu.GTP.leuU-tRNA + 66 EF-Tu.GTP.leuW-tRNA + 198 EF-Tu.GTP.leuZ-tRNA + 286 EF-Tu.GTP.lys1-tRNA + 242 EF-Tu.GTP.met1-tRNA + 242 EF-Tu.GTP.phe1-tRNA + 352 EF-Tu.GTP.pro1-tRNA + 22 EF-Tu.GTP.pro2-tRNA + 22 EF-Tu.GTP.proL-tRNA + 44 EF-Tu.GTP.proM-tRNA + 132 EF-Tu.GTP.ser1-tRNA + 22 EF-Tu.GTP.ser2-tRNA + 88 EF-Tu.GTP.ser3-tRNA + 44 EF-Tu.GTP.serT-tRNA + 154 EF-Tu.GTP.serV-tRNA + 132 EF-Tu.GTP.thr1-tRNA + 66 EF-Tu.GTP.thr2-tRNA + 154 EF-Tu.GTP.thr3-tRNA + 66 EF-Tu.GTP.thrU-tRNA + 264 EF-Tu.GTP.trpT-tRNA + 198 EF-Tu.GTP.tyr1-tRNA + 176 EF-Tu.GTP.val1-tRNA + 110 EF-Tu.GTP.val2-tRNA + 66 EF-Tu.GTP.val	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.87E+02	186.9786	0	3.32E+00	3.3245
tl_elo_b1804_22_rib2	Translation elongation 2 b1804 22 ribosome(s)	8206 h2o + 1 rib_70_elo1_b1804_22_cplx --> 8206 EF-G.GDP + 8206 EF-Tu.GDP + 528 ala1_tRNA + 286 ala2_tRNA + 506 arg1_tRNA + 22 argU_tRNA + 22 argX_tRNA + 220 asn1_tRNA + 462 asp1_tRNA + 110 cysT_tRNA + 22 fmet_tRNA + 154 gln1_tRNA + 220 gln2_tRNA + 638 glu1_tRNA + 286 gly1_tRNA + 44 glyT_tRNA + 44 glyU_tRNA + 16412 h + 154 hisR_tRNA + 352 ile1_tRNA + 22 ile2_tRNA + 660 leu1_tRNA + 176 leu2_tRNA + 154 leuU_tRNA + 66 leuW_tRNA + 198 leuZ_tRNA + 286 lys1_tRNA + 242 met1_tRNA + 41140 mg2 + 242 phe1_tRNA + 16412 pi + 352 pro1_tRNA + 22 pro2_tRNA + 22 proL_tRNA + 44 proM_tRNA + 1 rib_70_elo2_b1804_22_cplx + 132 ser1_tRNA + 22 ser2_tRNA + 88 ser3_tRNA + 44 serT_tRNA + 154 serV_tRNA + 132 thr1_tRNA + 66 thr2_tRNA + 154 thr3_tRNA + 66 thrU_tRNA + 264 trpT_tRNA + 198 tyr1_tRNA + 176 val1_tRNA + 110 val2_tRNA + 66 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.87E+02	186.9786	0	3.32E+00	3.3245
tl_elo_b1822_15_rib1	Translation elongation 1 b1822 15 ribosome(s)	4020 EF-G.GTP + 345 EF-Tu.GTP.ala1-tRNA + 120 EF-Tu.GTP.ala2-tRNA + 225 EF-Tu.GTP.arg1-tRNA + 15 EF-Tu.GTP.argW-tRNA + 30 EF-Tu.GTP.argX-tRNA + 60 EF-Tu.GTP.asn1-tRNA + 225 EF-Tu.GTP.asp1-tRNA + 120 EF-Tu.GTP.cysT-tRNA + 165 EF-Tu.GTP.gln1-tRNA + 60 EF-Tu.GTP.gln2-tRNA + 240 EF-Tu.GTP.glu1-tRNA + 120 EF-Tu.GTP.gly1-tRNA + 30 EF-Tu.GTP.glyT-tRNA + 45 EF-Tu.GTP.glyU-tRNA + 165 EF-Tu.GTP.hisR-tRNA + 120 EF-Tu.GTP.ile1-tRNA + 45 EF-Tu.GTP.ile2-tRNA + 150 EF-Tu.GTP.leu1-tRNA + 75 EF-Tu.GTP.leu2-tRNA + 90 EF-Tu.GTP.leuU-tRNA + 60 EF-Tu.GTP.leuZ-tRNA + 180 EF-Tu.GTP.lys1-tRNA + 105 EF-Tu.GTP.met1-tRNA + 165 EF-Tu.GTP.phe1-tRNA + 135 EF-Tu.GTP.pro1-tRNA + 30 EF-Tu.GTP.pro2-tRNA + 60 EF-Tu.GTP.proL-tRNA + 30 EF-Tu.GTP.proM-tRNA + 45 EF-Tu.GTP.ser1-tRNA + 45 EF-Tu.GTP.ser2-tRNA + 30 EF-Tu.GTP.ser3-tRNA + 75 EF-Tu.GTP.serV-tRNA + 30 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 75 EF-Tu.GTP.thr3-tRNA + 45 EF-Tu.GTP.thrU-tRNA + 60 EF-Tu.GTP.trpT-tRNA + 150 EF-Tu.GTP.tyr1-tRNA + 90 EF-Tu.GTP.val1-tRNA + 105 EF-Tu.GTP.val2-tRNA + 30 EF-Tu.GTP.val3-tRNA + 20100 mg2 + 1 rib_ini_b1822_15 --> 1 rib_70_elo1_b1822_15_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_elo_b1822_15_rib2	Translation elongation 2 b1822 15 ribosome(s)	4005 h2o + 1 rib_70_elo1_b1822_15_cplx --> 4005 EF-G.GDP + 4005 EF-Tu.GDP + 345 ala1_tRNA + 120 ala2_tRNA + 225 arg1_tRNA + 15 argW_tRNA + 30 argX_tRNA + 60 asn1_tRNA + 225 asp1_tRNA + 120 cysT_tRNA + 15 fmet_tRNA + 165 gln1_tRNA + 60 gln2_tRNA + 240 glu1_tRNA + 120 gly1_tRNA + 30 glyT_tRNA + 45 glyU_tRNA + 8010 h + 165 hisR_tRNA + 120 ile1_tRNA + 45 ile2_tRNA + 150 leu1_tRNA + 75 leu2_tRNA + 90 leuU_tRNA + 60 leuZ_tRNA + 180 lys1_tRNA + 105 met1_tRNA + 20100 mg2 + 165 phe1_tRNA + 8010 pi + 135 pro1_tRNA + 30 pro2_tRNA + 60 proL_tRNA + 30 proM_tRNA + 1 rib_70_elo2_b1822_15_cplx + 45 ser1_tRNA + 45 ser2_tRNA + 30 ser3_tRNA + 75 serV_tRNA + 30 thr1_tRNA + 30 thr2_tRNA + 75 thr3_tRNA + 45 thrU_tRNA + 60 trpT_tRNA + 135 tyr1_tRNA + 90 val1_tRNA + 105 val2_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698

tl_elo_b1822_1_rib1	Translation elongation 1 b1822 1 ribosome(s)	268 EF-G.GTP + 23 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 2 EF-Tu.GTP.argX-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 11 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 11 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 1340 mg2 + 1 rib_ini_b1822_1 --> 1 rib_70_elo1_b1822_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_elo_b1822_1_rib2	Translation elongation 2 b1822 1 ribosome(s)	267 h2o + 1 rib_70_elo1_b1822_1_cplx --> 267 EF-G.GDP + 267 EF-Tu.GDP + 23 ala1_tRNA + 8 ala2_tRNA + 15 arg1_tRNA + 1 argW_tRNA + 2 argX_tRNA + 4 asn1_tRNA + 15 asp1_tRNA + 8 cysT_tRNA + 1 fmet_tRNA + 11 gln1_tRNA + 4 gln2_tRNA + 16 glu1_tRNA + 8 gly1_tRNA + 2 glyT_tRNA + 3 glyU_tRNA + 534 h + 11 hisR_tRNA + 8 ile1_tRNA + 3 ile2_tRNA + 10 leu1_tRNA + 5 leu2_tRNA + 6 leuU_tRNA + 4 leuZ_tRNA + 12 lys1_tRNA + 7 met1_tRNA + 1340 mg2 + 11 phe1_tRNA + 534 pi + 9 pro1_tRNA + 2 pro2_tRNA + 4 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b1822_1_cplx + 3 ser1_tRNA + 3 ser2_tRNA + 2 ser3_tRNA + 5 serV_tRNA + 2 thr1_tRNA + 2 thr2_tRNA + 5 thr3_tRNA + 3 thrU_tRNA + 4 trpT_tRNA + 9 tyr1_tRNA + 6 val1_tRNA + 7 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_elo_b1822_7_rib1	Translation elongation 1 b1822 7 ribosome(s)	1876 EF-G.GTP + 161 EF-Tu.GTP.ala1-tRNA + 56 EF-Tu.GTP.ala2-tRNA + 105 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argW-tRNA + 14 EF-Tu.GTP.argX-tRNA + 28 EF-Tu.GTP.asn1-tRNA + 105 EF-Tu.GTP.asp1-tRNA + 56 EF-Tu.GTP.cysT-tRNA + 77 EF-Tu.GTP.gln1-tRNA + 28 EF-Tu.GTP.gln2-tRNA + 112 EF-Tu.GTP.glu1-tRNA + 56 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyT-tRNA + 21 EF-Tu.GTP.glyU-tRNA + 77 EF-Tu.GTP.hisR-tRNA + 56 EF-Tu.GTP.ile1-tRNA + 21 EF-Tu.GTP.ile2-tRNA + 70 EF-Tu.GTP.leu1-tRNA + 35 EF-Tu.GTP.leu2-tRNA + 42 EF-Tu.GTP.leuU-tRNA + 28 EF-Tu.GTP.leuZ-tRNA + 84 EF-Tu.GTP.lys1-tRNA + 49 EF-Tu.GTP.met1-tRNA + 77 EF-Tu.GTP.phe1-tRNA + 63 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.pro2-tRNA + 28 EF-Tu.GTP.proL-tRNA + 14 EF-Tu.GTP.proM-tRNA + 21 EF-Tu.GTP.ser1-tRNA + 21 EF-Tu.GTP.ser2-tRNA + 14 EF-Tu.GTP.ser3-tRNA + 35 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 35 EF-Tu.GTP.thr3-tRNA + 21 EF-Tu.GTP.thrU-tRNA + 28 EF-Tu.GTP.trpT-tRNA + 70 EF-Tu.GTP.tyr1-tRNA + 42 EF-Tu.GTP.val1-tRNA + 49 EF-Tu.GTP.val2-tRNA + 14 EF-Tu.GTP.val3-tRNA + 9380 mg2 + 1 rib_ini_b1822_7 --> 1 rib_70_elo1_b1822_7_c	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_elo_b1822_7_rib2	Translation elongation 2 b1822 7 ribosome(s)	1869 h2o + 1 rib_70_elo1_b1822_7_cplx --> 1869 EF-G.GDP + 1869 EF-Tu.GDP + 161 ala1_tRNA + 56 ala2_tRNA + 105 arg1_tRNA + 7 argW_tRNA + 14 argX_tRNA + 28 asn1_tRNA + 105 asp1_tRNA + 56 cysT_tRNA + 7 fmet_tRNA + 77 gln1_tRNA + 28 gln2_tRNA + 112 glu1_tRNA + 56 gly1_tRNA + 14 glyT_tRNA + 21 glyU_tRNA + 3738 h + 77 hisR_tRNA + 56 ile1_tRNA + 21 ile2_tRNA + 70 leu1_tRNA + 35 leu2_tRNA + 42 leuU_tRNA + 28 leuZ_tRNA + 84 lys1_tRNA + 49 met1_tRNA + 9380 mg2 + 77 phe1_tRNA + 3738 pi + 63 pro1_tRNA + 14 pro2_tRNA + 28 proL_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b1822_7_cplx + 21 ser1_tRNA + 21 ser2_tRNA + 14 ser3_tRNA + 35 serV_tRNA + 14 thr1_tRNA + 14 thr2_tRNA + 35 thr3_tRNA + 21 thrU_tRNA + 28 trpT_tRNA + 63 tyr1_tRNA + 42 val1_tRNA + 49 val2_tRNA + 14 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_elo_b1866_17_rib1	Translation elongation 1 b1866 17 ribosome(s)	10013 EF-G.GTP + 867 EF-Tu.GTP.ala1-tRNA + 102 EF-Tu.GTP.ala2-tRNA + 714 EF-Tu.GTP.arg1-tRNA + 391 EF-Tu.GTP.asn1-tRNA + 782 EF-Tu.GTP.asp1-tRNA + 85 EF-Tu.GTP.cysT-tRNA + 272 EF-Tu.GTP.gln1-tRNA + 51 EF-Tu.GTP.gln2-tRNA + 680 EF-Tu.GTP.glu1-tRNA + 697 EF-Tu.GTP.gly1-tRNA + 17 EF-Tu.GTP.glyT-tRNA + 17 EF-Tu.GTP.glyU-tRNA + 153 EF-Tu.GTP.hisR-tRNA + 493 EF-Tu.GTP.ile1-tRNA + 782 EF-Tu.GTP.leu1-tRNA + 34 EF-Tu.GTP.leu2-tRNA + 153 EF-Tu.GTP.leuU-tRNA + 17 EF-Tu.GTP.leuZ-tRNA + 544 EF-Tu.GTP.lys1-tRNA + 340 EF-Tu.GTP.met1-tRNA + 493 EF-Tu.GTP.phe1-tRNA + 425 EF-Tu.GTP.pro1-tRNA + 34 EF-Tu.GTP.pro2-tRNA + 68 EF-Tu.GTP.ser1-tRNA + 102 EF-Tu.GTP.ser2-tRNA + 34 EF-Tu.GTP.ser3-tRNA + 34 EF-Tu.GTP.serT-tRNA + 102 EF-Tu.GTP.serV-tRNA + 255 EF-Tu.GTP.thr1-tRNA + 170 EF-Tu.GTP.thr2-tRNA + 102 EF-Tu.GTP.thr3-tRNA + 17 EF-Tu.GTP.thrU-tRNA + 68 EF-Tu.GTP.trpT-tRNA + 238 EF-Tu.GTP.tyr1-tRNA + 425 EF-Tu.GTP.val1-tRNA + 68 EF-Tu.GTP.val2-tRNA + 187 EF-Tu.GTP.val3-tRNA + 50065 mg2 + 1 rib_ini_b1866_17 --> 1 rib_70_elo1_b1866_17_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.30E+01	7.30E+01	0	1.27E+02	127.2202	0	2.31E+00	2.314
tl_elo_b1866_17_rib2	Translation elongation 2 b1866 17 ribosome(s)	9996 h2o + 1 rib_70_elo1_b1866_17_cplx --> 9996 EF-G.GDP + 9996 EF-Tu.GDP + 867 ala1_tRNA + 102 ala2_tRNA + 714 arg1_tRNA + 374 asn1_tRNA + 782 asp1_tRNA + 85 cysT_tRNA + 17 fmet_tRNA + 272 gln1_tRNA + 51 gln2_tRNA + 680 glu1_tRNA + 697 gly1_tRNA + 17 glyT_tRNA + 17 glyU_tRNA + 19992 h + 153 hisR_tRNA + 493 ile1_tRNA + 782 leu1_tRNA + 34 leu2_tRNA + 153 leuU_tRNA + 17 leuZ_tRNA + 544 lys1_tRNA + 340 met1_tRNA + 50065 mg2 + 493 phe1_tRNA + 19992 pi + 425 pro1_tRNA + 34 pro2_tRNA + 1 rib_70_elo2_b1866_17_cplx + 68 ser1_tRNA + 102 ser2_tRNA + 34 ser3_tRNA + 34 serT_tRNA + 102 serV_tRNA + 255 thr1_tRNA + 170 thr2_tRNA + 102 thr3_tRNA + 17 thrU_tRNA + 68 trpT_tRNA + 238 tyr1_tRNA + 425 val1_tRNA + 68 val2_tRNA + 187 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.30E+01	7.30E+01	0	1.27E+02	127.2202	0	2.31E+00	2.314

tl_elo_b1866_1_rib1	Translation elongation 1 b1866 1 ribosome(s)	589 EF-G.GTP + 51 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 42 EF-Tu.GTP.arg1-tRNA + 23 EF-Tu.GTP.asn1-tRNA + 46 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 40 EF-Tu.GTP.glu1-tRNA + 41 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 29 EF-Tu.GTP.ile1-tRNA + 46 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 32 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 29 EF-Tu.GTP.phe1-tRNA + 25 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 14 EF-Tu.GTP.tyr1-tRNA + 25 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 11 EF-Tu.GTP.val3-tRNA + 2945 mg2 + 1 rib_ini_b1866_1 --> 1 rib_70_elo1_b1866_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.30E+01	7.30E+01	0	1.27E+02	127.2202	0	2.31E+00	2.314
tl_elo_b1866_1_rib2	Translation elongation 2 b1866 1 ribosome(s)	588 h2o + 1 rib_70_elo1_b1866_1_cplx --> 588 EF-G.GDP + 588 EF-Tu.GDP + 51 ala1_tRNA + 6 ala2_tRNA + 42 arg1_tRNA + 22 asn1_tRNA + 46 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 16 gln1_tRNA + 3 gln2_tRNA + 40 glu1_tRNA + 41 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 1176 h + 9 hisR_tRNA + 29 ile1_tRNA + 46 leu1_tRNA + 2 leu2_tRNA + 9 leuU_tRNA + 1 leuZ_tRNA + 32 lys1_tRNA + 20 met1_tRNA + 2945 mg2 + 29 phe1_tRNA + 1176 pi + 25 pro1_tRNA + 2 pro2_tRNA + 1 rib_70_elo2_b1866_1_cplx + 4 ser1_tRNA + 6 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 6 serV_tRNA + 15 thr1_tRNA + 10 thr2_tRNA + 6 thr3_tRNA + 1 thrU_tRNA + 4 trpT_tRNA + 14 tyr1_tRNA + 25 val1_tRNA + 4 val2_tRNA + 11 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.30E+01	7.30E+01	0	1.27E+02	127.2202	0	2.31E+00	2.314
tl_elo_b1866_34_rib1	Translation elongation 1 b1866 34 ribosome(s)	20026 EF-G.GTP + 1734 EF-Tu.GTP.ala1-tRNA + 204 EF-Tu.GTP.ala2-tRNA + 1428 EF-Tu.GTP.arg1-tRNA + 782 EF-Tu.GTP.asn1-tRNA + 1564 EF-Tu.GTP.asp1-tRNA + 170 EF-Tu.GTP.cysT-tRNA + 544 EF-Tu.GTP.gln1-tRNA + 102 EF-Tu.GTP.gln2-tRNA + 1360 EF-Tu.GTP.glu1-tRNA + 1394 EF-Tu.GTP.gly1-tRNA + 34 EF-Tu.GTP.glyT-tRNA + 34 EF-Tu.GTP.glyU-tRNA + 306 EF-Tu.GTP.hisR-tRNA + 986 EF-Tu.GTP.ile1-tRNA + 1564 EF-Tu.GTP.leu1-tRNA + 68 EF-Tu.GTP.leu2-tRNA + 306 EF-Tu.GTP.leuU-tRNA + 34 EF-Tu.GTP.leuZ-tRNA + 1088 EF-Tu.GTP.lys1-tRNA + 680 EF-Tu.GTP.met1-tRNA + 986 EF-Tu.GTP.phe1-tRNA + 850 EF-Tu.GTP.pro1-tRNA + 68 EF-Tu.GTP.pro2-tRNA + 136 EF-Tu.GTP.ser1-tRNA + 204 EF-Tu.GTP.ser2-tRNA + 68 EF-Tu.GTP.ser3-tRNA + 68 EF-Tu.GTP.serT-tRNA + 204 EF-Tu.GTP.serV-tRNA + 510 EF-Tu.GTP.thr1-tRNA + 340 EF-Tu.GTP.thr2-tRNA + 204 EF-Tu.GTP.thr3-tRNA + 34 EF-Tu.GTP.thrU-tRNA + 136 EF-Tu.GTP.trpT-tRNA + 476 EF-Tu.GTP.tyr1-tRNA + 850 EF-Tu.GTP.val1-tRNA + 136 EF-Tu.GTP.val2-tRNA + 374 EF-Tu.GTP.val3-tRNA + 100130 mg2 + 1 rib_ini_b1866_34 --> 1 rib_70_elo1_b1866_34_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.30E+01	7.30E+01	0	1.24E+02	124.3597	0	2.31E+00	2.314
tl_elo_b1866_34_rib2	Translation elongation 2 b1866 34 ribosome(s)	19992 h2o + 1 rib_70_elo1_b1866_34_cplx --> 19992 EF-G.GDP + 19992 EF-Tu.GDP + 1734 ala1_tRNA + 204 ala2_tRNA + 1428 arg1_tRNA + 748 asn1_tRNA + 1564 asp1_tRNA + 170 cysT_tRNA + 34 fmet_tRNA + 544 gln1_tRNA + 102 gln2_tRNA + 1360 glu1_tRNA + 1394 gly1_tRNA + 34 glyT_tRNA + 34 glyU_tRNA + 39984 h + 306 hisR_tRNA + 986 ile1_tRNA + 1564 leu1_tRNA + 68 leu2_tRNA + 306 leuU_tRNA + 34 leuZ_tRNA + 1088 lys1_tRNA + 680 met1_tRNA + 100130 mg2 + 986 phe1_tRNA + 39984 pi + 850 pro1_tRNA + 68 pro2_tRNA + 1 rib_70_elo2_b1866_34_cplx + 136 ser1_tRNA + 204 ser2_tRNA + 68 ser3_tRNA + 68 serT_tRNA + 204 serV_tRNA + 510 thr1_tRNA + 340 thr2_tRNA + 204 thr3_tRNA + 34 thrU_tRNA + 136 trpT_tRNA + 476 tyr1_tRNA + 850 val1_tRNA + 136 val2_tRNA + 374 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.30E+01	7.30E+01	0	1.24E+02	124.3597	0	2.31E+00	2.314
tl_elo_b1869_1_rib1	Translation elongation 1 b1869 1 ribosome(s)	130 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 2 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 5 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 1 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 650 mg2 + 1 rib_ini_b1869_1 --> 1 rib_70_elo1_b1869_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258
tl_elo_b1869_1_rib2	Translation elongation 2 b1869 1 ribosome(s)	129 h2o + 1 rib_70_elo1_b1869_1_cplx --> 129 EF-G.GDP + 129 EF-Tu.GDP + 9 ala1_tRNA + 3 ala2_tRNA + 9 arg1_tRNA + 3 asn1_tRNA + 2 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 1 gln2_tRNA + 5 glu1_tRNA + 9 gly1_tRNA + 258 h + 5 hisR_tRNA + 7 ile1_tRNA + 11 leu1_tRNA + 4 leu2_tRNA + 2 leuU_tRNA + 3 leuZ_tRNA + 1 lys1_tRNA + 10 met1_tRNA + 650 mg2 + 7 phe1_tRNA + 258 pi + 2 proL_tRNA + 1 rib_70_elo2_b1869_1_cplx + 2 ser1_tRNA + 1 ser2_tRNA + 5 serV_tRNA + 2 thr1_tRNA + 5 trpT_tRNA + 7 tyr1_tRNA + 5 val1_tRNA + 1 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258
tl_elo_b1869_3_rib1	Translation elongation 1 b1869 3 ribosome(s)	390 EF-G.GTP + 27 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 30 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 15 EF-Tu.GTP.glu1-tRNA + 27 EF-Tu.GTP.gly1-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 33 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuZ-tRNA + 3 EF-Tu.GTP.lys1-tRNA + 30 EF-Tu.GTP.met1-tRNA + 21 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 15 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 15 EF-Tu.GTP.trpT-tRNA + 21 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 15 EF-Tu.GTP.val3-tRNA + 1950 mg2 + 1 rib_ini_b1869_3 --> 1 rib_70_elo1_b1869_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258

tl_elo_b1869_3_rib2	Translation elongation 2 b1869 3 ribosome(s)	387 h2o + 1 rib_70_elo1_b1869_3_cplx --> 387 EF-G.GDP + 387 EF-Tu.GDP + 27 ala1_tRNA + 9 ala2_tRNA + 27 arg1_tRNA + 9 asn1_tRNA + 6 asp1_tRNA + 6 cysT_tRNA + 3 fmet_tRNA + 3 gln1_tRNA + 3 gln2_tRNA + 15 glu1_tRNA + 27 gly1_tRNA + 774 h + 15 hisR_tRNA + 21 ile1_tRNA + 33 leu1_tRNA + 12 leu2_tRNA + 6 leuU_tRNA + 9 leuZ_tRNA + 3 lys1_tRNA + 30 met1_tRNA + 1950 mg2 + 21 phe1_tRNA + 774 pi + 6 proL_tRNA + 1 rib_70_elo2_b1869_3_cplx + 6 ser1_tRNA + 3 ser2_tRNA + 15 serV_tRNA + 6 thr1_tRNA + 15 trpT_tRNA + 21 tyr1_tRNA + 15 val1_tRNA + 3 val2_tRNA + 15 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258
tl_elo_b1869_7_rib1	Translation elongation 1 b1869 7 ribosome(s)	910 EF-G.GTP + 63 EF-Tu.GTP.ala1-tRNA + 21 EF-Tu.GTP.ala2-tRNA + 70 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 35 EF-Tu.GTP.glu1-tRNA + 63 EF-Tu.GTP.gly1-tRNA + 35 EF-Tu.GTP.hisR-tRNA + 49 EF-Tu.GTP.ile1-tRNA + 77 EF-Tu.GTP.leu1-tRNA + 28 EF-Tu.GTP.leu2-tRNA + 14 EF-Tu.GTP.leuU-tRNA + 21 EF-Tu.GTP.leuZ-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 70 EF-Tu.GTP.met1-tRNA + 49 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.proL-tRNA + 14 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 35 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 35 EF-Tu.GTP.trpT-tRNA + 49 EF-Tu.GTP.tyr1-tRNA + 35 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 35 EF-Tu.GTP.val3-tRNA + 4550 mg2 + 1 rib_ini_b1869_7 --> 1 rib_70_elo1_b1869_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258
tl_elo_b1869_7_rib2	Translation elongation 2 b1869 7 ribosome(s)	903 h2o + 1 rib_70_elo1_b1869_7_cplx --> 903 EF-G.GDP + 903 EF-Tu.GDP + 63 ala1_tRNA + 21 ala2_tRNA + 63 arg1_tRNA + 21 asn1_tRNA + 14 asp1_tRNA + 14 cysT_tRNA + 7 fmet_tRNA + 7 gln1_tRNA + 7 gln2_tRNA + 35 glu1_tRNA + 63 gly1_tRNA + 1806 h + 35 hisR_tRNA + 49 ile1_tRNA + 77 leu1_tRNA + 28 leu2_tRNA + 14 leuU_tRNA + 21 leuZ_tRNA + 7 lys1_tRNA + 70 met1_tRNA + 4550 mg2 + 49 phe1_tRNA + 1806 pi + 14 proL_tRNA + 1 rib_70_elo2_b1869_7_cplx + 14 ser1_tRNA + 7 ser2_tRNA + 35 serV_tRNA + 14 thr1_tRNA + 35 trpT_tRNA + 49 tyr1_tRNA + 35 val1_tRNA + 7 val2_tRNA + 35 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258
tl_elo_b1870_14_rib1	Translation elongation 1 b1870 14 ribosome(s)	3444 EF-G.GTP + 168 EF-Tu.GTP.ala1-tRNA + 140 EF-Tu.GTP.ala2-tRNA + 182 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.argU-tRNA + 14 EF-Tu.GTP.argX-tRNA + 168 EF-Tu.GTP.asn1-tRNA + 224 EF-Tu.GTP.asp1-tRNA + 56 EF-Tu.GTP.cysT-tRNA + 70 EF-Tu.GTP.gln1-tRNA + 42 EF-Tu.GTP.gln2-tRNA + 252 EF-Tu.GTP.glu1-tRNA + 182 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyU-tRNA + 126 EF-Tu.GTP.hisR-tRNA + 238 EF-Tu.GTP.ile1-tRNA + 224 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leu2-tRNA + 28 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.leuW-tRNA + 42 EF-Tu.GTP.leuZ-tRNA + 126 EF-Tu.GTP.lys1-tRNA + 112 EF-Tu.GTP.met1-tRNA + 196 EF-Tu.GTP.phe1-tRNA + 28 EF-Tu.GTP.pro1-tRNA + 56 EF-Tu.GTP.pro2-tRNA + 28 EF-Tu.GTP.proL-tRNA + 14 EF-Tu.GTP.proM-tRNA + 84 EF-Tu.GTP.ser1-tRNA + 42 EF-Tu.GTP.ser2-tRNA + 42 EF-Tu.GTP.ser3-tRNA + 14 EF-Tu.GTP.serT-tRNA + 70 EF-Tu.GTP.serV-tRNA + 56 EF-Tu.GTP.thr1-tRNA + 56 EF-Tu.GTP.thr3-tRNA + 28 EF-Tu.GTP.trpT-tRNA + 70 EF-Tu.GTP.tyr1-tRNA + 140 EF-Tu.GTP.val1-tRNA + 28 EF-Tu.GTP.val2-tRNA + 42 EF-Tu.GTP.val3-tRNA + 17220 mg2 + 1 rib_ini_b1870_14 --> 1 rib_70_elo1_b1870_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578
tl_elo_b1870_14_rib2	Translation elongation 2 b1870 14 ribosome(s)	3430 h2o + 1 rib_70_elo1_b1870_14_cplx --> 3430 EF-G.GDP + 3430 EF-Tu.GDP + 154 ala1_tRNA + 140 ala2_tRNA + 182 arg1_tRNA + 14 argU_tRNA + 14 argX_tRNA + 168 asn1_tRNA + 224 asp1_tRNA + 56 cysT_tRNA + 14 fmet_tRNA + 70 gln1_tRNA + 42 gln2_tRNA + 252 glu1_tRNA + 182 gly1_tRNA + 14 glyU_tRNA + 6860 h + 126 hisR_tRNA + 238 ile1_tRNA + 224 leu1_tRNA + 14 leu2_tRNA + 28 leuU_tRNA + 14 leuW_tRNA + 42 leuZ_tRNA + 126 lys1_tRNA + 112 met1_tRNA + 17220 mg2 + 196 phe1_tRNA + 6860 pi + 28 pro1_tRNA + 56 pro2_tRNA + 28 proL_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b1870_14_cplx + 84 ser1_tRNA + 42 ser2_tRNA + 42 ser3_tRNA + 14 serT_tRNA + 70 serV_tRNA + 56 thr1_tRNA + 56 thr3_tRNA + 28 trpT_tRNA + 70 tyr1_tRNA + 140 val1_tRNA + 28 val2_tRNA + 42 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578
tl_elo_b1870_1_rib1	Translation elongation 1 b1870 1 ribosome(s)	246 EF-G.GTP + 12 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argX-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 16 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 17 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 14 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 1230 mg2 + 1 rib_ini_b1870_1 --> 1 rib_70_elo1_b1870_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578
tl_elo_b1870_1_rib2	Translation elongation 2 b1870 1 ribosome(s)	245 h2o + 1 rib_70_elo1_b1870_1_cplx --> 245 EF-G.GDP + 245 EF-Tu.GDP + 11 ala1_tRNA + 10 ala2_tRNA + 13 arg1_tRNA + 1 argU_tRNA + 1 argX_tRNA + 12 asn1_tRNA + 16 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 3 gln2_tRNA + 18 glu1_tRNA + 13 gly1_tRNA + 1 glyU_tRNA + 490 h + 9 hisR_tRNA + 17 ile1_tRNA + 16 leu1_tRNA + 1 leu2_tRNA + 2 leuU_tRNA + 1 leuW_tRNA + 3 leuZ_tRNA + 9 lys1_tRNA + 8 met1_tRNA + 1230 mg2 + 14 phe1_tRNA + 490 pi + 2 pro1_tRNA + 4 pro2_tRNA + 2 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b1870_1_cplx + 6 ser1_tRNA + 3 ser2_tRNA + 3 ser3_tRNA + 1 serT_tRNA + 5 serV_tRNA + 4 thr1_tRNA + 4 thr3_tRNA + 2 trpT_tRNA + 5 tyr1_tRNA + 10 val1_tRNA + 2 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578

tl_elo_b1870_7_rib1	Translation elongation 1 b1870 7 ribosome(s)	1722 EF-G.GTP + 84 EF-Tu.GTP.ala1-tRNA + 70 EF-Tu.GTP.ala2-tRNA + 91 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argU-tRNA + 7 EF-Tu.GTP.argX-tRNA + 84 EF-Tu.GTP.asn1-tRNA + 112 EF-Tu.GTP.asp1-tRNA + 28 EF-Tu.GTP.cysT-tRNA + 35 EF-Tu.GTP.gln1-tRNA + 21 EF-Tu.GTP.gln2-tRNA + 126 EF-Tu.GTP.glu1-tRNA + 91 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 63 EF-Tu.GTP.hisR-tRNA + 119 EF-Tu.GTP.ile1-tRNA + 112 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 14 EF-Tu.GTP.leuU-tRNA + 7 EF-Tu.GTP.leuW-tRNA + 21 EF-Tu.GTP.leuZ-tRNA + 63 EF-Tu.GTP.lys1-tRNA + 56 EF-Tu.GTP.met1-tRNA + 98 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.pro1-tRNA + 28 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proL-tRNA + 7 EF-Tu.GTP.proM-tRNA + 42 EF-Tu.GTP.ser1-tRNA + 21 EF-Tu.GTP.ser2-tRNA + 21 EF-Tu.GTP.ser3-tRNA + 7 EF-Tu.GTP.serT-tRNA + 35 EF-Tu.GTP.serV-tRNA + 28 EF-Tu.GTP.thr1-tRNA + 28 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.trpT-tRNA + 35 EF-Tu.GTP.tyr1-tRNA + 70 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 21 EF-Tu.GTP.val3-tRNA + 8610 mg2 + 1 rib_ini_b1870_7 --> 1 rib_70_elo1_b1870_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578
tl_elo_b1870_7_rib2	Translation elongation 2 b1870 7 ribosome(s)	1715 h2o + 1 rib_70_elo1_b1870_7_cplx --> 1715 EF-G.GDP + 1715 EF-Tu.GDP + 77 ala1_tRNA + 70 ala2_tRNA + 91 arg1_tRNA + 7 argU_tRNA + 7 argX_tRNA + 84 asn1_tRNA + 112 asp1_tRNA + 28 cysT_tRNA + 7 fmet_tRNA + 35 gln1_tRNA + 21 gln2_tRNA + 126 glu1_tRNA + 91 gly1_tRNA + 7 glyU_tRNA + 3430 h + 63 hisR_tRNA + 119 ile1_tRNA + 112 leu1_tRNA + 7 leu2_tRNA + 14 leuU_tRNA + 7 leuW_tRNA + 21 leuZ_tRNA + 63 lys1_tRNA + 56 met1_tRNA + 8610 mg2 + 98 phe1_tRNA + 3430 pi + 14 pro1_tRNA + 28 pro2_tRNA + 14 proL_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b1870_7_cplx + 42 ser1_tRNA + 21 ser2_tRNA + 21 ser3_tRNA + 7 serT_tRNA + 35 serV_tRNA + 28 thr1_tRNA + 28 thr3_tRNA + 14 trpT_tRNA + 35 tyr1_tRNA + 70 val1_tRNA + 14 val2_tRNA + 21 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578
tl_elo_b1871_19_rib1	Translation elongation 1 b1871 19 ribosome(s)	6118 EF-G.GTP + 342 EF-Tu.GTP.ala1-tRNA + 57 EF-Tu.GTP.ala2-tRNA + 380 EF-Tu.GTP.arg1-tRNA + 209 EF-Tu.GTP.asn1-tRNA + 361 EF-Tu.GTP.asp1-tRNA + 57 EF-Tu.GTP.cysT-tRNA + 171 EF-Tu.GTP.gln1-tRNA + 95 EF-Tu.GTP.gln2-tRNA + 399 EF-Tu.GTP.glu1-tRNA + 304 EF-Tu.GTP.gly1-tRNA + 19 EF-Tu.GTP.glyT-tRNA + 76 EF-Tu.GTP.glyU-tRNA + 209 EF-Tu.GTP.hisR-tRNA + 304 EF-Tu.GTP.ile1-tRNA + 437 EF-Tu.GTP.leu1-tRNA + 76 EF-Tu.GTP.leu2-tRNA + 152 EF-Tu.GTP.leuU-tRNA + 57 EF-Tu.GTP.leuW-tRNA + 76 EF-Tu.GTP.leuZ-tRNA + 285 EF-Tu.GTP.lys1-tRNA + 133 EF-Tu.GTP.met1-tRNA + 228 EF-Tu.GTP.phe1-tRNA + 171 EF-Tu.GTP.pro1-tRNA + 76 EF-Tu.GTP.pro2-tRNA + 38 EF-Tu.GTP.proL-tRNA + 57 EF-Tu.GTP.proM-tRNA + 38 EF-Tu.GTP.ser1-tRNA + 38 EF-Tu.GTP.ser2-tRNA + 38 EF-Tu.GTP.ser3-tRNA + 76 EF-Tu.GTP.serT-tRNA + 95 EF-Tu.GTP.serV-tRNA + 152 EF-Tu.GTP.thr1-tRNA + 133 EF-Tu.GTP.thr3-tRNA + 19 EF-Tu.GTP.thrU-tRNA + 209 EF-Tu.GTP.trpT-tRNA + 152 EF-Tu.GTP.tyr1-tRNA + 209 EF-Tu.GTP.val1-tRNA + 95 EF-Tu.GTP.val2-tRNA + 95 EF-Tu.GTP.val3-tRNA + 30590 mg2 + 1 rib_ini_b1871_19 --> 1 rib_70_elo1_b1871_19_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_elo_b1871_19_rib2	Translation elongation 2 b1871 19 ribosome(s)	6099 h2o + 1 rib_70_elo1_b1871_19_cplx --> 6099 EF-G.GDP + 6099 EF-Tu.GDP + 342 ala1_tRNA + 57 ala2_tRNA + 380 arg1_tRNA + 209 asn1_tRNA + 361 asp1_tRNA + 57 cysT_tRNA + 19 fmet_tRNA + 171 gln1_tRNA + 95 gln2_tRNA + 399 glu1_tRNA + 304 gly1_tRNA + 19 glyT_tRNA + 76 glyU_tRNA + 12198 h + 209 hisR_tRNA + 304 ile1_tRNA + 437 leu1_tRNA + 76 leu2_tRNA + 152 leuU_tRNA + 57 leuW_tRNA + 76 leuZ_tRNA + 285 lys1_tRNA + 133 met1_tRNA + 30590 mg2 + 228 phe1_tRNA + 12198 pi + 152 pro1_tRNA + 76 pro2_tRNA + 38 proL_tRNA + 57 proM_tRNA + 1 rib_70_elo2_b1871_19_cplx + 38 ser1_tRNA + 38 ser2_tRNA + 38 ser3_tRNA + 76 serT_tRNA + 95 serV_tRNA + 152 thr1_tRNA + 133 thr3_tRNA + 19 thrU_tRNA + 209 trpT_tRNA + 152 tyr1_tRNA + 209 val1_tRNA + 95 val2_tRNA + 95 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_elo_b1871_1_rib1	Translation elongation 1 b1871 1 ribosome(s)	322 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 11 EF-Tu.GTP.asn1-tRNA + 19 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 9 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 21 EF-Tu.GTP.glu1-tRNA + 16 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 23 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 15 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 11 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 11 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1610 mg2 + 1 rib_ini_b1871_1 --> 1 rib_70_elo1_b1871_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_elo_b1871_1_rib2	Translation elongation 2 b1871 1 ribosome(s)	321 h2o + 1 rib_70_elo1_b1871_1_cplx --> 321 EF-G.GDP + 321 EF-Tu.GDP + 18 ala1_tRNA + 3 ala2_tRNA + 20 arg1_tRNA + 11 asn1_tRNA + 19 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 9 gln1_tRNA + 5 gln2_tRNA + 21 glu1_tRNA + 16 gly1_tRNA + 1 glyT_tRNA + 4 glyU_tRNA + 642 h + 11 hisR_tRNA + 16 ile1_tRNA + 23 leu1_tRNA + 4 leu2_tRNA + 8 leuU_tRNA + 3 leuW_tRNA + 4 leuZ_tRNA + 15 lys1_tRNA + 7 met1_tRNA + 1610 mg2 + 12 phe1_tRNA + 642 pi + 8 pro1_tRNA + 4 pro2_tRNA + 2 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b1871_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 2 ser3_tRNA + 4 serT_tRNA + 5 serV_tRNA + 8 thr1_tRNA + 7 thr3_tRNA + 1 thrU_tRNA + 11 trpT_tRNA + 8 tyr1_tRNA + 11 val1_tRNA + 5 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068

tl_elo_b1871_9_rib1	Translation elongation 1 b1871 9 ribosome(s)	2898 EF-G.GTP + 162 EF-Tu.GTP.ala1-tRNA + 27 EF-Tu.GTP.ala2-tRNA + 180 EF-Tu.GTP.arg1-tRNA + 99 EF-Tu.GTP.asn1-tRNA + 171 EF-Tu.GTP.asp1-tRNA + 27 EF-Tu.GTP.cysT-tRNA + 81 EF-Tu.GTP.gln1-tRNA + 45 EF-Tu.GTP.gln2-tRNA + 189 EF-Tu.GTP.glu1-tRNA + 144 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 36 EF-Tu.GTP.glyU-tRNA + 99 EF-Tu.GTP.hisR-tRNA + 144 EF-Tu.GTP.ile1-tRNA + 207 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 72 EF-Tu.GTP.leuU-tRNA + 27 EF-Tu.GTP.leuW-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 135 EF-Tu.GTP.lys1-tRNA + 63 EF-Tu.GTP.met1-tRNA + 108 EF-Tu.GTP.phe1-tRNA + 81 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proL-tRNA + 27 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 36 EF-Tu.GTP.serT-tRNA + 45 EF-Tu.GTP.serV-tRNA + 72 EF-Tu.GTP.thr1-tRNA + 63 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 99 EF-Tu.GTP.trpT-tRNA + 72 EF-Tu.GTP.tyr1-tRNA + 99 EF-Tu.GTP.val1-tRNA + 45 EF-Tu.GTP.val2-tRNA + 45 EF-Tu.GTP.val3-tRNA + 14490 mg2 + 1 rib_ini_b1871_9 --> 1 rib_70_elo1_b1871_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_elo_b1871_9_rib2	Translation elongation 2 b1871 9 ribosome(s)	2889 h2o + 1 rib_70_elo1_b1871_9_cplx --> 2889 EF-G.GDP + 2889 EF-Tu.GDP + 162 ala1_tRNA + 27 ala2_tRNA + 180 arg1_tRNA + 99 asn1_tRNA + 171 asp1_tRNA + 27 cysT_tRNA + 9 fmet_tRNA + 81 gln1_tRNA + 45 gln2_tRNA + 189 glu1_tRNA + 144 gly1_tRNA + 9 glyT_tRNA + 36 glyU_tRNA + 5778 h + 99 hisR_tRNA + 144 ile1_tRNA + 207 leu1_tRNA + 36 leu2_tRNA + 72 leuU_tRNA + 27 leuW_tRNA + 36 leuZ_tRNA + 135 lys1_tRNA + 63 met1_tRNA + 14490 mg2 + 108 phe1_tRNA + 5778 pi + 72 pro1_tRNA + 36 pro2_tRNA + 18 proL_tRNA + 27 proM_tRNA + 1 rib_70_elo2_b1871_9_cplx + 18 ser1_tRNA + 18 ser2_tRNA + 18 ser3_tRNA + 36 serT_tRNA + 45 serV_tRNA + 72 thr1_tRNA + 63 thr3_tRNA + 9 thrU_tRNA + 99 trpT_tRNA + 72 tyr1_tRNA + 99 val1_tRNA + 45 val2_tRNA + 45 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_elo_b1876_16_rib1	Translation elongation 1 b1876 16 ribosome(s)	9216 EF-G.GTP + 848 EF-Tu.GTP.ala1-tRNA + 208 EF-Tu.GTP.ala2-tRNA + 512 EF-Tu.GTP.arg1-tRNA + 304 EF-Tu.GTP.asn1-tRNA + 576 EF-Tu.GTP.asp1-tRNA + 64 EF-Tu.GTP.cysT-tRNA + 336 EF-Tu.GTP.gln1-tRNA + 96 EF-Tu.GTP.gln2-tRNA + 768 EF-Tu.GTP.glu1-tRNA + 592 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 16 EF-Tu.GTP.glyU-tRNA + 224 EF-Tu.GTP.hisR-tRNA + 416 EF-Tu.GTP.ile1-tRNA + 656 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 240 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuW-tRNA + 16 EF-Tu.GTP.leuZ-tRNA + 528 EF-Tu.GTP.lys1-tRNA + 336 EF-Tu.GTP.met1-tRNA + 304 EF-Tu.GTP.phe1-tRNA + 192 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.pro2-tRNA + 96 EF-Tu.GTP.proM-tRNA + 80 EF-Tu.GTP.ser1-tRNA + 48 EF-Tu.GTP.ser2-tRNA + 32 EF-Tu.GTP.serT-tRNA + 96 EF-Tu.GTP.serV-tRNA + 208 EF-Tu.GTP.thr1-tRNA + 80 EF-Tu.GTP.thr2-tRNA + 144 EF-Tu.GTP.thr3-tRNA + 32 EF-Tu.GTP.thrU-tRNA + 80 EF-Tu.GTP.trpT-tRNA + 368 EF-Tu.GTP.tyr1-tRNA + 400 EF-Tu.GTP.val1-tRNA + 96 EF-Tu.GTP.val2-tRNA + 160 EF-Tu.GTP.val3-tRNA + 46080 mg2 + 1 rib_ini_b1876_16 --> 1 rib_70_elo1_b1876_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.32E+02	132.061	0	3.08E+00	3.076
tl_elo_b1876_16_rib2	Translation elongation 2 b1876 16 ribosome(s)	9200 h2o + 1 rib_70_elo1_b1876_16_cplx --> 9200 EF-G.GDP + 9200 EF-Tu.GDP + 848 ala1_tRNA + 208 ala2_tRNA + 512 arg1_tRNA + 304 asn1_tRNA + 576 asp1_tRNA + 64 cysT_tRNA + 16 fmet_tRNA + 336 gln1_tRNA + 96 gln2_tRNA + 768 glu1_tRNA + 592 gly1_tRNA + 16 glyT_tRNA + 16 glyU_tRNA + 18400 h + 224 hisR_tRNA + 416 ile1_tRNA + 656 leu1_tRNA + 16 leu2_tRNA + 240 leuU_tRNA + 16 leuW_tRNA + 16 leuZ_tRNA + 528 lys1_tRNA + 320 met1_tRNA + 46080 mg2 + 304 phe1_tRNA + 18400 pi + 192 pro1_tRNA + 16 pro2_tRNA + 96 proM_tRNA + 1 rib_70_elo2_b1876_16_cplx + 80 ser1_tRNA + 48 ser2_tRNA + 32 serT_tRNA + 96 serV_tRNA + 208 thr1_tRNA + 80 thr2_tRNA + 144 thr3_tRNA + 32 thrU_tRNA + 80 trpT_tRNA + 368 tyr1_tRNA + 400 val1_tRNA + 96 val2_tRNA + 160 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.32E+02	132.061	0	3.08E+00	3.076
tl_elo_b1876_1_rib1	Translation elongation 1 b1876 1 ribosome(s)	576 EF-G.GTP + 53 EF-Tu.GTP.ala1-tRNA + 13 EF-Tu.GTP.ala2-tRNA + 32 EF-Tu.GTP.arg1-tRNA + 19 EF-Tu.GTP.asn1-tRNA + 36 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 21 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 48 EF-Tu.GTP.glu1-tRNA + 37 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 14 EF-Tu.GTP.hisR-tRNA + 26 EF-Tu.GTP.ile1-tRNA + 41 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 15 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 33 EF-Tu.GTP.lys1-tRNA + 21 EF-Tu.GTP.met1-tRNA + 19 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 13 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 23 EF-Tu.GTP.tyr1-tRNA + 25 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 2880 mg2 + 1 rib_ini_b1876_1 --> 1 rib_70_elo1_b1876_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.32E+02	132.061	0	3.08E+00	3.076
tl_elo_b1876_1_rib2	Translation elongation 2 b1876 1 ribosome(s)	575 h2o + 1 rib_70_elo1_b1876_1_cplx --> 575 EF-G.GDP + 575 EF-Tu.GDP + 53 ala1_tRNA + 13 ala2_tRNA + 32 arg1_tRNA + 19 asn1_tRNA + 36 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 21 gln1_tRNA + 6 gln2_tRNA + 48 glu1_tRNA + 37 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 1150 h + 14 hisR_tRNA + 26 ile1_tRNA + 41 leu1_tRNA + 1 leu2_tRNA + 15 leuU_tRNA + 1 leuW_tRNA + 1 leuZ_tRNA + 33 lys1_tRNA + 20 met1_tRNA + 2880 mg2 + 19 phe1_tRNA + 1150 pi + 12 pro1_tRNA + 1 pro2_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b1876_1_cplx + 5 ser1_tRNA + 3 ser2_tRNA + 2 serT_tRNA + 6 serV_tRNA + 13 thr1_tRNA + 5 thr2_tRNA + 9 thr3_tRNA + 2 thrU_tRNA + 5 trpT_tRNA + 23 tyr1_tRNA + 25 val1_tRNA + 6 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.32E+02	132.061	0	3.08E+00	3.076

tl_elo_b1876_33_rib1	Translation elongation 1 b1876 33 ribosome(s)	19008 EF-G.GTP + 1749 EF-Tu.GTP.ala1-tRNA + 429 EF-Tu.GTP.ala2-tRNA + 1056 EF-Tu.GTP.arg1-tRNA + 627 EF-Tu.GTP.asn1-tRNA + 1188 EF-Tu.GTP.asp1-tRNA + 132 EF-Tu.GTP.cysT-tRNA + 693 EF-Tu.GTP.gln1-tRNA + 198 EF-Tu.GTP.gln2-tRNA + 1584 EF-Tu.GTP.glu1-tRNA + 1221 EF-Tu.GTP.gly1-tRNA + 33 EF-Tu.GTP.glyT-tRNA + 33 EF-Tu.GTP.glyU-tRNA + 462 EF-Tu.GTP.hisR-tRNA + 858 EF-Tu.GTP.ile1-tRNA + 1353 EF-Tu.GTP.leu1-tRNA + 33 EF-Tu.GTP.leu2-tRNA + 495 EF-Tu.GTP.leuU-tRNA + 33 EF-Tu.GTP.leuW-tRNA + 33 EF-Tu.GTP.leuZ-tRNA + 1089 EF-Tu.GTP.lys1-tRNA + 693 EF-Tu.GTP.met1-tRNA + 627 EF-Tu.GTP.phe1-tRNA + 396 EF-Tu.GTP.pro1-tRNA + 33 EF-Tu.GTP.pro2-tRNA + 198 EF-Tu.GTP.proM-tRNA + 165 EF-Tu.GTP.ser1-tRNA + 99 EF-Tu.GTP.ser2-tRNA + 66 EF-Tu.GTP.serT-tRNA + 198 EF-Tu.GTP.serV-tRNA + 429 EF-Tu.GTP.thr1-tRNA + 165 EF-Tu.GTP.thr2-tRNA + 297 EF-Tu.GTP.thr3-tRNA + 66 EF-Tu.GTP.thrU-tRNA + 165 EF-Tu.GTP.trpT-tRNA + 759 EF-Tu.GTP.tyr1-tRNA + 825 EF-Tu.GTP.val1-tRNA + 198 EF-Tu.GTP.val2-tRNA + 330 EF-Tu.GTP.val3-tRNA + 95040 mg2 + 1 rib_ini_b1876_33 --> 1 rib_70_elo1_b1876_33_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.24E+02	124.4591	0	3.08E+00	3.076
tl_elo_b1876_33_rib2	Translation elongation 2 b1876 33 ribosome(s)	18975 h2o + 1 rib_70_elo1_b1876_33_cplx --> 18975 EF-G.GDP + 18975 EF-Tu.GDP + 1749 ala1_tRNA + 429 ala2_tRNA + 1056 arg1_tRNA + 627 asn1_tRNA + 1188 asp1_tRNA + 132 cysT_tRNA + 33 fmet_tRNA + 693 gln1_tRNA + 198 gln2_tRNA + 1584 glu1_tRNA + 1221 gly1_tRNA + 33 glyT_tRNA + 33 glyU_tRNA + 37950 h + 462 hisR_tRNA + 858 ile1_tRNA + 1353 leu1_tRNA + 33 leu2_tRNA + 495 leuU_tRNA + 33 leuW_tRNA + 33 leuZ_tRNA + 1089 lys1_tRNA + 660 met1_tRNA + 95040 mg2 + 627 phe1_tRNA + 37950 pi + 396 pro1_tRNA + 33 pro2_tRNA + 198 proM_tRNA + 1 rib_70_elo2_b1876_33_cplx + 165 ser1_tRNA + 99 ser2_tRNA + 66 serT_tRNA + 198 serV_tRNA + 429 thr1_tRNA + 165 thr2_tRNA + 297 thr3_tRNA + 66 thrU_tRNA + 165 trpT_tRNA + 759 tyr1_tRNA + 825 val1_tRNA + 198 val2_tRNA + 330 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.24E+02	124.4591	0	3.08E+00	3.076
tl_elo_b1920_15_rib1	Translation elongation 1 b1920 15 ribosome(s)	3975 EF-G.GTP + 285 EF-Tu.GTP.ala1-tRNA + 60 EF-Tu.GTP.ala2-tRNA + 150 EF-Tu.GTP.arg1-tRNA + 15 EF-Tu.GTP.argX-tRNA + 120 EF-Tu.GTP.asn1-tRNA + 345 EF-Tu.GTP.asp1-tRNA + 135 EF-Tu.GTP.gln1-tRNA + 45 EF-Tu.GTP.gln2-tRNA + 225 EF-Tu.GTP.glu1-tRNA + 285 EF-Tu.GTP.gly1-tRNA + 60 EF-Tu.GTP.glyT-tRNA + 45 EF-Tu.GTP.glyU-tRNA + 30 EF-Tu.GTP.hisR-tRNA + 135 EF-Tu.GTP.ile1-tRNA + 330 EF-Tu.GTP.leu1-tRNA + 15 EF-Tu.GTP.leu2-tRNA + 60 EF-Tu.GTP.leuU-tRNA + 15 EF-Tu.GTP.leuW-tRNA + 30 EF-Tu.GTP.leuZ-tRNA + 390 EF-Tu.GTP.lys1-tRNA + 75 EF-Tu.GTP.met1-tRNA + 120 EF-Tu.GTP.phe1-tRNA + 75 EF-Tu.GTP.pro1-tRNA + 30 EF-Tu.GTP.ser1-tRNA + 60 EF-Tu.GTP.ser2-tRNA + 15 EF-Tu.GTP.ser3-tRNA + 30 EF-Tu.GTP.serT-tRNA + 45 EF-Tu.GTP.serV-tRNA + 180 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 30 EF-Tu.GTP.thr3-tRNA + 15 EF-Tu.GTP.thrU-tRNA + 45 EF-Tu.GTP.trpT-tRNA + 90 EF-Tu.GTP.tyr1-tRNA + 225 EF-Tu.GTP.val1-tRNA + 45 EF-Tu.GTP.val2-tRNA + 90 EF-Tu.GTP.val3-tRNA + 19875 mg2 + 1 rib_ini_b1920_15 --> 1 rib_70_elo1_b1920_15_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_elo_b1920_15_rib2	Translation elongation 2 b1920 15 ribosome(s)	3960 h2o + 1 rib_70_elo1_b1920_15_cplx --> 3960 EF-G.GDP + 3960 EF-Tu.GDP + 285 ala1_tRNA + 60 ala2_tRNA + 150 arg1_tRNA + 15 argX_tRNA + 120 asn1_tRNA + 345 asp1_tRNA + 15 fmet_tRNA + 135 gln1_tRNA + 45 gln2_tRNA + 225 glu1_tRNA + 285 gly1_tRNA + 60 glyT_tRNA + 45 glyU_tRNA + 7920 h + 30 hisR_tRNA + 135 ile1_tRNA + 330 leu1_tRNA + 15 leu2_tRNA + 60 leuU_tRNA + 15 leuW_tRNA + 30 leuZ_tRNA + 375 lys1_tRNA + 75 met1_tRNA + 19875 mg2 + 120 phe1_tRNA + 7920 pi + 75 pro1_tRNA + 1 rib_70_elo2_b1920_15_cplx + 30 ser1_tRNA + 60 ser2_tRNA + 15 ser3_tRNA + 30 serT_tRNA + 45 serV_tRNA + 180 thr1_tRNA + 30 thr2_tRNA + 30 thr3_tRNA + 15 thrU_tRNA + 45 trpT_tRNA + 90 tyr1_tRNA + 225 val1_tRNA + 45 val2_tRNA + 90 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_elo_b1920_1_rib1	Translation elongation 1 b1920 1 ribosome(s)	265 EF-G.GTP + 19 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 23 EF-Tu.GTP.asp1-tRNA + 9 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 15 EF-Tu.GTP.glu1-tRNA + 19 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 22 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 26 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1325 mg2 + 1 rib_ini_b1920_1 --> 1 rib_70_elo1_b1920_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_elo_b1920_1_rib2	Translation elongation 2 b1920 1 ribosome(s)	264 h2o + 1 rib_70_elo1_b1920_1_cplx --> 264 EF-G.GDP + 264 EF-Tu.GDP + 19 ala1_tRNA + 4 ala2_tRNA + 10 arg1_tRNA + 1 argX_tRNA + 8 asn1_tRNA + 23 asp1_tRNA + 1 fmet_tRNA + 9 gln1_tRNA + 3 gln2_tRNA + 15 glu1_tRNA + 19 gly1_tRNA + 4 glyT_tRNA + 3 glyU_tRNA + 528 h + 2 hisR_tRNA + 9 ile1_tRNA + 22 leu1_tRNA + 1 leu2_tRNA + 4 leuU_tRNA + 1 leuW_tRNA + 2 leuZ_tRNA + 25 lys1_tRNA + 5 met1_tRNA + 1325 mg2 + 8 phe1_tRNA + 528 pi + 5 pro1_tRNA + 1 rib_70_elo2_b1920_1_cplx + 2 ser1_tRNA + 4 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 3 serV_tRNA + 12 thr1_tRNA + 2 thr2_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 3 trpT_tRNA + 6 tyr1_tRNA + 15 val1_tRNA + 3 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871

tl_elo_b1920_7_rib1	Translation elongation 1 b1920 7 ribosome(s)	1855 EF-G.GTP + 133 EF-Tu.GTP.ala1-tRNA + 28 EF-Tu.GTP.ala2-tRNA + 70 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argX-tRNA + 56 EF-Tu.GTP.asn1-tRNA + 161 EF-Tu.GTP.asp1-tRNA + 63 EF-Tu.GTP.gln1-tRNA + 21 EF-Tu.GTP.gln2-tRNA + 105 EF-Tu.GTP.glu1-tRNA + 133 EF-Tu.GTP.gly1-tRNA + 28 EF-Tu.GTP.glyT-tRNA + 21 EF-Tu.GTP.glyU-tRNA + 14 EF-Tu.GTP.hisR-tRNA + 63 EF-Tu.GTP.ile1-tRNA + 154 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 28 EF-Tu.GTP.leuU-tRNA + 7 EF-Tu.GTP.leuW-tRNA + 14 EF-Tu.GTP.leuZ-tRNA + 182 EF-Tu.GTP.lys1-tRNA + 35 EF-Tu.GTP.met1-tRNA + 56 EF-Tu.GTP.phe1-tRNA + 35 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.ser1-tRNA + 28 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.ser3-tRNA + 14 EF-Tu.GTP.serT-tRNA + 21 EF-Tu.GTP.serV-tRNA + 84 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 14 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 21 EF-Tu.GTP.trpT-tRNA + 42 EF-Tu.GTP.tyr1-tRNA + 105 EF-Tu.GTP.val1-tRNA + 21 EF-Tu.GTP.val2-tRNA + 42 EF-Tu.GTP.val3-tRNA + 9275 mg2 + 1 rib_ini_b1920_7 --> 1 rib_70_elo1_b1920_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_elo_b1920_7_rib2	Translation elongation 2 b1920 7 ribosome(s)	1848 h2o + 1 rib_70_elo1_b1920_7_cplx --> 1848 EF-G.GDP + 1848 EF-Tu.GDP + 133 ala1_tRNA + 28 ala2_tRNA + 70 arg1_tRNA + 7 argX_tRNA + 56 asn1_tRNA + 161 asp1_tRNA + 7 fmet_tRNA + 63 gln1_tRNA + 21 gln2_tRNA + 105 glu1_tRNA + 133 gly1_tRNA + 28 glyT_tRNA + 21 glyU_tRNA + 3696 h + 14 hisR_tRNA + 63 ile1_tRNA + 154 leu1_tRNA + 7 leu2_tRNA + 28 leuU_tRNA + 7 leuW_tRNA + 14 leuZ_tRNA + 175 lys1_tRNA + 35 met1_tRNA + 9275 mg2 + 56 phe1_tRNA + 3696 pi + 35 pro1_tRNA + 1 rib_70_elo2_b1920_7_cplx + 14 ser1_tRNA + 28 ser2_tRNA + 7 ser3_tRNA + 14 serT_tRNA + 21 serV_tRNA + 84 thr1_tRNA + 14 thr2_tRNA + 14 thr3_tRNA + 7 thrU_tRNA + 21 trpT_tRNA + 42 tyr1_tRNA + 105 val1_tRNA + 21 val2_tRNA + 42 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_elo_b1921_10_rib1	Translation elongation 1 b1921 10 ribosome(s)	1820 EF-G.GTP + 40 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 120 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.argU-tRNA + 20 EF-Tu.GTP.argX-tRNA + 60 EF-Tu.GTP.asn1-tRNA + 120 EF-Tu.GTP.asp1-tRNA + 60 EF-Tu.GTP.cysT-tRNA + 70 EF-Tu.GTP.gln1-tRNA + 70 EF-Tu.GTP.gln2-tRNA + 80 EF-Tu.GTP.glu1-tRNA + 60 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyU-tRNA + 80 EF-Tu.GTP.hisR-tRNA + 80 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.ile2-tRNA + 60 EF-Tu.GTP.leu1-tRNA + 30 EF-Tu.GTP.leu2-tRNA + 80 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuW-tRNA + 50 EF-Tu.GTP.leuZ-tRNA + 110 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 80 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proL-tRNA + 20 EF-Tu.GTP.proM-tRNA + 40 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.serT-tRNA + 60 EF-Tu.GTP.serV-tRNA + 70 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 40 EF-Tu.GTP.thr3-tRNA + 30 EF-Tu.GTP.trpT-tRNA + 60 EF-Tu.GTP.tyr1-tRNA + 40 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 20 EF-Tu.GTP.val3-tRNA + 9100 mg2 + 1 rib_ini_b1921_10 --> 1 rib_70_elo1_b1921_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_elo_b1921_10_rib2	Translation elongation 2 b1921 10 ribosome(s)	1810 h2o + 1 rib_70_elo1_b1921_10_cplx --> 1810 EF-G.GDP + 1810 EF-Tu.GDP + 40 ala1_tRNA + 10 ala2_tRNA + 120 arg1_tRNA + 20 argU_tRNA + 20 argX_tRNA + 60 asn1_tRNA + 120 asp1_tRNA + 60 cysT_tRNA + 10 fmet_tRNA + 70 gln1_tRNA + 70 gln2_tRNA + 80 glu1_tRNA + 60 gly1_tRNA + 10 glyU_tRNA + 3620 h + 80 hisR_tRNA + 80 ile1_tRNA + 20 ile2_tRNA + 60 leu1_tRNA + 30 leu2_tRNA + 80 leuU_tRNA + 10 leuW_tRNA + 50 leuZ_tRNA + 110 lys1_tRNA + 20 met1_tRNA + 9100 mg2 + 80 phe1_tRNA + 3620 pi + 10 pro1_tRNA + 10 pro2_tRNA + 10 proL_tRNA + 20 proM_tRNA + 1 rib_70_elo2_b1921_10_cplx + 40 ser1_tRNA + 20 ser2_tRNA + 10 serT_tRNA + 60 serV_tRNA + 70 thr1_tRNA + 10 thr2_tRNA + 40 thr3_tRNA + 30 trpT_tRNA + 50 tyr1_tRNA + 40 val1_tRNA + 10 val2_tRNA + 20 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_elo_b1921_1_rib1	Translation elongation 1 b1921 1 ribosome(s)	182 EF-G.GTP + 4 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argU-tRNA + 2 EF-Tu.GTP.argX-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 910 mg2 + 1 rib_ini_b1921_1 --> 1 rib_70_elo1_b1921_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_elo_b1921_1_rib2	Translation elongation 2 b1921 1 ribosome(s)	181 h2o + 1 rib_70_elo1_b1921_1_cplx --> 181 EF-G.GDP + 181 EF-Tu.GDP + 4 ala1_tRNA + 1 ala2_tRNA + 12 arg1_tRNA + 2 argU_tRNA + 2 argX_tRNA + 6 asn1_tRNA + 12 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 7 gln2_tRNA + 8 glu1_tRNA + 6 gly1_tRNA + 1 glyU_tRNA + 362 h + 8 hisR_tRNA + 8 ile1_tRNA + 2 ile2_tRNA + 6 leu1_tRNA + 3 leu2_tRNA + 8 leuU_tRNA + 1 leuW_tRNA + 5 leuZ_tRNA + 11 lys1_tRNA + 2 met1_tRNA + 910 mg2 + 8 phe1_tRNA + 362 pi + 1 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b1921_1_cplx + 4 ser1_tRNA + 2 ser2_tRNA + 1 serT_tRNA + 6 serV_tRNA + 7 thr1_tRNA + 1 thr2_tRNA + 4 thr3_tRNA + 3 trpT_tRNA + 5 tyr1_tRNA + 4 val1_tRNA + 1 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361

tl_elo_b1921_5_rib1	Translation elongation 1 b1921 5 ribosome(s)	910 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 60 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argU-tRNA + 10 EF-Tu.GTP.argX-tRNA + 30 EF-Tu.GTP.asn1-tRNA + 60 EF-Tu.GTP.asp1-tRNA + 30 EF-Tu.GTP.cysT-tRNA + 35 EF-Tu.GTP.gln1-tRNA + 35 EF-Tu.GTP.gln2-tRNA + 40 EF-Tu.GTP.glu1-tRNA + 30 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 40 EF-Tu.GTP.hisR-tRNA + 40 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.ile2-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 15 EF-Tu.GTP.leu2-tRNA + 40 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuW-tRNA + 25 EF-Tu.GTP.leuZ-tRNA + 55 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 40 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.proM-tRNA + 20 EF-Tu.GTP.ser1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serT-tRNA + 30 EF-Tu.GTP.serV-tRNA + 35 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 15 EF-Tu.GTP.trpT-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 4550 mg2 + 1 rib_ini_b1921_5 --> 1 rib_70_elo1_b1921_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_elo_b1921_5_rib2	Translation elongation 2 b1921 5 ribosome(s)	905 h2o + 1 rib_70_elo1_b1921_5_cplx --> 905 EF-G.GDP + 905 EF-Tu.GDP + 20 ala1_tRNA + 5 ala2_tRNA + 60 arg1_tRNA + 10 argU_tRNA + 10 argX_tRNA + 30 asn1_tRNA + 60 asp1_tRNA + 30 cysT_tRNA + 5 fmet_tRNA + 35 gln1_tRNA + 35 gln2_tRNA + 40 glu1_tRNA + 30 gly1_tRNA + 5 glyU_tRNA + 1810 h + 40 hisR_tRNA + 40 ile1_tRNA + 10 ile2_tRNA + 30 leu1_tRNA + 15 leu2_tRNA + 40 leuU_tRNA + 5 leuW_tRNA + 25 leuZ_tRNA + 55 lys1_tRNA + 10 met1_tRNA + 4550 mg2 + 40 phe1_tRNA + 1810 pi + 5 pro1_tRNA + 5 pro2_tRNA + 5 proL_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b1921_5_cplx + 20 ser1_tRNA + 10 ser2_tRNA + 5 serT_tRNA + 30 serV_tRNA + 35 thr1_tRNA + 5 thr2_tRNA + 20 thr3_tRNA + 15 trpT_tRNA + 25 tyr1_tRNA + 20 val1_tRNA + 5 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_elo_b1922_14_rib1	Translation elongation 1 b1922 14 ribosome(s)	3332 EF-G.GTP + 182 EF-Tu.GTP.ala1-tRNA + 70 EF-Tu.GTP.ala2-tRNA + 294 EF-Tu.GTP.arg1-tRNA + 42 EF-Tu.GTP.argX-tRNA + 126 EF-Tu.GTP.asn1-tRNA + 196 EF-Tu.GTP.asp1-tRNA + 168 EF-Tu.GTP.gln1-tRNA + 70 EF-Tu.GTP.gln2-tRNA + 350 EF-Tu.GTP.glu1-tRNA + 112 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyT-tRNA + 56 EF-Tu.GTP.glyU-tRNA + 70 EF-Tu.GTP.hisR-tRNA + 112 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.ile2-tRNA + 196 EF-Tu.GTP.leu1-tRNA + 42 EF-Tu.GTP.leu2-tRNA + 126 EF-Tu.GTP.leuU-tRNA + 56 EF-Tu.GTP.leuW-tRNA + 84 EF-Tu.GTP.leuZ-tRNA + 84 EF-Tu.GTP.lys1-tRNA + 56 EF-Tu.GTP.met1-tRNA + 28 EF-Tu.GTP.phe1-tRNA + 56 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.proL-tRNA + 14 EF-Tu.GTP.ser1-tRNA + 28 EF-Tu.GTP.ser3-tRNA + 14 EF-Tu.GTP.serT-tRNA + 112 EF-Tu.GTP.serV-tRNA + 42 EF-Tu.GTP.thr1-tRNA + 56 EF-Tu.GTP.thr2-tRNA + 42 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.thrU-tRNA + 42 EF-Tu.GTP.trpT-tRNA + 112 EF-Tu.GTP.tyr1-tRNA + 154 EF-Tu.GTP.val1-tRNA + 56 EF-Tu.GTP.val2-tRNA + 28 EF-Tu.GTP.val3-tRNA + 16660 mg2 + 1 rib_ini_b1922_14 --> 1 rib_70_elo1_b1922_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_elo_b1922_14_rib2	Translation elongation 2 b1922 14 ribosome(s)	3318 h2o + 1 rib_70_elo1_b1922_14_cplx --> 3318 EF-G.GDP + 3318 EF-Tu.GDP + 182 ala1_tRNA + 70 ala2_tRNA + 294 arg1_tRNA + 42 argX_tRNA + 126 asn1_tRNA + 196 asp1_tRNA + 14 fmet_tRNA + 168 gln1_tRNA + 70 gln2_tRNA + 350 glu1_tRNA + 112 gly1_tRNA + 14 glyT_tRNA + 56 glyU_tRNA + 6636 h + 70 hisR_tRNA + 112 ile1_tRNA + 14 ile2_tRNA + 196 leu1_tRNA + 42 leu2_tRNA + 126 leuU_tRNA + 56 leuW_tRNA + 70 leuZ_tRNA + 84 lys1_tRNA + 56 met1_tRNA + 16660 mg2 + 28 phe1_tRNA + 6636 pi + 56 pro1_tRNA + 14 proL_tRNA + 1 rib_70_elo2_b1922_14_cplx + 14 ser1_tRNA + 28 ser3_tRNA + 14 serT_tRNA + 112 serV_tRNA + 42 thr1_tRNA + 56 thr2_tRNA + 42 thr3_tRNA + 14 thrU_tRNA + 42 trpT_tRNA + 112 tyr1_tRNA + 154 val1_tRNA + 56 val2_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_elo_b1922_1_rib1	Translation elongation 1 b1922 1 ribosome(s)	238 EF-G.GTP + 13 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 21 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argX-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 25 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 14 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuW-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 6 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 8 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 11 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 1190 mg2 + 1 rib_ini_b1922_1 --> 1 rib_70_elo1_b1922_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_elo_b1922_1_rib2	Translation elongation 2 b1922 1 ribosome(s)	237 h2o + 1 rib_70_elo1_b1922_1_cplx --> 237 EF-G.GDP + 237 EF-Tu.GDP + 13 ala1_tRNA + 5 ala2_tRNA + 21 arg1_tRNA + 3 argX_tRNA + 9 asn1_tRNA + 14 asp1_tRNA + 1 fmet_tRNA + 12 gln1_tRNA + 5 gln2_tRNA + 25 glu1_tRNA + 8 gly1_tRNA + 1 glyT_tRNA + 4 glyU_tRNA + 474 h + 5 hisR_tRNA + 8 ile1_tRNA + 1 ile2_tRNA + 14 leu1_tRNA + 3 leu2_tRNA + 9 leuU_tRNA + 4 leuW_tRNA + 5 leuZ_tRNA + 6 lys1_tRNA + 4 met1_tRNA + 1190 mg2 + 2 phe1_tRNA + 474 pi + 4 pro1_tRNA + 1 proL_tRNA + 1 rib_70_elo2_b1922_1_cplx + 1 ser1_tRNA + 2 ser3_tRNA + 1 serT_tRNA + 8 serV_tRNA + 3 thr1_tRNA + 4 thr2_tRNA + 3 thr3_tRNA + 1 thrU_tRNA + 3 trpT_tRNA + 8 tyr1_tRNA + 11 val1_tRNA + 4 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791

tl_elo_b1922_7_rib1	Translation elongation 1 b1922 7 ribosome(s)	1666 EF-G.GTP + 91 EF-Tu.GTP.ala1-tRNA + 35 EF-Tu.GTP.ala2-tRNA + 147 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.argX-tRNA + 63 EF-Tu.GTP.asn1-tRNA + 98 EF-Tu.GTP.asp1-tRNA + 84 EF-Tu.GTP.gln1-tRNA + 35 EF-Tu.GTP.gln2-tRNA + 175 EF-Tu.GTP.glu1-tRNA + 56 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyT-tRNA + 28 EF-Tu.GTP.glyU-tRNA + 35 EF-Tu.GTP.hisR-tRNA + 56 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.ile2-tRNA + 98 EF-Tu.GTP.leu1-tRNA + 21 EF-Tu.GTP.leu2-tRNA + 63 EF-Tu.GTP.leuU-tRNA + 28 EF-Tu.GTP.leuW-tRNA + 42 EF-Tu.GTP.leuZ-tRNA + 42 EF-Tu.GTP.lys1-tRNA + 28 EF-Tu.GTP.met1-tRNA + 14 EF-Tu.GTP.phe1-tRNA + 28 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.proL-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 14 EF-Tu.GTP.ser3-tRNA + 7 EF-Tu.GTP.serT-tRNA + 56 EF-Tu.GTP.serV-tRNA + 21 EF-Tu.GTP.thr1-tRNA + 28 EF-Tu.GTP.thr2-tRNA + 21 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 21 EF-Tu.GTP.trpT-tRNA + 56 EF-Tu.GTP.tyr1-tRNA + 77 EF-Tu.GTP.val1-tRNA + 28 EF-Tu.GTP.val2-tRNA + 14 EF-Tu.GTP.val3-tRNA + 8330 mg2 + 1 rib_ini_b1922_7 --> 1 rib_70_elo1_b1922_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_elo_b1922_7_rib2	Translation elongation 2 b1922 7 ribosome(s)	1659 h2o + 1 rib_70_elo1_b1922_7_cplx --> 1659 EF-G.GDP + 1659 EF-Tu.GDP + 91 ala1_tRNA + 35 ala2_tRNA + 147 arg1_tRNA + 21 argX_tRNA + 63 asn1_tRNA + 98 asp1_tRNA + 7 fmet_tRNA + 84 gln1_tRNA + 35 gln2_tRNA + 175 glu1_tRNA + 56 gly1_tRNA + 7 glyT_tRNA + 28 glyU_tRNA + 3318 h + 35 hisR_tRNA + 56 ile1_tRNA + 7 ile2_tRNA + 98 leu1_tRNA + 21 leu2_tRNA + 63 leuU_tRNA + 28 leuW_tRNA + 35 leuZ_tRNA + 42 lys1_tRNA + 28 met1_tRNA + 8330 mg2 + 14 phe1_tRNA + 3318 pi + 28 pro1_tRNA + 7 proL_tRNA + 1 rib_70_elo2_b1922_7_cplx + 7 ser1_tRNA + 14 ser3_tRNA + 7 serT_tRNA + 56 serV_tRNA + 21 thr1_tRNA + 28 thr2_tRNA + 21 thr3_tRNA + 7 thrU_tRNA + 21 trpT_tRNA + 56 tyr1_tRNA + 77 val1_tRNA + 28 val2_tRNA + 14 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_elo_b2114_19_rib1	Translation elongation 1 b2114 19 ribosome(s)	12844 EF-G.GTP + 817 EF-Tu.GTP.ala1-tRNA + 304 EF-Tu.GTP.ala2-tRNA + 608 EF-Tu.GTP.arg1-tRNA + 19 EF-Tu.GTP.argW-tRNA + 551 EF-Tu.GTP.asn1-tRNA + 855 EF-Tu.GTP.asp1-tRNA + 152 EF-Tu.GTP.cysT-tRNA + 456 EF-Tu.GTP.gln1-tRNA + 76 EF-Tu.GTP.gln2-tRNA + 836 EF-Tu.GTP.glu1-tRNA + 855 EF-Tu.GTP.gly1-tRNA + 19 EF-Tu.GTP.glyU-tRNA + 304 EF-Tu.GTP.hisR-tRNA + 684 EF-Tu.GTP.ile1-tRNA + 855 EF-Tu.GTP.leu1-tRNA + 76 EF-Tu.GTP.leu2-tRNA + 133 EF-Tu.GTP.leuU-tRNA + 19 EF-Tu.GTP.leuW-tRNA + 760 EF-Tu.GTP.lys1-tRNA + 380 EF-Tu.GTP.met1-tRNA + 703 EF-Tu.GTP.phe1-tRNA + 513 EF-Tu.GTP.pro1-tRNA + 57 EF-Tu.GTP.pro2-tRNA + 19 EF-Tu.GTP.proL-tRNA + 19 EF-Tu.GTP.proM-tRNA + 133 EF-Tu.GTP.ser1-tRNA + 247 EF-Tu.GTP.ser2-tRNA + 57 EF-Tu.GTP.ser3-tRNA + 57 EF-Tu.GTP.serT-tRNA + 285 EF-Tu.GTP.serV-tRNA + 266 EF-Tu.GTP.thr1-tRNA + 133 EF-Tu.GTP.thr2-tRNA + 114 EF-Tu.GTP.thr3-tRNA + 19 EF-Tu.GTP.thrU-tRNA + 209 EF-Tu.GTP.trpT-tRNA + 456 EF-Tu.GTP.tyr1-tRNA + 475 EF-Tu.GTP.val1-tRNA + 152 EF-Tu.GTP.val2-tRNA + 171 EF-Tu.GTP.val3-tRNA + 64220 mg2 + 1 rib_ini_b2114_19 --> 1 rib_70_elo1_b2114_19_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.08E+02	107.9198	0	2.85E+00	2.853
tl_elo_b2114_19_rib2	Translation elongation 2 b2114 19 ribosome(s)	12825 h2o + 1 rib_70_elo1_b2114_19_cplx --> 12825 EF-G.GDP + 12825 EF-Tu.GDP + 817 ala1_tRNA + 304 ala2_tRNA + 608 arg1_tRNA + 19 argW_tRNA + 551 asn1_tRNA + 855 asp1_tRNA + 152 cysT_tRNA + 19 fmet_tRNA + 456 gln1_tRNA + 76 gln2_tRNA + 836 glu1_tRNA + 855 gly1_tRNA + 19 glyU_tRNA + 25650 h + 304 hisR_tRNA + 684 ile1_tRNA + 855 leu1_tRNA + 76 leu2_tRNA + 133 leuU_tRNA + 19 leuW_tRNA + 741 lys1_tRNA + 380 met1_tRNA + 64220 mg2 + 703 phe1_tRNA + 25650 pi + 513 pro1_tRNA + 57 pro2_tRNA + 19 proL_tRNA + 19 proM_tRNA + 1 rib_70_elo2_b2114_19_cplx + 133 ser1_tRNA + 247 ser2_tRNA + 57 ser3_tRNA + 57 serT_tRNA + 285 serV_tRNA + 266 thr1_tRNA + 133 thr2_tRNA + 114 thr3_tRNA + 19 thrU_tRNA + 209 trpT_tRNA + 456 tyr1_tRNA + 475 val1_tRNA + 152 val2_tRNA + 171 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.08E+02	107.9198	0	2.85E+00	2.853
tl_elo_b2114_1_rib1	Translation elongation 1 b2114 1 ribosome(s)	676 EF-G.GTP + 43 EF-Tu.GTP.ala1-tRNA + 16 EF-Tu.GTP.ala2-tRNA + 32 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 29 EF-Tu.GTP.asn1-tRNA + 45 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 44 EF-Tu.GTP.glu1-tRNA + 45 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 36 EF-Tu.GTP.ile1-tRNA + 45 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 40 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 37 EF-Tu.GTP.phe1-tRNA + 27 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 13 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 15 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 11 EF-Tu.GTP.trpT-tRNA + 24 EF-Tu.GTP.tyr1-tRNA + 25 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 3380 mg2 + 1 rib_ini_b2114_1 --> 1 rib_70_elo1_b2114_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.08E+02	107.9198	0	2.85E+00	2.853
tl_elo_b2114_1_rib2	Translation elongation 2 b2114 1 ribosome(s)	675 h2o + 1 rib_70_elo1_b2114_1_cplx --> 675 EF-G.GDP + 675 EF-Tu.GDP + 43 ala1_tRNA + 16 ala2_tRNA + 32 arg1_tRNA + 1 argW_tRNA + 29 asn1_tRNA + 45 asp1_tRNA + 8 cysT_tRNA + 1 fmet_tRNA + 24 gln1_tRNA + 4 gln2_tRNA + 44 glu1_tRNA + 45 gly1_tRNA + 1 glyU_tRNA + 1350 h + 16 hisR_tRNA + 36 ile1_tRNA + 45 leu1_tRNA + 4 leu2_tRNA + 7 leuU_tRNA + 1 leuW_tRNA + 39 lys1_tRNA + 20 met1_tRNA + 3380 mg2 + 37 phe1_tRNA + 1350 pi + 27 pro1_tRNA + 3 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b2114_1_cplx + 7 ser1_tRNA + 13 ser2_tRNA + 3 ser3_tRNA + 3 serT_tRNA + 15 serV_tRNA + 14 thr1_tRNA + 7 thr2_tRNA + 6 thr3_tRNA + 1 thrU_tRNA + 11 trpT_tRNA + 24 tyr1_tRNA + 25 val1_tRNA + 8 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.08E+02	107.9198	0	2.85E+00	2.853

tl_elo_b2114_39_rib1	Translation elongation 1 b2114 39 ribosome(s)	26364 EF-G.GTP + 1677 EF-Tu.GTP.ala1-tRNA + 624 EF-Tu.GTP.ala2-tRNA + 1248 EF-Tu.GTP.arg1-tRNA + 39 EF-Tu.GTP.argW-tRNA + 1131 EF-Tu.GTP.asn1-tRNA + 1755 EF-Tu.GTP.asp1-tRNA + 312 EF-Tu.GTP.cysT-tRNA + 936 EF-Tu.GTP.gln1-tRNA + 156 EF-Tu.GTP.gln2-tRNA + 1716 EF-Tu.GTP.glu1-tRNA + 1755 EF-Tu.GTP.gly1-tRNA + 39 EF-Tu.GTP.glyU-tRNA + 624 EF-Tu.GTP.hisR-tRNA + 1404 EF-Tu.GTP.ile1-tRNA + 1755 EF-Tu.GTP.leu1-tRNA + 156 EF-Tu.GTP.leu2-tRNA + 273 EF-Tu.GTP.leuU-tRNA + 39 EF-Tu.GTP.leuW-tRNA + 1560 EF-Tu.GTP.lys1-tRNA + 780 EF-Tu.GTP.met1-tRNA + 1443 EF-Tu.GTP.phe1-tRNA + 1053 EF-Tu.GTP.pro1-tRNA + 117 EF-Tu.GTP.pro2-tRNA + 39 EF-Tu.GTP.proL-tRNA + 39 EF-Tu.GTP.proM-tRNA + 273 EF-Tu.GTP.ser1-tRNA + 507 EF-Tu.GTP.ser2-tRNA + 117 EF-Tu.GTP.ser3-tRNA + 117 EF-Tu.GTP.serT-tRNA + 585 EF-Tu.GTP.serV-tRNA + 546 EF-Tu.GTP.thr1-tRNA + 273 EF-Tu.GTP.thr2-tRNA + 234 EF-Tu.GTP.thr3-tRNA + 39 EF-Tu.GTP.thrU-tRNA + 429 EF-Tu.GTP.trpT-tRNA + 936 EF-Tu.GTP.tyr1-tRNA + 975 EF-Tu.GTP.val1-tRNA + 312 EF-Tu.GTP.val2-tRNA + 351 EF-Tu.GTP.val3-tRNA + 131820 mg2 + 1 rib_ini_b2114_39 --> 1 rib_70_elo1_b2114_39_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.06E+02	106.4596	0	2.85E+00	2.853
tl_elo_b2114_39_rib2	Translation elongation 2 b2114 39 ribosome(s)	26325 h2o + 1 rib_70_elo1_b2114_39_cplx --> 26325 EF-G.GDP + 26325 EF-Tu.GDP + 1677 ala1_tRNA + 624 ala2_tRNA + 1248 arg1_tRNA + 39 argW_tRNA + 1131 asn1_tRNA + 1755 asp1_tRNA + 312 cysT_tRNA + 39 fmet_tRNA + 936 gln1_tRNA + 156 gln2_tRNA + 1716 glu1_tRNA + 1755 gly1_tRNA + 39 glyU_tRNA + 52650 h + 624 hisR_tRNA + 1404 ile1_tRNA + 1755 leu1_tRNA + 156 leu2_tRNA + 273 leuU_tRNA + 39 leuW_tRNA + 1521 lys1_tRNA + 780 met1_tRNA + 131820 mg2 + 1443 phe1_tRNA + 52650 pi + 1053 pro1_tRNA + 117 pro2_tRNA + 39 proL_tRNA + 39 proM_tRNA + 1 rib_70_elo2_b2114_39_cplx + 273 ser1_tRNA + 507 ser2_tRNA + 117 ser3_tRNA + 117 serT_tRNA + 585 serV_tRNA + 546 thr1_tRNA + 273 thr2_tRNA + 234 thr3_tRNA + 39 thrU_tRNA + 429 trpT_tRNA + 936 tyr1_tRNA + 975 val1_tRNA + 312 val2_tRNA + 351 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.06E+02	106.4596	0	2.85E+00	2.853
tl_elo_b2140_18_rib1	Translation elongation 1 b2140 18 ribosome(s)	5652 EF-G.GTP + 414 EF-Tu.GTP.ala1-tRNA + 90 EF-Tu.GTP.ala2-tRNA + 252 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argW-tRNA + 108 EF-Tu.GTP.argX-tRNA + 216 EF-Tu.GTP.asn1-tRNA + 288 EF-Tu.GTP.asp1-tRNA + 108 EF-Tu.GTP.cysT-tRNA + 216 EF-Tu.GTP.gln1-tRNA + 126 EF-Tu.GTP.gln2-tRNA + 396 EF-Tu.GTP.glu1-tRNA + 324 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 72 EF-Tu.GTP.glyU-tRNA + 108 EF-Tu.GTP.hisR-tRNA + 324 EF-Tu.GTP.ile1-tRNA + 252 EF-Tu.GTP.leu1-tRNA + 126 EF-Tu.GTP.leu2-tRNA + 108 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuW-tRNA + 108 EF-Tu.GTP.leuZ-tRNA + 252 EF-Tu.GTP.lys1-tRNA + 90 EF-Tu.GTP.met1-tRNA + 90 EF-Tu.GTP.phe1-tRNA + 144 EF-Tu.GTP.pro1-tRNA + 54 EF-Tu.GTP.pro2-tRNA + 36 EF-Tu.GTP.proL-tRNA + 36 EF-Tu.GTP.proM-tRNA + 36 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 144 EF-Tu.GTP.serV-tRNA + 72 EF-Tu.GTP.thr1-tRNA + 108 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 144 EF-Tu.GTP.trpT-tRNA + 144 EF-Tu.GTP.tyr1-tRNA + 378 EF-Tu.GTP.val1-tRNA + 54 EF-Tu.GTP.val2-tRNA + 108 EF-Tu.GTP.val3-tRNA + 28260 mg2 + 1 rib_ini_b2140_18 --> 1 rib_70_elo1_b2140_18_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_elo_b2140_18_rib2	Translation elongation 2 b2140 18 ribosome(s)	5634 h2o + 1 rib_70_elo1_b2140_18_cplx --> 5634 EF-G.GDP + 5634 EF-Tu.GDP + 414 ala1_tRNA + 90 ala2_tRNA + 252 arg1_tRNA + 18 argW_tRNA + 108 argX_tRNA + 216 asn1_tRNA + 288 asp1_tRNA + 108 cysT_tRNA + 18 fmet_tRNA + 216 gln1_tRNA + 126 gln2_tRNA + 396 glu1_tRNA + 324 gly1_tRNA + 18 glyT_tRNA + 72 glyU_tRNA + 11268 h + 108 hisR_tRNA + 324 ile1_tRNA + 252 leu1_tRNA + 126 leu2_tRNA + 90 leuU_tRNA + 18 leuW_tRNA + 108 leuZ_tRNA + 252 lys1_tRNA + 90 met1_tRNA + 28260 mg2 + 90 phe1_tRNA + 11268 pi + 144 pro1_tRNA + 54 pro2_tRNA + 36 proL_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b2140_18_cplx + 36 ser1_tRNA + 36 ser2_tRNA + 18 ser3_tRNA + 144 serV_tRNA + 72 thr1_tRNA + 108 thr3_tRNA + 18 thrU_tRNA + 144 trpT_tRNA + 144 tyr1_tRNA + 378 val1_tRNA + 54 val2_tRNA + 108 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_elo_b2140_1_rib1	Translation elongation 1 b2140 1 ribosome(s)	314 EF-G.GTP + 23 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 6 EF-Tu.GTP.argX-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 16 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 22 EF-Tu.GTP.glu1-tRNA + 18 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 21 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1570 mg2 + 1 rib_ini_b2140_1 --> 1 rib_70_elo1_b2140_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_elo_b2140_1_rib2	Translation elongation 2 b2140 1 ribosome(s)	313 h2o + 1 rib_70_elo1_b2140_1_cplx --> 313 EF-G.GDP + 313 EF-Tu.GDP + 23 ala1_tRNA + 5 ala2_tRNA + 14 arg1_tRNA + 1 argW_tRNA + 6 argX_tRNA + 12 asn1_tRNA + 16 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 12 gln1_tRNA + 7 gln2_tRNA + 22 glu1_tRNA + 18 gly1_tRNA + 1 glyT_tRNA + 4 glyU_tRNA + 626 h + 6 hisR_tRNA + 18 ile1_tRNA + 14 leu1_tRNA + 7 leu2_tRNA + 5 leuU_tRNA + 1 leuW_tRNA + 6 leuZ_tRNA + 14 lys1_tRNA + 5 met1_tRNA + 1570 mg2 + 5 phe1_tRNA + 626 pi + 8 pro1_tRNA + 3 pro2_tRNA + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b2140_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 1 ser3_tRNA + 8 serV_tRNA + 4 thr1_tRNA + 6 thr3_tRNA + 1 thrU_tRNA + 8 trpT_tRNA + 8 tyr1_tRNA + 21 val1_tRNA + 3 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213

tl_elo_b2140_9_rib1	Translation elongation 1 b2140 9 ribosome(s)	2826 EF-G.GTP + 207 EF-Tu.GTP.ala1-tRNA + 45 EF-Tu.GTP.ala2-tRNA + 126 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argW-tRNA + 54 EF-Tu.GTP.argX-tRNA + 108 EF-Tu.GTP.asn1-tRNA + 144 EF-Tu.GTP.asp1-tRNA + 54 EF-Tu.GTP.cysT-tRNA + 108 EF-Tu.GTP.gln1-tRNA + 63 EF-Tu.GTP.gln2-tRNA + 198 EF-Tu.GTP.glu1-tRNA + 162 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 36 EF-Tu.GTP.glyU-tRNA + 54 EF-Tu.GTP.hisR-tRNA + 162 EF-Tu.GTP.ile1-tRNA + 126 EF-Tu.GTP.leu1-tRNA + 63 EF-Tu.GTP.leu2-tRNA + 54 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuW-tRNA + 54 EF-Tu.GTP.leuZ-tRNA + 126 EF-Tu.GTP.lys1-tRNA + 45 EF-Tu.GTP.met1-tRNA + 45 EF-Tu.GTP.phe1-tRNA + 72 EF-Tu.GTP.pro1-tRNA + 27 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proL-tRNA + 18 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 9 EF-Tu.GTP.ser3-tRNA + 72 EF-Tu.GTP.serV-tRNA + 36 EF-Tu.GTP.thr1-tRNA + 54 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 72 EF-Tu.GTP.trpT-tRNA + 72 EF-Tu.GTP.tyr1-tRNA + 189 EF-Tu.GTP.val1-tRNA + 27 EF-Tu.GTP.val2-tRNA + 54 EF-Tu.GTP.val3-tRNA + 14130 mg2 + 1 rib_ini_b2140_9 --> 1 rib_70_elo1_b2140_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_elo_b2140_9_rib2	Translation elongation 2 b2140 9 ribosome(s)	2817 h2o + 1 rib_70_elo1_b2140_9_cplx --> 2817 EF-G.GDP + 2817 EF-Tu.GDP + 207 ala1_tRNA + 45 ala2_tRNA + 126 arg1_tRNA + 9 argW_tRNA + 54 argX_tRNA + 108 asn1_tRNA + 144 asp1_tRNA + 54 cysT_tRNA + 9 fmet_tRNA + 108 gln1_tRNA + 63 gln2_tRNA + 198 glu1_tRNA + 162 gly1_tRNA + 9 glyT_tRNA + 36 glyU_tRNA + 5634 h + 54 hisR_tRNA + 162 ile1_tRNA + 126 leu1_tRNA + 63 leu2_tRNA + 45 leuU_tRNA + 9 leuW_tRNA + 54 leuZ_tRNA + 126 lys1_tRNA + 45 met1_tRNA + 14130 mg2 + 45 phe1_tRNA + 5634 pi + 72 pro1_tRNA + 27 pro2_tRNA + 18 proL_tRNA + 18 proM_tRNA + 1 rib_70_elo2_b2140_9_cplx + 18 ser1_tRNA + 18 ser2_tRNA + 9 ser3_tRNA + 72 serV_tRNA + 36 thr1_tRNA + 54 thr3_tRNA + 9 thrU_tRNA + 72 trpT_tRNA + 72 tyr1_tRNA + 189 val1_tRNA + 27 val2_tRNA + 54 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_elo_b2183_13_rib1	Translation elongation 1 b2183 13 ribosome(s)	2990 EF-G.GTP + 182 EF-Tu.GTP.ala1-tRNA + 65 EF-Tu.GTP.ala2-tRNA + 195 EF-Tu.GTP.arg1-tRNA + 13 EF-Tu.GTP.argX-tRNA + 78 EF-Tu.GTP.asn1-tRNA + 221 EF-Tu.GTP.asp1-tRNA + 26 EF-Tu.GTP.cysT-tRNA + 91 EF-Tu.GTP.gln1-tRNA + 39 EF-Tu.GTP.gln2-tRNA + 208 EF-Tu.GTP.glu1-tRNA + 169 EF-Tu.GTP.gly1-tRNA + 39 EF-Tu.GTP.glyU-tRNA + 143 EF-Tu.GTP.hisR-tRNA + 143 EF-Tu.GTP.ile1-tRNA + 156 EF-Tu.GTP.leu1-tRNA + 13 EF-Tu.GTP.leu2-tRNA + 91 EF-Tu.GTP.leuU-tRNA + 26 EF-Tu.GTP.leuZ-tRNA + 117 EF-Tu.GTP.lys1-tRNA + 39 EF-Tu.GTP.met1-tRNA + 78 EF-Tu.GTP.phe1-tRNA + 52 EF-Tu.GTP.pro1-tRNA + 65 EF-Tu.GTP.pro2-tRNA + 13 EF-Tu.GTP.proL-tRNA + 39 EF-Tu.GTP.proM-tRNA + 13 EF-Tu.GTP.ser1-tRNA + 13 EF-Tu.GTP.ser2-tRNA + 13 EF-Tu.GTP.ser3-tRNA + 13 EF-Tu.GTP.serT-tRNA + 39 EF-Tu.GTP.serV-tRNA + 78 EF-Tu.GTP.thr1-tRNA + 52 EF-Tu.GTP.thr2-tRNA + 65 EF-Tu.GTP.thr3-tRNA + 13 EF-Tu.GTP.thrU-tRNA + 26 EF-Tu.GTP.trpT-tRNA + 91 EF-Tu.GTP.tyr1-tRNA + 143 EF-Tu.GTP.val1-tRNA + 78 EF-Tu.GTP.val2-tRNA + 52 EF-Tu.GTP.val3-tRNA + 14950 mg2 + 1 rib_ini_b2183_13 --> 1 rib_70_elo1_b2183_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_elo_b2183_13_rib2	Translation elongation 2 b2183 13 ribosome(s)	2977 h2o + 1 rib_70_elo1_b2183_13_cplx --> 2977 EF-G.GDP + 2977 EF-Tu.GDP + 182 ala1_tRNA + 65 ala2_tRNA + 195 arg1_tRNA + 13 argX_tRNA + 78 asn1_tRNA + 221 asp1_tRNA + 26 cysT_tRNA + 13 fmet_tRNA + 91 gln1_tRNA + 39 gln2_tRNA + 208 glu1_tRNA + 169 gly1_tRNA + 39 glyU_tRNA + 5954 h + 143 hisR_tRNA + 143 ile1_tRNA + 156 leu1_tRNA + 13 leu2_tRNA + 91 leuU_tRNA + 26 leuZ_tRNA + 117 lys1_tRNA + 39 met1_tRNA + 14950 mg2 + 78 phe1_tRNA + 5954 pi + 52 pro1_tRNA + 65 pro2_tRNA + 13 proL_tRNA + 39 proM_tRNA + 1 rib_70_elo2_b2183_13_cplx + 13 ser1_tRNA + 13 ser2_tRNA + 13 ser3_tRNA + 13 serT_tRNA + 39 serV_tRNA + 78 thr1_tRNA + 52 thr2_tRNA + 65 thr3_tRNA + 13 thrU_tRNA + 26 trpT_tRNA + 91 tyr1_tRNA + 143 val1_tRNA + 65 val2_tRNA + 52 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_elo_b2183_1_rib1	Translation elongation 1 b2183 1 ribosome(s)	230 EF-G.GTP + 14 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 17 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 11 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1150 mg2 + 1 rib_ini_b2183_1 --> 1 rib_70_elo1_b2183_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_elo_b2183_1_rib2	Translation elongation 2 b2183 1 ribosome(s)	229 h2o + 1 rib_70_elo1_b2183_1_cplx --> 229 EF-G.GDP + 229 EF-Tu.GDP + 14 ala1_tRNA + 5 ala2_tRNA + 15 arg1_tRNA + 1 argX_tRNA + 6 asn1_tRNA + 17 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 3 gln2_tRNA + 16 glu1_tRNA + 13 gly1_tRNA + 3 glyU_tRNA + 458 h + 11 hisR_tRNA + 11 ile1_tRNA + 12 leu1_tRNA + 1 leu2_tRNA + 7 leuU_tRNA + 2 leuZ_tRNA + 9 lys1_tRNA + 3 met1_tRNA + 1150 mg2 + 6 phe1_tRNA + 458 pi + 4 pro1_tRNA + 5 pro2_tRNA + 1 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b2183_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 3 serV_tRNA + 6 thr1_tRNA + 4 thr2_tRNA + 5 thr3_tRNA + 1 thrU_tRNA + 2 trpT_tRNA + 7 tyr1_tRNA + 11 val1_tRNA + 5 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046

tl_elo_b2183_6_rib1	Translation elongation 1 b2183 6 ribosome(s)	1380 EF-G.GTP + 84 EF-Tu.GTP.ala1-tRNA + 30 EF-Tu.GTP.ala2-tRNA + 90 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argX-tRNA + 36 EF-Tu.GTP.asn1-tRNA + 102 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 42 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 96 EF-Tu.GTP.glu1-tRNA + 78 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyU-tRNA + 66 EF-Tu.GTP.hisR-tRNA + 66 EF-Tu.GTP.ile1-tRNA + 72 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 42 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 54 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 36 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 30 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 18 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serT-tRNA + 18 EF-Tu.GTP.serV-tRNA + 36 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr2-tRNA + 30 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 42 EF-Tu.GTP.tyr1-tRNA + 66 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val2-tRNA + 24 EF-Tu.GTP.val3-tRNA + 6900 mg2 + 1 rib_ini_b2183_6 --> 1 rib_70_elo1_b2183_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_elo_b2183_6_rib2	Translation elongation 2 b2183 6 ribosome(s)	1374 h2o + 1 rib_70_elo1_b2183_6_cplx --> 1374 EF-G.GDP + 1374 EF-Tu.GDP + 84 ala1_tRNA + 30 ala2_tRNA + 90 arg1_tRNA + 6 argX_tRNA + 36 asn1_tRNA + 102 asp1_tRNA + 12 cysT_tRNA + 6 fmet_tRNA + 42 gln1_tRNA + 18 gln2_tRNA + 96 glu1_tRNA + 78 gly1_tRNA + 18 glyU_tRNA + 2748 h + 66 hisR_tRNA + 66 ile1_tRNA + 72 leu1_tRNA + 6 leu2_tRNA + 42 leuU_tRNA + 12 leuZ_tRNA + 54 lys1_tRNA + 18 met1_tRNA + 6900 mg2 + 36 phe1_tRNA + 2748 pi + 24 pro1_tRNA + 30 pro2_tRNA + 6 proL_tRNA + 18 proM_tRNA + 1 rib_70_elo2_b2183_6_cplx + 6 ser1_tRNA + 6 ser2_tRNA + 6 ser3_tRNA + 6 serT_tRNA + 18 serV_tRNA + 36 thr1_tRNA + 24 thr2_tRNA + 30 thr3_tRNA + 6 thrU_tRNA + 12 trpT_tRNA + 42 tyr1_tRNA + 66 val1_tRNA + 30 val2_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_elo_b2185_1_rib1	Translation elongation 1 b2185 1 ribosome(s)	93 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 7 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 465 mg2 + 1 rib_ini_b2185_1 --> 1 rib_70_elo1_b2185_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	5.06E+01	50.6475
tl_elo_b2185_1_rib2	Translation elongation 2 b2185 1 ribosome(s)	92 h2o + 1 rib_70_elo1_b2185_1_cplx --> 92 EF-G.GDP + 92 EF-Tu.GDP + 9 ala1_tRNA + 1 ala2_tRNA + 6 arg1_tRNA + 3 asn1_tRNA + 5 asp1_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 1 gln2_tRNA + 7 glu1_tRNA + 5 gly1_tRNA + 184 h + 3 hisR_tRNA + 7 ile1_tRNA + 5 leu1_tRNA + 11 lys1_tRNA + 2 met1_tRNA + 465 mg2 + 4 phe1_tRNA + 184 pi + 4 pro1_tRNA + 1 rib_70_elo2_b2185_1_cplx + 2 serV_tRNA + 1 thr1_tRNA + 1 thr2_tRNA + 3 tyr1_tRNA + 2 val1_tRNA + 1 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	5.06E+01	50.6475
tl_elo_b2185_2_rib1	Translation elongation 1 b2185 2 ribosome(s)	186 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 14 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 22 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 930 mg2 + 1 rib_ini_b2185_2 --> 1 rib_70_elo1_b2185_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.62E+01	5.62E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b2185_2_rib2	Translation elongation 2 b2185 2 ribosome(s)	184 h2o + 1 rib_70_elo1_b2185_2_cplx --> 184 EF-G.GDP + 184 EF-Tu.GDP + 18 ala1_tRNA + 2 ala2_tRNA + 12 arg1_tRNA + 6 asn1_tRNA + 10 asp1_tRNA + 2 fmet_tRNA + 8 gln1_tRNA + 2 gln2_tRNA + 14 glu1_tRNA + 10 gly1_tRNA + 368 h + 6 hisR_tRNA + 14 ile1_tRNA + 10 leu1_tRNA + 22 lys1_tRNA + 4 met1_tRNA + 930 mg2 + 8 phe1_tRNA + 368 pi + 8 pro1_tRNA + 1 rib_70_elo2_b2185_2_cplx + 4 serV_tRNA + 2 thr1_tRNA + 2 thr2_tRNA + 6 tyr1_tRNA + 4 val1_tRNA + 2 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.62E+01	5.62E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b2185_5_rib1	Translation elongation 1 b2185 5 ribosome(s)	465 EF-G.GTP + 50 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 30 EF-Tu.GTP.arg1-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 25 EF-Tu.GTP.asp1-tRNA + 20 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 35 EF-Tu.GTP.glu1-tRNA + 25 EF-Tu.GTP.gly1-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 35 EF-Tu.GTP.ile1-tRNA + 25 EF-Tu.GTP.leu1-tRNA + 55 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 20 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 25 EF-Tu.GTP.val3-tRNA + 2325 mg2 + 1 rib_ini_b2185_5 --> 1 rib_70_elo1_b2185_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b2185_5_rib2	Translation elongation 2 b2185 5 ribosome(s)	460 h2o + 1 rib_70_elo1_b2185_5_cplx --> 460 EF-G.GDP + 460 EF-Tu.GDP + 45 ala1_tRNA + 5 ala2_tRNA + 30 arg1_tRNA + 15 asn1_tRNA + 25 asp1_tRNA + 5 fmet_tRNA + 20 gln1_tRNA + 5 gln2_tRNA + 35 glu1_tRNA + 25 gly1_tRNA + 920 h + 15 hisR_tRNA + 35 ile1_tRNA + 25 leu1_tRNA + 55 lys1_tRNA + 10 met1_tRNA + 2325 mg2 + 20 phe1_tRNA + 920 pi + 20 pro1_tRNA + 1 rib_70_elo2_b2185_5_cplx + 10 serV_tRNA + 5 thr1_tRNA + 5 thr2_tRNA + 15 tyr1_tRNA + 10 val1_tRNA + 5 val2_tRNA + 25 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576

tl_elo_b2268_17_rib1	Translation elongation 1 b2268 17 ribosome(s)	5168 EF-G.GTP + 374 EF-Tu.GTP.ala1-tRNA + 119 EF-Tu.GTP.ala2-tRNA + 187 EF-Tu.GTP.arg1-tRNA + 34 EF-Tu.GTP.argW-tRNA + 17 EF-Tu.GTP.argX-tRNA + 136 EF-Tu.GTP.asn1-tRNA + 289 EF-Tu.GTP.asp1-tRNA + 102 EF-Tu.GTP.cysT-tRNA + 136 EF-Tu.GTP.gln1-tRNA + 51 EF-Tu.GTP.gln2-tRNA + 306 EF-Tu.GTP.glu1-tRNA + 459 EF-Tu.GTP.gly1-tRNA + 68 EF-Tu.GTP.glyT-tRNA + 204 EF-Tu.GTP.hisR-tRNA + 306 EF-Tu.GTP.ile1-tRNA + 34 EF-Tu.GTP.ile2-tRNA + 255 EF-Tu.GTP.leu1-tRNA + 51 EF-Tu.GTP.leu2-tRNA + 119 EF-Tu.GTP.leuU-tRNA + 51 EF-Tu.GTP.leuW-tRNA + 153 EF-Tu.GTP.leuZ-tRNA + 204 EF-Tu.GTP.lys1-tRNA + 51 EF-Tu.GTP.met1-tRNA + 187 EF-Tu.GTP.phe1-tRNA + 119 EF-Tu.GTP.pro1-tRNA + 34 EF-Tu.GTP.pro2-tRNA + 51 EF-Tu.GTP.proL-tRNA + 85 EF-Tu.GTP.proM-tRNA + 34 EF-Tu.GTP.ser2-tRNA + 17 EF-Tu.GTP.ser3-tRNA + 68 EF-Tu.GTP.serT-tRNA + 119 EF-Tu.GTP.serV-tRNA + 187 EF-Tu.GTP.thr1-tRNA + 34 EF-Tu.GTP.thr2-tRNA + 85 EF-Tu.GTP.thr3-tRNA + 51 EF-Tu.GTP.thrU-tRNA + 34 EF-Tu.GTP.trpT-tRNA + 119 EF-Tu.GTP.tyr1-tRNA + 119 EF-Tu.GTP.val1-tRNA + 102 EF-Tu.GTP.val2-tRNA + 17 EF-Tu.GTP.val3-tRNA + 25840 mg2 + 1 rib_ini_b2268_17 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_elo_b2268_17_rib2	Translation elongation 2 b2268 17 ribosome(s)	5151 h2o + 1 rib_70_elo1_b2268_17_cplx --> 5151 EF-G.GDP + 5151 EF-Tu.GDP + 374 ala1_tRNA + 119 ala2_tRNA + 187 arg1_tRNA + 34 argW_tRNA + 17 argX_tRNA + 136 asn1_tRNA + 289 asp1_tRNA + 102 cysT_tRNA + 17 fmet_tRNA + 136 gln1_tRNA + 51 gln2_tRNA + 306 glu1_tRNA + 459 gly1_tRNA + 68 glyT_tRNA + 10302 h + 204 hisR_tRNA + 306 ile1_tRNA + 34 ile2_tRNA + 255 leu1_tRNA + 51 leu2_tRNA + 119 leuU_tRNA + 51 leuW_tRNA + 153 leuZ_tRNA + 204 lys1_tRNA + 51 met1_tRNA + 25840 mg2 + 187 phe1_tRNA + 10302 pi + 119 pro1_tRNA + 34 pro2_tRNA + 51 proL_tRNA + 85 proM_tRNA + 1 rib_70_elo2_b2268_17_cplx + 34 ser2_tRNA + 17 ser3_tRNA + 68 serT_tRNA + 119 serV_tRNA + 187 thr1_tRNA + 34 thr2_tRNA + 85 thr3_tRNA + 51 thrU_tRNA + 34 trpT_tRNA + 119 tyr1_tRNA + 119 val1_tRNA + 102 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_elo_b2268_1_rib1	Translation elongation 1 b2268 1 ribosome(s)	304 EF-G.GTP + 22 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.argX-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 17 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 27 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuW-tRNA + 9 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 11 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 1 EF-Tu.GTP.val3-tRNA + 1520 mg2 + 1 rib_ini_b2268_1 --> 1 rib_70_elo1_b2268_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_elo_b2268_1_rib2	Translation elongation 2 b2268 1 ribosome(s)	303 h2o + 1 rib_70_elo1_b2268_1_cplx --> 303 EF-G.GDP + 303 EF-Tu.GDP + 22 ala1_tRNA + 7 ala2_tRNA + 11 arg1_tRNA + 2 argW_tRNA + 1 argX_tRNA + 8 asn1_tRNA + 17 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 3 gln2_tRNA + 18 glu1_tRNA + 27 gly1_tRNA + 4 glyT_tRNA + 606 h + 12 hisR_tRNA + 18 ile1_tRNA + 2 ile2_tRNA + 15 leu1_tRNA + 3 leu2_tRNA + 7 leuU_tRNA + 3 leuW_tRNA + 9 leuZ_tRNA + 12 lys1_tRNA + 3 met1_tRNA + 1520 mg2 + 11 phe1_tRNA + 606 pi + 7 pro1_tRNA + 2 pro2_tRNA + 3 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b2268_1_cplx + 2 ser2_tRNA + 1 ser3_tRNA + 4 serT_tRNA + 7 serV_tRNA + 11 thr1_tRNA + 2 thr2_tRNA + 5 thr3_tRNA + 3 thrU_tRNA + 2 trpT_tRNA + 7 tyr1_tRNA + 7 val1_tRNA + 6 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_elo_b2268_8_rib1	Translation elongation 1 b2268 8 ribosome(s)	2432 EF-G.GTP + 176 EF-Tu.GTP.ala1-tRNA + 56 EF-Tu.GTP.ala2-tRNA + 88 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.argW-tRNA + 8 EF-Tu.GTP.argX-tRNA + 64 EF-Tu.GTP.asn1-tRNA + 136 EF-Tu.GTP.asp1-tRNA + 48 EF-Tu.GTP.cysT-tRNA + 64 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 144 EF-Tu.GTP.glu1-tRNA + 216 EF-Tu.GTP.gly1-tRNA + 32 EF-Tu.GTP.glyT-tRNA + 96 EF-Tu.GTP.hisR-tRNA + 144 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.ile2-tRNA + 120 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.leu2-tRNA + 56 EF-Tu.GTP.leuU-tRNA + 24 EF-Tu.GTP.leuW-tRNA + 72 EF-Tu.GTP.leuZ-tRNA + 96 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 88 EF-Tu.GTP.phe1-tRNA + 56 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proL-tRNA + 40 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 32 EF-Tu.GTP.serT-tRNA + 56 EF-Tu.GTP.serV-tRNA + 88 EF-Tu.GTP.thr1-tRNA + 16 EF-Tu.GTP.thr2-tRNA + 40 EF-Tu.GTP.thr3-tRNA + 24 EF-Tu.GTP.thrU-tRNA + 16 EF-Tu.GTP.trpT-tRNA + 56 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 48 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 12160 mg2 + 1 rib_ini_b2268_8 --> 1 rib_70_elo1_b2268_8_	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_elo_b2268_8_rib2	Translation elongation 2 b2268 8 ribosome(s)	2424 h2o + 1 rib_70_elo1_b2268_8_cplx --> 2424 EF-G.GDP + 2424 EF-Tu.GDP + 176 ala1_tRNA + 56 ala2_tRNA + 88 arg1_tRNA + 16 argW_tRNA + 8 argX_tRNA + 64 asn1_tRNA + 136 asp1_tRNA + 48 cysT_tRNA + 8 fmet_tRNA + 64 gln1_tRNA + 24 gln2_tRNA + 144 glu1_tRNA + 216 gly1_tRNA + 32 glyT_tRNA + 4848 h + 96 hisR_tRNA + 144 ile1_tRNA + 16 ile2_tRNA + 120 leu1_tRNA + 24 leu2_tRNA + 56 leuU_tRNA + 24 leuW_tRNA + 72 leuZ_tRNA + 96 lys1_tRNA + 24 met1_tRNA + 12160 mg2 + 88 phe1_tRNA + 4848 pi + 56 pro1_tRNA + 16 pro2_tRNA + 24 proL_tRNA + 40 proM_tRNA + 1 rib_70_elo2_b2268_8_cplx + 16 ser2_tRNA + 8 ser3_tRNA + 32 serT_tRNA + 56 serV_tRNA + 88 thr1_tRNA + 16 thr2_tRNA + 40 thr3_tRNA + 24 thrU_tRNA + 16 trpT_tRNA + 56 tyr1_tRNA + 56 val1_tRNA + 48 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371

tl_elo_b2317_12_rib1	Translation elongation 1 b2317 12 ribosome(s)	2616 EF-G.GTP + 168 EF-Tu.GTP.ala1-tRNA + 84 EF-Tu.GTP.ala2-tRNA + 84 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argU-tRNA + 12 EF-Tu.GTP.argX-tRNA + 84 EF-Tu.GTP.asn1-tRNA + 96 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 84 EF-Tu.GTP.glu1-tRNA + 144 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.glyT-tRNA + 24 EF-Tu.GTP.glyU-tRNA + 96 EF-Tu.GTP.hisR-tRNA + 252 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.ile2-tRNA + 156 EF-Tu.GTP.leu1-tRNA + 96 EF-Tu.GTP.leu2-tRNA + 72 EF-Tu.GTP.leuU-tRNA + 24 EF-Tu.GTP.leuZ-tRNA + 96 EF-Tu.GTP.lys1-tRNA + 72 EF-Tu.GTP.met1-tRNA + 204 EF-Tu.GTP.phe1-tRNA + 72 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.proL-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serT-tRNA + 24 EF-Tu.GTP.serV-tRNA + 48 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 36 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.thrU-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 120 EF-Tu.GTP.tyr1-tRNA + 120 EF-Tu.GTP.val1-tRNA + 84 EF-Tu.GTP.val2-tRNA + 60 EF-Tu.GTP.val3-tRNA + 13080 mg2 + 1 rib_ini_b2317_12 --> 1 rib_70_elo1_b2317_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_elo_b2317_12_rib2	Translation elongation 2 b2317 12 ribosome(s)	2604 h2o + 1 rib_70_elo1_b2317_12_cplx --> 2604 EF-G.GDP + 2604 EF-Tu.GDP + 168 ala1_tRNA + 84 ala2_tRNA + 84 arg1_tRNA + 12 argU_tRNA + 12 argX_tRNA + 84 asn1_tRNA + 96 asp1_tRNA + 12 cysT_tRNA + 12 fmet_tRNA + 24 gln1_tRNA + 84 glu1_tRNA + 144 gly1_tRNA + 24 glyT_tRNA + 24 glyU_tRNA + 5208 h + 96 hisR_tRNA + 252 ile1_tRNA + 12 ile2_tRNA + 156 leu1_tRNA + 96 leu2_tRNA + 72 leuU_tRNA + 24 leuZ_tRNA + 84 lys1_tRNA + 72 met1_tRNA + 13080 mg2 + 204 phe1_tRNA + 5208 pi + 72 pro1_tRNA + 12 proL_tRNA + 1 rib_70_elo2_b2317_12_cplx + 12 ser2_tRNA + 24 ser3_tRNA + 24 serT_tRNA + 24 serV_tRNA + 48 thr1_tRNA + 12 thr2_tRNA + 36 thr3_tRNA + 12 thrU_tRNA + 24 trpT_tRNA + 120 tyr1_tRNA + 120 val1_tRNA + 84 val2_tRNA + 60 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_elo_b2317_1_rib1	Translation elongation 1 b2317 1 ribosome(s)	218 EF-G.GTP + 14 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 17 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 2 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1090 mg2 + 1 rib_ini_b2317_1 --> 1 rib_70_elo1_b2317_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_elo_b2317_1_rib2	Translation elongation 2 b2317 1 ribosome(s)	217 h2o + 1 rib_70_elo1_b2317_1_cplx --> 217 EF-G.GDP + 217 EF-Tu.GDP + 14 ala1_tRNA + 7 ala2_tRNA + 7 arg1_tRNA + 1 argU_tRNA + 1 argX_tRNA + 7 asn1_tRNA + 8 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 7 glu1_tRNA + 12 gly1_tRNA + 2 glyT_tRNA + 2 glyU_tRNA + 434 h + 8 hisR_tRNA + 21 ile1_tRNA + 1 ile2_tRNA + 13 leu1_tRNA + 8 leu2_tRNA + 6 leuU_tRNA + 2 leuZ_tRNA + 7 lys1_tRNA + 6 met1_tRNA + 1090 mg2 + 17 phe1_tRNA + 434 pi + 6 pro1_tRNA + 1 proL_tRNA + 1 rib_70_elo2_b2317_1_cplx + 1 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 2 serV_tRNA + 4 thr1_tRNA + 1 thr2_tRNA + 3 thr3_tRNA + 1 thrU_tRNA + 2 trpT_tRNA + 10 tyr1_tRNA + 10 val1_tRNA + 7 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_elo_b2317_6_rib1	Translation elongation 1 b2317 6 ribosome(s)	1308 EF-G.GTP + 84 EF-Tu.GTP.ala1-tRNA + 42 EF-Tu.GTP.ala2-tRNA + 42 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argU-tRNA + 6 EF-Tu.GTP.argX-tRNA + 42 EF-Tu.GTP.asn1-tRNA + 48 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 42 EF-Tu.GTP.glu1-tRNA + 72 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.glyU-tRNA + 48 EF-Tu.GTP.hisR-tRNA + 126 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.ile2-tRNA + 78 EF-Tu.GTP.leu1-tRNA + 48 EF-Tu.GTP.leu2-tRNA + 36 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 48 EF-Tu.GTP.lys1-tRNA + 36 EF-Tu.GTP.met1-tRNA + 102 EF-Tu.GTP.phe1-tRNA + 36 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 12 EF-Tu.GTP.serT-tRNA + 12 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 60 EF-Tu.GTP.tyr1-tRNA + 60 EF-Tu.GTP.val1-tRNA + 42 EF-Tu.GTP.val2-tRNA + 30 EF-Tu.GTP.val3-tRNA + 6540 mg2 + 1 rib_ini_b2317_6 --> 1 rib_70_elo1_b2317_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_elo_b2317_6_rib2	Translation elongation 2 b2317 6 ribosome(s)	1302 h2o + 1 rib_70_elo1_b2317_6_cplx --> 1302 EF-G.GDP + 1302 EF-Tu.GDP + 84 ala1_tRNA + 42 ala2_tRNA + 42 arg1_tRNA + 6 argU_tRNA + 6 argX_tRNA + 42 asn1_tRNA + 48 asp1_tRNA + 6 cysT_tRNA + 6 fmet_tRNA + 12 gln1_tRNA + 42 glu1_tRNA + 72 gly1_tRNA + 12 glyT_tRNA + 12 glyU_tRNA + 2604 h + 48 hisR_tRNA + 126 ile1_tRNA + 6 ile2_tRNA + 78 leu1_tRNA + 48 leu2_tRNA + 36 leuU_tRNA + 12 leuZ_tRNA + 42 lys1_tRNA + 36 met1_tRNA + 6540 mg2 + 102 phe1_tRNA + 2604 pi + 36 pro1_tRNA + 6 proL_tRNA + 1 rib_70_elo2_b2317_6_cplx + 6 ser2_tRNA + 12 ser3_tRNA + 12 serT_tRNA + 12 serV_tRNA + 24 thr1_tRNA + 6 thr2_tRNA + 18 thr3_tRNA + 6 thrU_tRNA + 12 trpT_tRNA + 60 tyr1_tRNA + 60 val1_tRNA + 42 val2_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345

tl_elo_b2318_15_rib1	Translation elongation 1 b2318 15 ribosome(s)	4035 EF-G.GTP + 405 EF-Tu.GTP.ala1-tRNA + 60 EF-Tu.GTP.ala2-tRNA + 195 EF-Tu.GTP.arg1-tRNA + 15 EF-Tu.GTP.argU-tRNA + 15 EF-Tu.GTP.argW-tRNA + 75 EF-Tu.GTP.argX-tRNA + 165 EF-Tu.GTP.asn1-tRNA + 225 EF-Tu.GTP.asp1-tRNA + 45 EF-Tu.GTP.cysT-tRNA + 120 EF-Tu.GTP.gln1-tRNA + 60 EF-Tu.GTP.gln2-tRNA + 195 EF-Tu.GTP.glu1-tRNA + 165 EF-Tu.GTP.gly1-tRNA + 75 EF-Tu.GTP.glyU-tRNA + 165 EF-Tu.GTP.hisR-tRNA + 135 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.ile2-tRNA + 195 EF-Tu.GTP.leu1-tRNA + 45 EF-Tu.GTP.leu2-tRNA + 30 EF-Tu.GTP.leuU-tRNA + 15 EF-Tu.GTP.leuW-tRNA + 15 EF-Tu.GTP.leuZ-tRNA + 165 EF-Tu.GTP.lys1-tRNA + 75 EF-Tu.GTP.met1-tRNA + 135 EF-Tu.GTP.phe1-tRNA + 105 EF-Tu.GTP.pro1-tRNA + 60 EF-Tu.GTP.pro2-tRNA + 15 EF-Tu.GTP.proL-tRNA + 45 EF-Tu.GTP.proM-tRNA + 45 EF-Tu.GTP.ser1-tRNA + 15 EF-Tu.GTP.ser3-tRNA + 90 EF-Tu.GTP.serV-tRNA + 105 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 60 EF-Tu.GTP.thr3-tRNA + 15 EF-Tu.GTP.thrU-tRNA + 75 EF-Tu.GTP.trpT-tRNA + 180 EF-Tu.GTP.tyr1-tRNA + 225 EF-Tu.GTP.val1-tRNA + 105 EF-Tu.GTP.val2-tRNA + 60 EF-Tu.GTP.val3-tRNA + 20175 mg2 + 1 rib_ini_b2318_15 --> 1 rib_70_elo1_b2318_15_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_elo_b2318_15_rib2	Translation elongation 2 b2318 15 ribosome(s)	4020 h2o + 1 rib_70_elo1_b2318_15_cplx --> 4020 EF-G.GDP + 4020 EF-Tu.GDP + 405 ala1_tRNA + 60 ala2_tRNA + 195 arg1_tRNA + 15 argU_tRNA + 15 argW_tRNA + 75 argX_tRNA + 165 asn1_tRNA + 210 asp1_tRNA + 45 cysT_tRNA + 15 fmet_tRNA + 120 gln1_tRNA + 60 gln2_tRNA + 195 glu1_tRNA + 165 gly1_tRNA + 75 glyU_tRNA + 8040 h + 165 hisR_tRNA + 135 ile1_tRNA + 15 ile2_tRNA + 195 leu1_tRNA + 45 leu2_tRNA + 30 leuU_tRNA + 15 leuW_tRNA + 15 leuZ_tRNA + 165 lys1_tRNA + 75 met1_tRNA + 20175 mg2 + 135 phe1_tRNA + 8040 pi + 105 pro1_tRNA + 60 pro2_tRNA + 15 proL_tRNA + 45 proM_tRNA + 1 rib_70_elo2_b2318_15_cplx + 45 ser1_tRNA + 15 ser3_tRNA + 90 serV_tRNA + 105 thr1_tRNA + 30 thr2_tRNA + 60 thr3_tRNA + 15 thrU_tRNA + 75 trpT_tRNA + 180 tyr1_tRNA + 225 val1_tRNA + 105 val2_tRNA + 60 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_elo_b2318_1_rib1	Translation elongation 1 b2318 1 ribosome(s)	269 EF-G.GTP + 27 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argW-tRNA + 5 EF-Tu.GTP.argX-tRNA + 11 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 13 EF-Tu.GTP.glu1-tRNA + 11 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1345 mg2 + 1 rib_ini_b2318_1 --> 1 rib_70_elo1_b2318_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_elo_b2318_1_rib2	Translation elongation 2 b2318 1 ribosome(s)	268 h2o + 1 rib_70_elo1_b2318_1_cplx --> 268 EF-G.GDP + 268 EF-Tu.GDP + 27 ala1_tRNA + 4 ala2_tRNA + 13 arg1_tRNA + 1 argU_tRNA + 1 argW_tRNA + 5 argX_tRNA + 11 asn1_tRNA + 14 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 4 gln2_tRNA + 13 glu1_tRNA + 11 gly1_tRNA + 5 glyU_tRNA + 536 h + 11 hisR_tRNA + 9 ile1_tRNA + 1 ile2_tRNA + 13 leu1_tRNA + 3 leu2_tRNA + 2 leuU_tRNA + 1 leuW_tRNA + 1 leuZ_tRNA + 11 lys1_tRNA + 5 met1_tRNA + 1345 mg2 + 9 phe1_tRNA + 536 pi + 7 pro1_tRNA + 4 pro2_tRNA + 1 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b2318_1_cplx + 3 ser1_tRNA + 1 ser3_tRNA + 6 serV_tRNA + 7 thr1_tRNA + 2 thr2_tRNA + 4 thr3_tRNA + 1 thrU_tRNA + 5 trpT_tRNA + 12 tyr1_tRNA + 15 val1_tRNA + 7 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_elo_b2318_7_rib1	Translation elongation 1 b2318 7 ribosome(s)	1883 EF-G.GTP + 189 EF-Tu.GTP.ala1-tRNA + 28 EF-Tu.GTP.ala2-tRNA + 91 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argU-tRNA + 7 EF-Tu.GTP.argW-tRNA + 35 EF-Tu.GTP.argX-tRNA + 77 EF-Tu.GTP.asn1-tRNA + 105 EF-Tu.GTP.asp1-tRNA + 21 EF-Tu.GTP.cysT-tRNA + 56 EF-Tu.GTP.gln1-tRNA + 28 EF-Tu.GTP.gln2-tRNA + 91 EF-Tu.GTP.glu1-tRNA + 77 EF-Tu.GTP.gly1-tRNA + 35 EF-Tu.GTP.glyU-tRNA + 77 EF-Tu.GTP.hisR-tRNA + 63 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.ile2-tRNA + 91 EF-Tu.GTP.leu1-tRNA + 21 EF-Tu.GTP.leu2-tRNA + 14 EF-Tu.GTP.leuU-tRNA + 7 EF-Tu.GTP.leuW-tRNA + 7 EF-Tu.GTP.leuZ-tRNA + 77 EF-Tu.GTP.lys1-tRNA + 35 EF-Tu.GTP.met1-tRNA + 63 EF-Tu.GTP.phe1-tRNA + 49 EF-Tu.GTP.pro1-tRNA + 28 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proL-tRNA + 21 EF-Tu.GTP.proM-tRNA + 21 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.ser3-tRNA + 42 EF-Tu.GTP.serV-tRNA + 49 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 28 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 35 EF-Tu.GTP.trpT-tRNA + 84 EF-Tu.GTP.tyr1-tRNA + 105 EF-Tu.GTP.val1-tRNA + 49 EF-Tu.GTP.val2-tRNA + 28 EF-Tu.GTP.val3-tRNA + 9415 mg2 + 1 rib_ini_b2318_7 --> 1 rib_70_elo1_b2318_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_elo_b2318_7_rib2	Translation elongation 2 b2318 7 ribosome(s)	1876 h2o + 1 rib_70_elo1_b2318_7_cplx --> 1876 EF-G.GDP + 1876 EF-Tu.GDP + 189 ala1_tRNA + 28 ala2_tRNA + 91 arg1_tRNA + 7 argU_tRNA + 7 argW_tRNA + 35 argX_tRNA + 77 asn1_tRNA + 98 asp1_tRNA + 21 cysT_tRNA + 7 fmet_tRNA + 56 gln1_tRNA + 28 gln2_tRNA + 91 glu1_tRNA + 77 gly1_tRNA + 35 glyU_tRNA + 3752 h + 77 hisR_tRNA + 63 ile1_tRNA + 7 ile2_tRNA + 91 leu1_tRNA + 21 leu2_tRNA + 14 leuU_tRNA + 7 leuW_tRNA + 7 leuZ_tRNA + 77 lys1_tRNA + 35 met1_tRNA + 9415 mg2 + 63 phe1_tRNA + 3752 pi + 49 pro1_tRNA + 28 pro2_tRNA + 7 proL_tRNA + 21 proM_tRNA + 1 rib_70_elo2_b2318_7_cplx + 21 ser1_tRNA + 7 ser3_tRNA + 42 serV_tRNA + 49 thr1_tRNA + 14 thr2_tRNA + 28 thr3_tRNA + 7 thrU_tRNA + 35 trpT_tRNA + 84 tyr1_tRNA + 105 val1_tRNA + 49 val2_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545

tl_elo_b2319_19_rib1	Translation elongation 1 b2319 19 ribosome(s)	6384 EF-G.GTP + 589 EF-Tu.GTP.ala1-tRNA + 190 EF-Tu.GTP.ala2-tRNA + 247 EF-Tu.GTP.arg1-tRNA + 38 EF-Tu.GTP.argX-tRNA + 228 EF-Tu.GTP.asn1-tRNA + 342 EF-Tu.GTP.asp1-tRNA + 38 EF-Tu.GTP.cysT-tRNA + 285 EF-Tu.GTP.gln1-tRNA + 57 EF-Tu.GTP.gln2-tRNA + 570 EF-Tu.GTP.glu1-tRNA + 418 EF-Tu.GTP.gly1-tRNA + 19 EF-Tu.GTP.glyT-tRNA + 76 EF-Tu.GTP.glyU-tRNA + 38 EF-Tu.GTP.hisR-tRNA + 285 EF-Tu.GTP.ile1-tRNA + 456 EF-Tu.GTP.leu1-tRNA + 38 EF-Tu.GTP.leu2-tRNA + 95 EF-Tu.GTP.leuU-tRNA + 76 EF-Tu.GTP.leuZ-tRNA + 171 EF-Tu.GTP.lys1-tRNA + 95 EF-Tu.GTP.met1-tRNA + 304 EF-Tu.GTP.phe1-tRNA + 209 EF-Tu.GTP.pro1-tRNA + 19 EF-Tu.GTP.proL-tRNA + 57 EF-Tu.GTP.proM-tRNA + 19 EF-Tu.GTP.ser1-tRNA + 57 EF-Tu.GTP.ser2-tRNA + 57 EF-Tu.GTP.ser3-tRNA + 57 EF-Tu.GTP.serT-tRNA + 209 EF-Tu.GTP.serV-tRNA + 95 EF-Tu.GTP.thr1-tRNA + 38 EF-Tu.GTP.thr2-tRNA + 57 EF-Tu.GTP.thr3-tRNA + 38 EF-Tu.GTP.thrU-tRNA + 76 EF-Tu.GTP.trpT-tRNA + 114 EF-Tu.GTP.tyr1-tRNA + 342 EF-Tu.GTP.val1-tRNA + 152 EF-Tu.GTP.val2-tRNA + 133 EF-Tu.GTP.val3-tRNA + 31920 mg2 + 1 rib_ini_b2319_19 --> 1 rib_70_elo1_b2319_19_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_elo_b2319_19_rib2	Translation elongation 2 b2319 19 ribosome(s)	6365 h2o + 1 rib_70_elo1_b2319_19_cplx --> 6365 EF-G.GDP + 6365 EF-Tu.GDP + 589 ala1_tRNA + 190 ala2_tRNA + 247 arg1_tRNA + 38 argX_tRNA + 228 asn1_tRNA + 342 asp1_tRNA + 38 cysT_tRNA + 19 fmet_tRNA + 285 gln1_tRNA + 57 gln2_tRNA + 570 glu1_tRNA + 418 gly1_tRNA + 19 glyT_tRNA + 76 glyU_tRNA + 12730 h + 38 hisR_tRNA + 285 ile1_tRNA + 456 leu1_tRNA + 38 leu2_tRNA + 95 leuU_tRNA + 76 leuZ_tRNA + 171 lys1_tRNA + 95 met1_tRNA + 31920 mg2 + 304 phe1_tRNA + 12730 pi + 209 pro1_tRNA + 19 proL_tRNA + 57 proM_tRNA + 1 rib_70_elo2_b2319_19_cplx + 19 ser1_tRNA + 57 ser2_tRNA + 57 ser3_tRNA + 57 serT_tRNA + 209 serV_tRNA + 95 thr1_tRNA + 38 thr2_tRNA + 57 thr3_tRNA + 38 thrU_tRNA + 76 trpT_tRNA + 95 tyr1_tRNA + 342 val1_tRNA + 152 val2_tRNA + 133 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_elo_b2319_1_rib1	Translation elongation 1 b2319 1 ribosome(s)	336 EF-G.GTP + 31 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 15 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 30 EF-Tu.GTP.glu1-tRNA + 22 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 24 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 11 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 18 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 1680 mg2 + 1 rib_ini_b2319_1 --> 1 rib_70_elo1_b2319_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_elo_b2319_1_rib2	Translation elongation 2 b2319 1 ribosome(s)	335 h2o + 1 rib_70_elo1_b2319_1_cplx --> 335 EF-G.GDP + 335 EF-Tu.GDP + 31 ala1_tRNA + 10 ala2_tRNA + 13 arg1_tRNA + 2 argX_tRNA + 12 asn1_tRNA + 18 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 15 gln1_tRNA + 3 gln2_tRNA + 30 glu1_tRNA + 22 gly1_tRNA + 1 glyT_tRNA + 4 glyU_tRNA + 670 h + 2 hisR_tRNA + 15 ile1_tRNA + 24 leu1_tRNA + 2 leu2_tRNA + 5 leuU_tRNA + 4 leuZ_tRNA + 9 lys1_tRNA + 5 met1_tRNA + 1680 mg2 + 16 phe1_tRNA + 670 pi + 11 pro1_tRNA + 1 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b2319_1_cplx + 1 ser1_tRNA + 3 ser2_tRNA + 3 ser3_tRNA + 3 serT_tRNA + 11 serV_tRNA + 5 thr1_tRNA + 2 thr2_tRNA + 3 thr3_tRNA + 2 thrU_tRNA + 4 trpT_tRNA + 5 tyr1_tRNA + 18 val1_tRNA + 8 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_elo_b2319_9_rib1	Translation elongation 1 b2319 9 ribosome(s)	3024 EF-G.GTP + 279 EF-Tu.GTP.ala1-tRNA + 90 EF-Tu.GTP.ala2-tRNA + 117 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argX-tRNA + 108 EF-Tu.GTP.asn1-tRNA + 162 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.cysT-tRNA + 135 EF-Tu.GTP.gln1-tRNA + 27 EF-Tu.GTP.gln2-tRNA + 270 EF-Tu.GTP.glu1-tRNA + 198 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 36 EF-Tu.GTP.glyU-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 135 EF-Tu.GTP.ile1-tRNA + 216 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.leu2-tRNA + 45 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 81 EF-Tu.GTP.lys1-tRNA + 45 EF-Tu.GTP.met1-tRNA + 144 EF-Tu.GTP.phe1-tRNA + 99 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.proL-tRNA + 27 EF-Tu.GTP.proM-tRNA + 9 EF-Tu.GTP.ser1-tRNA + 27 EF-Tu.GTP.ser2-tRNA + 27 EF-Tu.GTP.ser3-tRNA + 27 EF-Tu.GTP.serT-tRNA + 99 EF-Tu.GTP.serV-tRNA + 45 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 27 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 54 EF-Tu.GTP.tyr1-tRNA + 162 EF-Tu.GTP.val1-tRNA + 72 EF-Tu.GTP.val2-tRNA + 63 EF-Tu.GTP.val3-tRNA + 15120 mg2 + 1 rib_ini_b2319_9 --> 1 rib_70_elo1_b2319_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_elo_b2319_9_rib2	Translation elongation 2 b2319 9 ribosome(s)	3015 h2o + 1 rib_70_elo1_b2319_9_cplx --> 3015 EF-G.GDP + 3015 EF-Tu.GDP + 279 ala1_tRNA + 90 ala2_tRNA + 117 arg1_tRNA + 18 argX_tRNA + 108 asn1_tRNA + 162 asp1_tRNA + 18 cysT_tRNA + 9 fmet_tRNA + 135 gln1_tRNA + 27 gln2_tRNA + 270 glu1_tRNA + 198 gly1_tRNA + 9 glyT_tRNA + 36 glyU_tRNA + 6030 h + 18 hisR_tRNA + 135 ile1_tRNA + 216 leu1_tRNA + 18 leu2_tRNA + 45 leuU_tRNA + 36 leuZ_tRNA + 81 lys1_tRNA + 45 met1_tRNA + 15120 mg2 + 144 phe1_tRNA + 6030 pi + 99 pro1_tRNA + 9 proL_tRNA + 27 proM_tRNA + 1 rib_70_elo2_b2319_9_cplx + 9 ser1_tRNA + 27 ser2_tRNA + 27 ser3_tRNA + 27 serT_tRNA + 99 serV_tRNA + 45 thr1_tRNA + 18 thr2_tRNA + 27 thr3_tRNA + 18 thrU_tRNA + 36 trpT_tRNA + 45 tyr1_tRNA + 162 val1_tRNA + 72 val2_tRNA + 63 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145

tl_elo_b2320_11_rib1	Translation elongation 1 b2320 11 ribosome(s)	4147 EF-G.GTP + 319 EF-Tu.GTP.ala1-tRNA + 88 EF-Tu.GTP.ala2-tRNA + 264 EF-Tu.GTP.arg1-tRNA + 11 EF-Tu.GTP.argW-tRNA + 110 EF-Tu.GTP.asn1-tRNA + 297 EF-Tu.GTP.asp1-tRNA + 66 EF-Tu.GTP.cysT-tRNA + 55 EF-Tu.GTP.gln1-tRNA + 33 EF-Tu.GTP.gln2-tRNA + 242 EF-Tu.GTP.glu1-tRNA + 209 EF-Tu.GTP.gly1-tRNA + 55 EF-Tu.GTP.glyT-tRNA + 77 EF-Tu.GTP.glyU-tRNA + 110 EF-Tu.GTP.hisR-tRNA + 176 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.ile2-tRNA + 319 EF-Tu.GTP.leu1-tRNA + 77 EF-Tu.GTP.leu2-tRNA + 77 EF-Tu.GTP.leuU-tRNA + 11 EF-Tu.GTP.leuW-tRNA + 66 EF-Tu.GTP.leuZ-tRNA + 220 EF-Tu.GTP.lys1-tRNA + 33 EF-Tu.GTP.met1-tRNA + 143 EF-Tu.GTP.phe1-tRNA + 88 EF-Tu.GTP.pro1-tRNA + 44 EF-Tu.GTP.pro2-tRNA + 44 EF-Tu.GTP.proL-tRNA + 33 EF-Tu.GTP.proM-tRNA + 33 EF-Tu.GTP.ser1-tRNA + 22 EF-Tu.GTP.ser2-tRNA + 33 EF-Tu.GTP.ser3-tRNA + 33 EF-Tu.GTP.serT-tRNA + 55 EF-Tu.GTP.serV-tRNA + 55 EF-Tu.GTP.thr1-tRNA + 55 EF-Tu.GTP.thr2-tRNA + 88 EF-Tu.GTP.thr3-tRNA + 11 EF-Tu.GTP.thrU-tRNA + 33 EF-Tu.GTP.trpT-tRNA + 99 EF-Tu.GTP.tyr1-tRNA + 165 EF-Tu.GTP.val1-tRNA + 99 EF-Tu.GTP.val2-tRNA + 88 EF-Tu.GTP.val3-tRNA + 20735 mg2 + 1 rib_	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_elo_b2320_11_rib2	Translation elongation 2 b2320 11 ribosome(s)	4136 h2o + 1 rib_70_elo1_b2320_11_cplx --> 4136 EF-G.GDP + 4136 EF-Tu.GDP + 319 ala1_tRNA + 88 ala2_tRNA + 253 arg1_tRNA + 11 argW_tRNA + 110 asn1_tRNA + 297 asp1_tRNA + 66 cysT_tRNA + 11 fmet_tRNA + 55 gln1_tRNA + 33 gln2_tRNA + 242 glu1_tRNA + 209 gly1_tRNA + 55 glyT_tRNA + 77 glyU_tRNA + 8272 h + 110 hisR_tRNA + 176 ile1_tRNA + 11 ile2_tRNA + 319 leu1_tRNA + 77 leu2_tRNA + 77 leuU_tRNA + 11 leuW_tRNA + 66 leuZ_tRNA + 220 lys1_tRNA + 33 met1_tRNA + 20735 mg2 + 143 phe1_tRNA + 8272 pi + 88 pro1_tRNA + 44 pro2_tRNA + 44 proL_tRNA + 33 proM_tRNA + 1 rib_70_elo2_b2320_11_cplx + 33 ser1_tRNA + 22 ser2_tRNA + 33 ser3_tRNA + 33 serT_tRNA + 55 serV_tRNA + 55 thr1_tRNA + 55 thr2_tRNA + 88 thr3_tRNA + 11 thrU_tRNA + 33 trpT_tRNA + 99 tyr1_tRNA + 165 val1_tRNA + 99 val2_tRNA + 88 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_elo_b2320_1_rib1	Translation elongation 1 b2320 1 ribosome(s)	377 EF-G.GTP + 29 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 27 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 22 EF-Tu.GTP.glu1-tRNA + 19 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 29 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 13 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 1885 mg2 + 1 rib_ini_b2320_1 --> 1 rib_70_elo1_b2320_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_elo_b2320_1_rib2	Translation elongation 2 b2320 1 ribosome(s)	376 h2o + 1 rib_70_elo1_b2320_1_cplx --> 376 EF-G.GDP + 376 EF-Tu.GDP + 29 ala1_tRNA + 8 ala2_tRNA + 23 arg1_tRNA + 1 argW_tRNA + 10 asn1_tRNA + 27 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 3 gln2_tRNA + 22 glu1_tRNA + 19 gly1_tRNA + 5 glyT_tRNA + 7 glyU_tRNA + 752 h + 10 hisR_tRNA + 16 ile1_tRNA + 1 ile2_tRNA + 29 leu1_tRNA + 7 leu2_tRNA + 7 leuU_tRNA + 1 leuW_tRNA + 6 leuZ_tRNA + 20 lys1_tRNA + 3 met1_tRNA + 1885 mg2 + 13 phe1_tRNA + 752 pi + 8 pro1_tRNA + 4 pro2_tRNA + 4 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b2320_1_cplx + 3 ser1_tRNA + 2 ser2_tRNA + 3 ser3_tRNA + 3 serT_tRNA + 5 serV_tRNA + 5 thr1_tRNA + 5 thr2_tRNA + 8 thr3_tRNA + 1 thrU_tRNA + 3 trpT_tRNA + 9 tyr1_tRNA + 15 val1_tRNA + 9 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_elo_b2320_22_rib1	Translation elongation 1 b2320 22 ribosome(s)	8294 EF-G.GTP + 638 EF-Tu.GTP.ala1-tRNA + 176 EF-Tu.GTP.ala2-tRNA + 528 EF-Tu.GTP.arg1-tRNA + 22 EF-Tu.GTP.argW-tRNA + 220 EF-Tu.GTP.asn1-tRNA + 594 EF-Tu.GTP.asp1-tRNA + 132 EF-Tu.GTP.cysT-tRNA + 110 EF-Tu.GTP.gln1-tRNA + 66 EF-Tu.GTP.gln2-tRNA + 484 EF-Tu.GTP.glu1-tRNA + 418 EF-Tu.GTP.gly1-tRNA + 110 EF-Tu.GTP.glyT-tRNA + 154 EF-Tu.GTP.glyU-tRNA + 220 EF-Tu.GTP.hisR-tRNA + 352 EF-Tu.GTP.ile1-tRNA + 22 EF-Tu.GTP.ile2-tRNA + 638 EF-Tu.GTP.leu1-tRNA + 154 EF-Tu.GTP.leu2-tRNA + 154 EF-Tu.GTP.leuU-tRNA + 22 EF-Tu.GTP.leuW-tRNA + 132 EF-Tu.GTP.leuZ-tRNA + 440 EF-Tu.GTP.lys1-tRNA + 66 EF-Tu.GTP.met1-tRNA + 286 EF-Tu.GTP.phe1-tRNA + 176 EF-Tu.GTP.pro1-tRNA + 88 EF-Tu.GTP.pro2-tRNA + 88 EF-Tu.GTP.proL-tRNA + 66 EF-Tu.GTP.proM-tRNA + 66 EF-Tu.GTP.ser1-tRNA + 44 EF-Tu.GTP.ser2-tRNA + 66 EF-Tu.GTP.ser3-tRNA + 66 EF-Tu.GTP.serT-tRNA + 110 EF-Tu.GTP.serV-tRNA + 110 EF-Tu.GTP.thr1-tRNA + 110 EF-Tu.GTP.thr2-tRNA + 176 EF-Tu.GTP.thr3-tRNA + 22 EF-Tu.GTP.thrU-tRNA + 66 EF-Tu.GTP.trpT-tRNA + 198 EF-Tu.GTP.tyr1-tRNA + 330 EF-Tu.GTP.val1-tRNA + 198 EF-Tu.GTP.val2-tRNA + 176 EF-Tu.GTP.val3-tRNA + 41470 mg	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_elo_b2320_22_rib2	Translation elongation 2 b2320 22 ribosome(s)	8272 h2o + 1 rib_70_elo1_b2320_22_cplx --> 8272 EF-G.GDP + 8272 EF-Tu.GDP + 638 ala1_tRNA + 176 ala2_tRNA + 506 arg1_tRNA + 22 argW_tRNA + 220 asn1_tRNA + 594 asp1_tRNA + 132 cysT_tRNA + 22 fmet_tRNA + 110 gln1_tRNA + 66 gln2_tRNA + 484 glu1_tRNA + 418 gly1_tRNA + 110 glyT_tRNA + 154 glyU_tRNA + 16544 h + 220 hisR_tRNA + 352 ile1_tRNA + 22 ile2_tRNA + 638 leu1_tRNA + 154 leu2_tRNA + 154 leuU_tRNA + 22 leuW_tRNA + 132 leuZ_tRNA + 440 lys1_tRNA + 66 met1_tRNA + 41470 mg2 + 286 phe1_tRNA + 16544 pi + 176 pro1_tRNA + 88 pro2_tRNA + 88 proL_tRNA + 66 proM_tRNA + 1 rib_70_elo2_b2320_22_cplx + 66 ser1_tRNA + 44 ser2_tRNA + 66 ser3_tRNA + 66 serT_tRNA + 110 serV_tRNA + 110 thr1_tRNA + 110 thr2_tRNA + 176 thr3_tRNA + 22 thrU_tRNA + 66 trpT_tRNA + 198 tyr1_tRNA + 330 val1_tRNA + 198 val2_tRNA + 176 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445

tl_elo_b2324_19_rib1	Translation elongation 1 b2324 19 ribosome(s)	12673 EF-G.GTP + 1083 EF-Tu.GTP.ala1-tRNA + 285 EF-Tu.GTP.ala2-tRNA + 513 EF-Tu.GTP.arg1-tRNA + 19 EF-Tu.GTP.argW-tRNA + 133 EF-Tu.GTP.argX-tRNA + 513 EF-Tu.GTP.asn1-tRNA + 741 EF-Tu.GTP.asp1-tRNA + 285 EF-Tu.GTP.cysT-tRNA + 513 EF-Tu.GTP.gln1-tRNA + 399 EF-Tu.GTP.gln2-tRNA + 684 EF-Tu.GTP.glu1-tRNA + 665 EF-Tu.GTP.gly1-tRNA + 76 EF-Tu.GTP.glyT-tRNA + 133 EF-Tu.GTP.glyU-tRNA + 342 EF-Tu.GTP.hisR-tRNA + 285 EF-Tu.GTP.ile1-tRNA + 19 EF-Tu.GTP.ile2-tRNA + 494 EF-Tu.GTP.leu1 tRNA + 304 EF-Tu.GTP.leu2-tRNA + 209 EF-Tu.GTP.leuU-tRNA + 76 EF-Tu.GTP.leuW-tRNA + 380 EF-Tu.GTP.leuZ-tRNA + 399 EF-Tu.GTP.lys1-tRNA + 228 EF-Tu.GTP.met1-tRNA + 646 EF-Tu.GTP.phe1-tRNA + 361 EF-Tu.GTP.pro1-tRNA + 76 EF-Tu.GTP.pro2-tRNA + 152 EF-Tu.GTP.proL-tRNA + 114 EF-Tu.GTP.proM-tRNA + 114 EF-Tu.GTP.ser1-tRNA + 76 EF-Tu.GTP.ser2-tRNA + 95 EF-Tu.GTP.ser3-tRNA + 19 EF-Tu.GTP.serT-tRNA + 380 EF-Tu.GTP.serV-tRNA + 95 EF-Tu.GTP.thr1-tRNA + 57 EF-Tu.GTP.thr2-tRNA + 304 EF-Tu.GTP.thr3-tRNA + 133 EF-Tu.GTP.thrU-tRNA + 285 EF-Tu.GTP.trpT-tRNA + 323 EF-Tu.GTP.tyr1-tRNA + 361 EF-Tu.GTP.val1-tRNA + 95 EF-Tu.GTP.val2-tRNA + 209 EF-Tu.GTP.val	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	1.19E+02	119.1375	0	1.80E+00	1.797
tl_elo_b2324_19_rib2	Translation elongation 2 b2324 19 ribosome(s)	12654 h2o + 1 rib_70_elo1_b2324_19_cplx --> 12654 EF-G.GDP + 12654 EF-Tu.GDP + 1083 ala1_tRNA + 285 ala2_tRNA + 513 arg1_tRNA + 19 argW_tRNA + 133 argX_tRNA + 513 asn1_tRNA + 741 asp1_tRNA + 285 cysT_tRNA + 19 fmet_tRNA + 513 gln1_tRNA + 399 gln2_tRNA + 684 glu1_tRNA + 665 gly1_tRNA + 76 glyT_tRNA + 114 glyU_tRNA + 25308 h + 342 hisR_tRNA + 285 ile1_tRNA + 19 ile2_tRNA + 494 leu1_tRNA + 304 leu2_tRNA + 209 leuU_tRNA + 76 leuW_tRNA + 380 leuZ_tRNA + 399 lys1_tRNA + 228 met1_tRNA + 63365 mg2 + 646 phe1_tRNA + 25308 pi + 361 pro1_tRNA + 76 pro2_tRNA + 152 proL_tRNA + 114 proM_tRNA + 1 rib_70_elo2_b2324_19_cplx + 114 ser1_tRNA + 76 ser2_tRNA + 95 ser3_tRNA + 19 serT_tRNA + 380 serV_tRNA + 95 thr1_tRNA + 57 thr2_tRNA + 304 thr3_tRNA + 133 thrU_tRNA + 285 trpT_tRNA + 323 tyr1_tRNA + 361 val1_tRNA + 95 val2_tRNA + 209 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	1.19E+02	119.1375	0	1.80E+00	1.797
tl_elo_b2324_1_rib1	Translation elongation 1 b2324 1 ribosome(s)	667 EF-G.GTP + 57 EF-Tu.GTP.ala1-tRNA + 15 EF-Tu.GTP.ala2-tRNA + 27 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 7 EF-Tu.GTP.argX-tRNA + 27 EF-Tu.GTP.asn1-tRNA + 39 EF-Tu.GTP.asp1-tRNA + 15 EF-Tu.GTP.cysT-tRNA + 27 EF-Tu.GTP.gln1-tRNA + 21 EF-Tu.GTP.gln2-tRNA + 36 EF-Tu.GTP.glu1-tRNA + 35 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 26 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuW-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 21 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 34 EF-Tu.GTP.phe1-tRNA + 19 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 20 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 16 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 15 EF-Tu.GTP.trpT-tRNA + 17 EF-Tu.GTP.tyr1-tRNA + 19 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 11 EF-Tu.GTP.val3-tRNA + 3335 mg2 + 1 rib_ini_b2324_1 --> 1 rib_70_elo1	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	1.19E+02	119.1375	0	1.80E+00	1.797
tl_elo_b2324_1_rib2	Translation elongation 2 b2324 1 ribosome(s)	666 h2o + 1 rib_70_elo1_b2324_1_cplx --> 666 EF-G.GDP + 666 EF-Tu.GDP + 57 ala1_tRNA + 15 ala2_tRNA + 27 arg1_tRNA + 1 argW_tRNA + 7 argX_tRNA + 27 asn1_tRNA + 39 asp1_tRNA + 15 cysT_tRNA + 1 fmet_tRNA + 27 gln1_tRNA + 21 gln2_tRNA + 36 glu1_tRNA + 35 gly1_tRNA + 4 glyT_tRNA + 6 glyU_tRNA + 1332 h + 18 hisR_tRNA + 15 ile1_tRNA + 1 ile2_tRNA + 26 leu1_tRNA + 16 leu2_tRNA + 11 leuU_tRNA + 4 leuW_tRNA + 20 leuZ_tRNA + 21 lys1_tRNA + 12 met1_tRNA + 3335 mg2 + 34 phe1_tRNA + 1332 pi + 19 pro1_tRNA + 4 pro2_tRNA + 8 proL_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b2324_1_cplx + 6 ser1_tRNA + 4 ser2_tRNA + 5 ser3_tRNA + 1 serT_tRNA + 20 serV_tRNA + 5 thr1_tRNA + 3 thr2_tRNA + 16 thr3_tRNA + 7 thrU_tRNA + 15 trpT_tRNA + 17 tyr1_tRNA + 19 val1_tRNA + 5 val2_tRNA + 11 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	1.19E+02	119.1375	0	1.80E+00	1.797
tl_elo_b2324_39_rib1	Translation elongation 1 b2324 39 ribosome(s)	26013 EF-G.GTP + 2223 EF-Tu.GTP.ala1-tRNA + 585 EF-Tu.GTP.ala2-tRNA + 1053 EF-Tu.GTP.arg1-tRNA + 39 EF-Tu.GTP.argW-tRNA + 273 EF-Tu.GTP.argX-tRNA + 1053 EF-Tu.GTP.asn1-tRNA + 1521 EF-Tu.GTP.asp1-tRNA + 585 EF-Tu.GTP.cysT-tRNA + 1053 EF-Tu.GTP.gln1-tRNA + 819 EF-Tu.GTP.gln2-tRNA + 1404 EF-Tu.GTP.glu1-tRNA + 1365 EF-Tu.GTP.gly1-tRNA + 156 EF-Tu.GTP.glyT-tRNA + 273 EF-Tu.GTP.glyU-tRNA + 702 EF-Tu.GTP.hisR-tRNA + 585 EF-Tu.GTP.ile1-tRNA + 39 EF-Tu.GTP.ile2-tRNA + 1014 EF-Tu.GTP.leu1-tRNA + 624 EF-Tu.GTP.leu2-tRNA + 429 EF-Tu.GTP.leuU-tRNA + 156 EF-Tu.GTP.leuW-tRNA + 780 EF-Tu.GTP.leuZ-tRNA + 819 EF-Tu.GTP.lys1-tRNA + 468 EF-Tu.GTP.met1-tRNA + 1326 EF-Tu.GTP.phe1-tRNA + 741 EF-Tu.GTP.pro1-tRNA + 156 EF-Tu.GTP.pro2-tRNA + 312 EF-Tu.GTP.proL-tRNA + 234 EF-Tu.GTP.proM-tRNA + 234 EF-Tu.GTP.ser1-tRNA + 156 EF-Tu.GTP.ser2-tRNA + 195 EF-Tu.GTP.ser3-tRNA + 39 EF-Tu.GTP.serT-tRNA + 780 EF-Tu.GTP.serV-tRNA + 195 EF-Tu.GTP.thr1-tRNA + 117 EF-Tu.GTP.thr2-tRNA + 624 EF-Tu.GTP.thr3-tRNA + 273 EF-Tu.GTP.thrU-tRNA + 585 EF-Tu.GTP.trpT-tRNA + 663 EF-Tu.GTP.tyr1-tRNA + 741 EF-Tu.GTP.val1-tRNA + 195 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	8.44E+01	84.38009	0	1.80E+00	1.797
tl_elo_b2324_39_rib2	Translation elongation 2 b2324 39 ribosome(s)	25974 h2o + 1 rib_70_elo1_b2324_39_cplx --> 25974 EF-G.GDP + 25974 EF-Tu.GDP + 2223 ala1_tRNA + 585 ala2_tRNA + 1053 arg1_tRNA + 39 argW_tRNA + 273 argX_tRNA + 1053 asn1_tRNA + 1521 asp1_tRNA + 585 cysT_tRNA + 39 fmet_tRNA + 1053 gln1_tRNA + 819 gln2_tRNA + 1404 glu1_tRNA + 1365 gly1_tRNA + 156 glyT_tRNA + 234 glyU_tRNA + 51948 h + 702 hisR_tRNA + 585 ile1_tRNA + 39 ile2_tRNA + 1014 leu1_tRNA + 624 leu2_tRNA + 429 leuU_tRNA + 156 leuW_tRNA + 780 leuZ_tRNA + 819 lys1_tRNA + 468 met1_tRNA + 130065 mg2 + 1326 phe1_tRNA + 51948 pi + 741 pro1_tRNA + 156 pro2_tRNA + 312 proL_tRNA + 234 proM_tRNA + rib_70_elo2_b2324_39_cplx + 234 ser1_tRNA + 156 ser2_tRNA + 195 ser3_tRNA + 39 serT_tRNA + 780 serV_tRNA + 195 thr1_tRNA + 117 thr2_tRNA + 624 thr3_tRNA + 273 thrU_tRNA + 585 trpT_tRNA + 663 tyr1_tRNA + 741 val1_tRNA + 195 val2_tRNA + 429 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	8.44E+01	84.38009	0	1.80E+00	1.797

tl_elo_b2325_1_rib1	Translation elongation 1 b2325 1 ribosome(s)	91 EF-G.GTP + 8 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 3 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 5 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 1 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val3-tRNA + 455 mg2 + 1 rib_ini_b2325_1 --> 1 rib_70_elo1_b2325_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_elo_b2325_1_rib2	Translation elongation 2 b2325 1 ribosome(s)	90 h2o + 1 rib_70_elo1_b2325_1_cplx --> 90 EF-G.GDP + 90 EF-Tu.GDP + 8 ala1_tRNA + 4 ala2_tRNA + 3 arg1_tRNA + 1 asn1_tRNA + 8 asp1_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 8 glu1_tRNA + 5 gly1_tRNA + 1 glyU_tRNA + 180 h + 4 hisR_tRNA + 5 ile1_tRNA + 6 leu1_tRNA + 3 leu2_tRNA + 2 leuZ_tRNA + 1 lys1_tRNA + 2 met1_tRNA + 455 mg2 + 3 phe1_tRNA + 180 pi + 1 pro1_tRNA + 1 rib_70_elo2_b2325_1_cplx + 1 ser1_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 5 serV_tRNA + 2 thr1_tRNA + 1 thr3_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 1 tyr1_tRNA + 2 val1_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_elo_b2325_2_rib1	Translation elongation 1 b2325 2 ribosome(s)	182 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 16 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 2 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 10 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val3-tRNA + 910 mg2 + 1 rib_ini_b2325_2 --> 1 rib_70_elo1_b2325_2_cp	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_elo_b2325_2_rib2	Translation elongation 2 b2325 2 ribosome(s)	180 h2o + 1 rib_70_elo1_b2325_2_cplx --> 180 EF-G.GDP + 180 EF-Tu.GDP + 16 ala1_tRNA + 8 ala2_tRNA + 6 arg1_tRNA + 2 asn1_tRNA + 16 asp1_tRNA + 2 fmet_tRNA + 12 gln1_tRNA + 16 glu1_tRNA + 10 gly1_tRNA + 2 glyU_tRNA + 360 h + 8 hisR_tRNA + 10 ile1_tRNA + 12 leu1_tRNA + 6 leu2_tRNA + 4 leuZ_tRNA + 2 lys1_tRNA + 4 met1_tRNA + 910 mg2 + 6 phe1_tRNA + 360 pi + 2 pro1_tRNA + 1 rib_70_elo2_b2325_2_cplx + 2 ser1_tRNA + 2 ser3_tRNA + 4 serT_tRNA + 10 serV_tRNA + 4 thr1_tRNA + 2 thr3_tRNA + 2 thrU_tRNA + 2 trpT_tRNA + 2 tyr1_tRNA + 4 val1_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_elo_b2325_5_rib1	Translation elongation 1 b2325 5 ribosome(s)	455 EF-G.GTP + 40 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 40 EF-Tu.GTP.asp1-tRNA + 35 EF-Tu.GTP.gln1-tRNA + 40 EF-Tu.GTP.glu1-tRNA + 25 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 20 EF-Tu.GTP.hisR-tRNA + 25 EF-Tu.GTP.ile1-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 15 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 5 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serT-tRNA + 25 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val3-tRNA + 2275 mg2 + 1 rib_ini_b2325_5 --> 1 rib_70_elo1_b2325_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_elo_b2325_5_rib2	Translation elongation 2 b2325 5 ribosome(s)	450 h2o + 1 rib_70_elo1_b2325_5_cplx --> 450 EF-G.GDP + 450 EF-Tu.GDP + 40 ala1_tRNA + 20 ala2_tRNA + 15 arg1_tRNA + 5 asn1_tRNA + 40 asp1_tRNA + 5 fmet_tRNA + 30 gln1_tRNA + 40 glu1_tRNA + 25 gly1_tRNA + 5 glyU_tRNA + 900 h + 20 hisR_tRNA + 25 ile1_tRNA + 30 leu1_tRNA + 15 leu2_tRNA + 10 leuZ_tRNA + 5 lys1_tRNA + 10 met1_tRNA + 2275 mg2 + 15 phe1_tRNA + 900 pi + 5 pro1_tRNA + 1 rib_70_elo2_b2325_5_cplx + 5 ser1_tRNA + 5 ser3_tRNA + 10 serT_tRNA + 25 serV_tRNA + 10 thr1_tRNA + 5 thr3_tRNA + 5 thrU_tRNA + 5 trpT_tRNA + 5 tyr1_tRNA + 10 val1_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_elo_b2326_10_rib1	Translation elongation 1 b2326 10 ribosome(s)	1810 EF-G.GTP + 130 EF-Tu.GTP.ala1-tRNA + 40 EF-Tu.GTP.ala2-tRNA + 90 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argX-tRNA + 90 EF-Tu.GTP.asn1-tRNA + 140 EF-Tu.GTP.asp1-tRNA + 50 EF-Tu.GTP.cysT-tRNA + 50 EF-Tu.GTP.gln1-tRNA + 40 EF-Tu.GTP.gln2-tRNA + 140 EF-Tu.GTP.glu1-tRNA + 40 EF-Tu.GTP.gly1-tRNA + 20 EF-Tu.GTP.glyT-tRNA + 20 EF-Tu.GTP.glyU-tRNA + 70 EF-Tu.GTP.hisR-tRNA + 100 EF-Tu.GTP.ile1-tRNA + 40 EF-Tu.GTP.leu1-tRNA + 20 EF-Tu.GTP.leu2-tRNA + 40 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuW-tRNA + 40 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 130 EF-Tu.GTP.phe1-tRNA + 110 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.ser3-tRNA + 50 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.thrU-tRNA + 40 EF-Tu.GTP.trpT-tRNA + 100 EF-Tu.GTP.tyr1-tRNA + 70 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 20 EF-Tu.GTP.val3-tRNA + 9050 mg2 + 1 rib_ini_b2326_10 --> 1 rib_70_elo1_b2326_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276
tl_elo_b2326_10_rib2	Translation elongation 2 b2326 10 ribosome(s)	1800 h2o + 1 rib_70_elo1_b2326_10_cplx --> 1800 EF-G.GDP + 1800 EF-Tu.GDP + 130 ala1_tRNA + 40 ala2_tRNA + 90 arg1_tRNA + 10 argX_tRNA + 80 asn1_tRNA + 140 asp1_tRNA + 50 cysT_tRNA + 10 fmet_tRNA + 50 gln1_tRNA + 40 gln2_tRNA + 140 glu1_tRNA + 40 gly1_tRNA + 20 glyT_tRNA + 20 glyU_tRNA + 3600 h + 70 hisR_tRNA + 100 ile1_tRNA + 40 leu1_tRNA + 20 leu2_tRNA + 40 leuU_tRNA + 10 leuW_tRNA + 40 lys1_tRNA + 10 met1_tRNA + 9050 mg2 + 130 phe1_tRNA + 3600 pi + 110 pro1_tRNA + 10 pro2_tRNA + 1 rib_70_elo2_b2326_10_cplx + 10 ser3_tRNA + 50 serV_tRNA + 10 thr1_tRNA + 30 thr3_tRNA + 20 thrU_tRNA + 40 trpT_tRNA + 100 tyr1_tRNA + 70 val1_tRNA + 20 val2_tRNA + 20 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276

tl_elo_b2326_1_rib1	Translation elongation 1 b2326 1 ribosome(s)	181 EF-G.GTP + 13 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 9 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 13 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 905 mg2 + 1 rib_ini_b2326_1 --> 1 rib_70_elo1_b2326_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276
tl_elo_b2326_1_rib2	Translation elongation 2 b2326 1 ribosome(s)	180 h2o + 1 rib_70_elo1_b2326_1_cplx --> 180 EF-G.GDP + 180 EF-Tu.GDP + 13 ala1_tRNA + 4 ala2_tRNA + 9 arg1_tRNA + 1 argX_tRNA + 8 asn1_tRNA + 14 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 4 gln2_tRNA + 14 glu1_tRNA + 4 gly1_tRNA + 2 glyT_tRNA + 2 glyU_tRNA + 360 h + 7 hisR_tRNA + 10 ile1_tRNA + 4 leu1_tRNA + 2 leu2_tRNA + 4 leuU_tRNA + 1 leuW_tRNA + 4 lys1_tRNA + 1 met1_tRNA + 905 mg2 + 13 phe1_tRNA + 360 pi + 11 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b2326_1_cplx + 1 ser3_tRNA + 5 serV_tRNA + 1 thr1_tRNA + 3 thr3_tRNA + 2 thrU_tRNA + 4 trpT_tRNA + 10 tyr1_tRNA + 7 val1_tRNA + 2 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276
tl_elo_b2326_5_rib1	Translation elongation 1 b2326 5 ribosome(s)	905 EF-G.GTP + 65 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 45 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argX-tRNA + 45 EF-Tu.GTP.asn1-tRNA + 70 EF-Tu.GTP.asp1-tRNA + 25 EF-Tu.GTP.cysT-tRNA + 25 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 70 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 10 EF-Tu.GTP.glyU-tRNA + 35 EF-Tu.GTP.hisR-tRNA + 50 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 20 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuW-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 65 EF-Tu.GTP.phe1-tRNA + 55 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 25 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 15 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.thrU-tRNA + 20 EF-Tu.GTP.trpT-tRNA + 50 EF-Tu.GTP.tyr1-tRNA + 35 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 4525 mg2 + 1 rib_ini_b2326_5 --> 1 rib_70_elo1_b2326_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276
tl_elo_b2326_5_rib2	Translation elongation 2 b2326 5 ribosome(s)	900 h2o + 1 rib_70_elo1_b2326_5_cplx --> 900 EF-G.GDP + 900 EF-Tu.GDP + 65 ala1_tRNA + 20 ala2_tRNA + 45 arg1_tRNA + 5 argX_tRNA + 40 asn1_tRNA + 70 asp1_tRNA + 25 cysT_tRNA + 5 fmet_tRNA + 25 gln1_tRNA + 20 gln2_tRNA + 70 glu1_tRNA + 20 gly1_tRNA + 10 glyT_tRNA + 10 glyU_tRNA + 1800 h + 35 hisR_tRNA + 50 ile1_tRNA + 20 leu1_tRNA + 10 leu2_tRNA + 20 leuU_tRNA + 5 leuW_tRNA + 20 lys1_tRNA + 5 met1_tRNA + 4525 mg2 + 65 phe1_tRNA + 1800 pi + 55 pro1_tRNA + 5 pro2_tRNA + 1 rib_70_elo2_b2326_5_cplx + 5 ser3_tRNA + 25 serV_tRNA + 5 thr1_tRNA + 15 thr3_tRNA + 10 thrU_tRNA + 20 trpT_tRNA + 50 tyr1_tRNA + 35 val1_tRNA + 10 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276
tl_elo_b2327_15_rib1	Translation elongation 1 b2327 15 ribosome(s)	4020 EF-G.GTP + 270 EF-Tu.GTP.ala1-tRNA + 165 EF-Tu.GTP.ala2-tRNA + 105 EF-Tu.GTP.arg1-tRNA + 30 EF-Tu.GTP.argX-tRNA + 120 EF-Tu.GTP.asn1-tRNA + 90 EF-Tu.GTP.asp1-tRNA + 60 EF-Tu.GTP.cysT-tRNA + 90 EF-Tu.GTP.gln1-tRNA + 45 EF-Tu.GTP.gln2-tRNA + 60 EF-Tu.GTP.glu1-tRNA + 315 EF-Tu.GTP.gly1-tRNA + 90 EF-Tu.GTP.glyT-tRNA + 75 EF-Tu.GTP.glyU-tRNA + 45 EF-Tu.GTP.hisR-tRNA + 270 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.ile2-tRNA + 255 EF-Tu.GTP.leu1-tRNA + 90 EF-Tu.GTP.leu2-tRNA + 150 EF-Tu.GTP.leuU-tRNA + 15 EF-Tu.GTP.leuW-tRNA + 120 EF-Tu.GTP.leuZ-tRNA + 150 EF-Tu.GTP.lys1-tRNA + 195 EF-Tu.GTP.met1-tRNA + 270 EF-Tu.GTP.phe1-tRNA + 60 EF-Tu.GTP.pro1-tRNA + 45 EF-Tu.GTP.proL-tRNA + 15 EF-Tu.GTP.proM-tRNA + 30 EF-Tu.GTP.ser1-tRNA + 30 EF-Tu.GTP.ser2-tRNA + 45 EF-Tu.GTP.ser3-tRNA + 45 EF-Tu.GTP.serT-tRNA + 105 EF-Tu.GTP.serV-tRNA + 45 EF-Tu.GTP.thr1-tRNA + 15 EF-Tu.GTP.thr2-tRNA + 75 EF-Tu.GTP.thr3-tRNA + 30 EF-Tu.GTP.trpT-tRNA + 105 EF-Tu.GTP.tyr1-tRNA + 105 EF-Tu.GTP.val1-tRNA + 90 EF-Tu.GTP.val2-tRNA + 90 EF-Tu.GTP.val3-tRNA + 20100 mg2 + 1 rib_ini_b2327_15 --> 1 rib_70_elo1_b2327_15_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_elo_b2327_15_rib2	Translation elongation 2 b2327 15 ribosome(s)	4005 h2o + 1 rib_70_elo1_b2327_15_cplx --> 4005 EF-G.GDP + 4005 EF-Tu.GDP + 270 ala1_tRNA + 165 ala2_tRNA + 105 arg1_tRNA + 30 argX_tRNA + 105 asn1_tRNA + 90 asp1_tRNA + 60 cysT_tRNA + 15 fmet_tRNA + 90 gln1_tRNA + 45 gln2_tRNA + 60 glu1_tRNA + 315 gly1_tRNA + 90 glyT_tRNA + 75 glyU_tRNA + 8010 h + 45 hisR_tRNA + 270 ile1_tRNA + 15 ile2_tRNA + 255 leu1_tRNA + 90 leu2_tRNA + 150 leuU_tRNA + 15 leuW_tRNA + 120 leuZ_tRNA + 150 lys1_tRNA + 195 met1_tRNA + 20100 mg2 + 270 phe1_tRNA + 8010 pi + 60 pro1_tRNA + 45 proL_tRNA + 15 proM_tRNA + 1 rib_70_elo2_b2327_15_cplx + 30 ser1_tRNA + 30 ser2_tRNA + 45 ser3_tRNA + 45 serT_tRNA + 105 serV_tRNA + 45 thr1_tRNA + 15 thr2_tRNA + 75 thr3_tRNA + 30 trpT_tRNA + 105 tyr1_tRNA + 105 val1_tRNA + 90 val2_tRNA + 90 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776

tl_elo_b2327_1_rib1	Translation elongation 1 b2327 1 ribosome(s)	268 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.ala2-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 4 EF-Tu.GTP.glu1-tRNA + 21 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 17 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 13 EF-Tu.GTP.met1-tRNA + 18 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1340 mg2 + 1 rib_ini_b2327_1 --> 1 rib_70_elo1_b2327_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_elo_b2327_1_rib2	Translation elongation 2 b2327 1 ribosome(s)	267 h2o + 1 rib_70_elo1_b2327_1_cplx --> 267 EF-G.GDP + 267 EF-Tu.GDP + 18 ala1_tRNA + 11 ala2_tRNA + 7 arg1_tRNA + 2 argX_tRNA + 7 asn1_tRNA + 6 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 3 gln2_tRNA + 4 glu1_tRNA + 21 gly1_tRNA + 6 glyT_tRNA + 5 glyU_tRNA + 534 h + 3 hisR_tRNA + 18 ile1_tRNA + 1 ile2_tRNA + 17 leu1_tRNA + 6 leu2_tRNA + 10 leuU_tRNA + 1 leuW_tRNA + 8 leuZ_tRNA + 10 lys1_tRNA + 13 met1_tRNA + 1340 mg2 + 18 phe1_tRNA + 534 pi + 4 pro1_tRNA + 3 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b2327_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 3 ser3_tRNA + 3 serT_tRNA + 7 serV_tRNA + 3 thr1_tRNA + 1 thr2_tRNA + 5 thr3_tRNA + 2 trpT_tRNA + 7 tyr1_tRNA + 7 val1_tRNA + 6 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_elo_b2327_7_rib1	Translation elongation 1 b2327 7 ribosome(s)	1876 EF-G.GTP + 126 EF-Tu.GTP.ala1-tRNA + 77 EF-Tu.GTP.ala2-tRNA + 49 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.argX-tRNA + 56 EF-Tu.GTP.asn1-tRNA + 42 EF-Tu.GTP.asp1-tRNA + 28 EF-Tu.GTP.cysT-tRNA + 42 EF-Tu.GTP.gln1-tRNA + 21 EF-Tu.GTP.gln2-tRNA + 28 EF-Tu.GTP.glu1-tRNA + 147 EF-Tu.GTP.gly1-tRNA + 42 EF-Tu.GTP.glyT-tRNA + 35 EF-Tu.GTP.glyU-tRNA + 21 EF-Tu.GTP.hisR-tRNA + 126 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.ile2-tRNA + 119 EF-Tu.GTP.leu1-tRNA + 42 EF-Tu.GTP.leu2-tRNA + 70 EF-Tu.GTP.leuU-tRNA + 7 EF-Tu.GTP.leuW-tRNA + 56 EF-Tu.GTP.leuZ-tRNA + 70 EF-Tu.GTP.lys1-tRNA + 91 EF-Tu.GTP.met1-tRNA + 126 EF-Tu.GTP.phe1-tRNA + 28 EF-Tu.GTP.pro1-tRNA + 21 EF-Tu.GTP.proL-tRNA + 7 EF-Tu.GTP.proM-tRNA + 14 EF-Tu.GTP.ser1-tRNA + 14 EF-Tu.GTP.ser2-tRNA + 21 EF-Tu.GTP.ser3-tRNA + 21 EF-Tu.GTP.serT-tRNA + 49 EF-Tu.GTP.serV-tRNA + 21 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 35 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.trpT-tRNA + 49 EF-Tu.GTP.tyr1-tRNA + 49 EF-Tu.GTP.val1-tRNA + 42 EF-Tu.GTP.val2-tRNA + 42 EF-Tu.GTP.val3-tRNA + 9380 mg2 + 1 rib_ini_b2327_7 --> 1 rib_70_elo1_b2327_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_elo_b2327_7_rib2	Translation elongation 2 b2327 7 ribosome(s)	1869 h2o + 1 rib_70_elo1_b2327_7_cplx --> 1869 EF-G.GDP + 1869 EF-Tu.GDP + 126 ala1_tRNA + 77 ala2_tRNA + 49 arg1_tRNA + 14 argX_tRNA + 49 asn1_tRNA + 42 asp1_tRNA + 28 cysT_tRNA + 7 fmet_tRNA + 42 gln1_tRNA + 21 gln2_tRNA + 28 glu1_tRNA + 147 gly1_tRNA + 42 glyT_tRNA + 35 glyU_tRNA + 3738 h + 21 hisR_tRNA + 126 ile1_tRNA + 7 ile2_tRNA + 119 leu1_tRNA + 42 leu2_tRNA + 70 leuU_tRNA + 7 leuW_tRNA + 56 leuZ_tRNA + 70 lys1_tRNA + 91 met1_tRNA + 9380 mg2 + 126 phe1_tRNA + 3738 pi + 28 pro1_tRNA + 21 proL_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b2327_7_cplx + 14 ser1_tRNA + 14 ser2_tRNA + 21 ser3_tRNA + 21 serT_tRNA + 49 serV_tRNA + 21 thr1_tRNA + 7 thr2_tRNA + 35 thr3_tRNA + 14 trpT_tRNA + 49 tyr1_tRNA + 49 val1_tRNA + 42 val2_tRNA + 42 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_elo_b2328_16_rib1	Translation elongation 1 b2328 16 ribosome(s)	4368 EF-G.GTP + 240 EF-Tu.GTP.ala1-tRNA + 96 EF-Tu.GTP.ala2-tRNA + 240 EF-Tu.GTP.arg1-tRNA + 80 EF-Tu.GTP.asn1-tRNA + 272 EF-Tu.GTP.asp1-tRNA + 96 EF-Tu.GTP.cysT-tRNA + 160 EF-Tu.GTP.gln1-tRNA + 144 EF-Tu.GTP.gln2-tRNA + 128 EF-Tu.GTP.glu1-tRNA + 240 EF-Tu.GTP.gly1-tRNA + 32 EF-Tu.GTP.glyT-tRNA + 48 EF-Tu.GTP.glyU-tRNA + 144 EF-Tu.GTP.hisR-tRNA + 160 EF-Tu.GTP.ile1-tRNA + 48 EF-Tu.GTP.ile2-tRNA + 272 EF-Tu.GTP.leu1-tRNA + 64 EF-Tu.GTP.leu2-tRNA + 80 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuW-tRNA + 48 EF-Tu.GTP.leuZ-tRNA + 208 EF-Tu.GTP.lys1-tRNA + 96 EF-Tu.GTP.met1-tRNA + 144 EF-Tu.GTP.phe1-tRNA + 192 EF-Tu.GTP.pro1-tRNA + 112 EF-Tu.GTP.pro2-tRNA + 32 EF-Tu.GTP.proL-tRNA + 48 EF-Tu.GTP.proM-tRNA + 80 EF-Tu.GTP.ser1-tRNA + 16 EF-Tu.GTP.ser2-tRNA + 16 EF-Tu.GTP.ser3-tRNA + 16 EF-Tu.GTP.serT-tRNA + 192 EF-Tu.GTP.serV-tRNA + 96 EF-Tu.GTP.thr1-tRNA + 16 EF-Tu.GTP.thr2-tRNA + 80 EF-Tu.GTP.thr3-tRNA + 48 EF-Tu.GTP.thrU-tRNA + 96 EF-Tu.GTP.trpT-tRNA + 32 EF-Tu.GTP.tyr1-tRNA + 112 EF-Tu.GTP.val1-tRNA + 80 EF-Tu.GTP.val2-tRNA + 48 EF-Tu.GTP.val3-tRNA + 21840 mg2 + 1 rib_ini_b2328_16 --> 1 rib_70_elo1_b2328_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_elo_b2328_16_rib2	Translation elongation 2 b2328 16 ribosome(s)	4352 h2o + 1 rib_70_elo1_b2328_16_cplx --> 4352 EF-G.GDP + 4352 EF-Tu.GDP + 240 ala1_tRNA + 96 ala2_tRNA + 240 arg1_tRNA + 80 asn1_tRNA + 272 asp1_tRNA + 96 cysT_tRNA + 160 fmet_tRNA + 160 gln1_tRNA + 144 gln2_tRNA + 128 glu1_tRNA + 240 gly1_tRNA + 32 glyT_tRNA + 48 glyU_tRNA + 8704 h + 144 hisR_tRNA + 144 ile1_tRNA + 48 ile2_tRNA + 272 leu1_tRNA + 64 leu2_tRNA + 80 leuU_tRNA + 16 leuW_tRNA + 48 leuZ_tRNA + 208 lys1_tRNA + 96 met1_tRNA + 21840 mg2 + 144 phe1_tRNA + 8704 pi + 192 pro1_tRNA + 112 pro2_tRNA + 32 proL_tRNA + 48 proM_tRNA + 1 rib_70_elo2_b2328_16_cplx + 80 ser1_tRNA + 16 ser2_tRNA + 16 ser3_tRNA + 16 serT_tRNA + 192 serV_tRNA + 96 thr1_tRNA + 16 thr2_tRNA + 80 thr3_tRNA + 48 thrU_tRNA + 96 trpT_tRNA + 32 tyr1_tRNA + 112 val1_tRNA + 80 val2_tRNA + 48 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076

tl_elo_b2328_1_rib1	Translation elongation 1 b2328 1 ribosome(s)	273 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 17 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 9 EF-Tu.GTP.gln2-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 17 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 12 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 1365 mg2 + 1 rib_ini_b2328_1 --> 1 rib_70_elo1_b2328_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_elo_b2328_1_rib2	Translation elongation 2 b2328 1 ribosome(s)	272 h2o + 1 rib_70_elo1_b2328_1_cplx --> 272 EF-G.GDP + 272 EF-Tu.GDP + 15 ala1_tRNA + 6 ala2_tRNA + 15 arg1_tRNA + 5 asn1_tRNA + 17 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 10 gln1_tRNA + 9 gln2_tRNA + 8 glu1_tRNA + 15 gly1_tRNA + 2 glyT_tRNA + 3 glyU_tRNA + 544 h + 9 hisR_tRNA + 9 ile1_tRNA + 3 ile2_tRNA + 17 leu1_tRNA + 4 leu2_tRNA + 5 leuU_tRNA + 1 leuW_tRNA + 3 leuZ_tRNA + 13 lys1_tRNA + 6 met1_tRNA + 1365 mg2 + 9 phe1_tRNA + 544 pi + 12 pro1_tRNA + 7 pro2_tRNA + 2 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b2328_1_cplx + 5 ser1_tRNA + 1 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 12 serV_tRNA + 6 thr1_tRNA + 1 thr2_tRNA + 5 thr3_tRNA + 3 thrU_tRNA + 6 trpT_tRNA + 2 tyr1_tRNA + 7 val1_tRNA + 5 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_elo_b2328_8_rib1	Translation elongation 1 b2328 8 ribosome(s)	2184 EF-G.GTP + 120 EF-Tu.GTP.ala1-tRNA + 48 EF-Tu.GTP.ala2-tRNA + 120 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 136 EF-Tu.GTP.asp1-tRNA + 48 EF-Tu.GTP.cysT-tRNA + 80 EF-Tu.GTP.gln1-tRNA + 72 EF-Tu.GTP.gln2-tRNA + 64 EF-Tu.GTP.glu1-tRNA + 120 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 24 EF-Tu.GTP.glyU-tRNA + 72 EF-Tu.GTP.hisR-tRNA + 80 EF-Tu.GTP.ile1-tRNA + 24 EF-Tu.GTP.ile2-tRNA + 136 EF-Tu.GTP.leu1-tRNA + 32 EF-Tu.GTP.leu2-tRNA + 40 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuW-tRNA + 24 EF-Tu.GTP.leuZ-tRNA + 104 EF-Tu.GTP.lys1-tRNA + 48 EF-Tu.GTP.met1-tRNA + 72 EF-Tu.GTP.phe1-tRNA + 96 EF-Tu.GTP.pro1-tRNA + 56 EF-Tu.GTP.pro2-tRNA + 16 EF-Tu.GTP.proL-tRNA + 24 EF-Tu.GTP.proM-tRNA + 40 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serT-tRNA + 96 EF-Tu.GTP.serV-tRNA + 48 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 40 EF-Tu.GTP.thr3-tRNA + 24 EF-Tu.GTP.thrU-tRNA + 48 EF-Tu.GTP.trpT-tRNA + 16 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 40 EF-Tu.GTP.val2-tRNA + 24 EF-Tu.GTP.val3-tRNA + 10920 mg2 + 1 rib_ini_b2328_8 --> 1 rib_70_elo1_b2328_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_elo_b2328_8_rib2	Translation elongation 2 b2328 8 ribosome(s)	2176 h2o + 1 rib_70_elo1_b2328_8_cplx --> 2176 EF-G.GDP + 2176 EF-Tu.GDP + 120 ala1_tRNA + 48 ala2_tRNA + 120 arg1_tRNA + 40 asn1_tRNA + 136 asp1_tRNA + 48 cysT_tRNA + 8 fmet_tRNA + 80 gln1_tRNA + 72 gln2_tRNA + 64 glu1_tRNA + 120 gly1_tRNA + 16 glyT_tRNA + 24 glyU_tRNA + 4352 h + 72 hisR_tRNA + 72 ile1_tRNA + 24 ile2_tRNA + 136 leu1_tRNA + 32 leu2_tRNA + 40 leuU_tRNA + 8 leuW_tRNA + 24 leuZ_tRNA + 104 lys1_tRNA + 48 met1_tRNA + 10920 mg2 + 72 phe1_tRNA + 4352 pi + 96 pro1_tRNA + 56 pro2_tRNA + 16 proL_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b2328_8_cplx + 40 ser1_tRNA + 8 ser2_tRNA + 8 ser3_tRNA + 8 serT_tRNA + 96 serV_tRNA + 48 thr1_tRNA + 8 thr2_tRNA + 40 thr3_tRNA + 24 thrU_tRNA + 48 trpT_tRNA + 16 tyr1_tRNA + 56 val1_tRNA + 40 val2_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_elo_b2329_10_rib1	Translation elongation 1 b2329 10 ribosome(s)	3600 EF-G.GTP + 210 EF-Tu.GTP.ala1-tRNA + 100 EF-Tu.GTP.ala2-tRNA + 240 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.argX-tRNA + 80 EF-Tu.GTP.asn1-tRNA + 290 EF-Tu.GTP.asp1-tRNA + 40 EF-Tu.GTP.cysT-tRNA + 90 EF-Tu.GTP.gln1-tRNA + 70 EF-Tu.GTP.gln2-tRNA + 190 EF-Tu.GTP.glu1-tRNA + 310 EF-Tu.GTP.gly1-tRNA + 50 EF-Tu.GTP.glyT-tRNA + 40 EF-Tu.GTP.glyU-tRNA + 80 EF-Tu.GTP.hisR-tRNA + 290 EF-Tu.GTP.ile1-tRNA + 130 EF-Tu.GTP.leu1-tRNA + 30 EF-Tu.GTP.leu2-tRNA + 70 EF-Tu.GTP.leuU-tRNA + 30 EF-Tu.GTP.leuZ-tRNA + 160 EF-Tu.GTP.lys1-tRNA + 80 EF-Tu.GTP.met1-tRNA + 110 EF-Tu.GTP.phe1-tRNA + 100 EF-Tu.GTP.pro1-tRNA + 20 EF-Tu.GTP.pro2-tRNA + 20 EF-Tu.GTP.proL-tRNA + 30 EF-Tu.GTP.proM-tRNA + 40 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 30 EF-Tu.GTP.ser3-tRNA + 90 EF-Tu.GTP.serV-tRNA + 150 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.thrU-tRNA + 20 EF-Tu.GTP.trpT-tRNA + 70 EF-Tu.GTP.tyr1-tRNA + 90 EF-Tu.GTP.val1-tRNA + 60 EF-Tu.GTP.val2-tRNA + 90 EF-Tu.GTP.val3-tRNA + 18000 mg2 + 1 rib_ini_b2329_10 --> 1 rib_70_elo1_b2329_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_elo_b2329_10_rib2	Translation elongation 2 b2329 10 ribosome(s)	3590 h2o + 1 rib_70_elo1_b2329_10_cplx --> 3590 EF-G.GDP + 3590 EF-Tu.GDP + 210 ala1_tRNA + 100 ala2_tRNA + 240 arg1_tRNA + 20 argX_tRNA + 80 asn1_tRNA + 290 asp1_tRNA + 40 cysT_tRNA + 10 fmet_tRNA + 90 gln1_tRNA + 70 gln2_tRNA + 190 glu1_tRNA + 310 gly1_tRNA + 50 glyT_tRNA + 40 glyU_tRNA + 7180 h + 80 hisR_tRNA + 290 ile1_tRNA + 130 leu1_tRNA + 30 leu2_tRNA + 70 leuU_tRNA + 30 leuZ_tRNA + 160 lys1_tRNA + 80 met1_tRNA + 18000 mg2 + 110 phe1_tRNA + 7180 pi + 100 pro1_tRNA + 20 pro2_tRNA + 20 proL_tRNA + 30 proM_tRNA + 1 rib_70_elo2_b2329_10_cplx + 40 ser1_tRNA + 20 ser2_tRNA + 30 ser3_tRNA + 90 serV_tRNA + 150 thr1_tRNA + 30 thr2_tRNA + 10 thr3_tRNA + 20 thrU_tRNA + 10 trpT_tRNA + 70 tyr1_tRNA + 90 val1_tRNA + 60 val2_tRNA + 90 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976

tl_elo_b2329_1_rib1	Translation elongation 1 b2329 1 ribosome(s)	360 EF-G.GTP + 21 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 29 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 9 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 19 EF-Tu.GTP.glu1-tRNA + 31 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 29 EF-Tu.GTP.ile1-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 11 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 1800 mg2 + 1 rib_ini_b2329_1 --> 1 rib_70_elo1_b2329_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_elo_b2329_1_rib2	Translation elongation 2 b2329 1 ribosome(s)	359 h2o + 1 rib_70_elo1_b2329_1_cplx --> 359 EF-G.GDP + 359 EF-Tu.GDP + 21 ala1_tRNA + 10 ala2_tRNA + 24 arg1_tRNA + 2 argX_tRNA + 8 asn1_tRNA + 29 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 9 gln1_tRNA + 7 gln2_tRNA + 19 glu1_tRNA + 31 gly1_tRNA + 5 glyT_tRNA + 4 glyU_tRNA + 718 h + 8 hisR_tRNA + 29 ile1_tRNA + 13 leu1_tRNA + 3 leu2_tRNA + 7 leuU_tRNA + 3 leuZ_tRNA + 16 lys1_tRNA + 8 met1_tRNA + 1800 mg2 + 11 phe1_tRNA + 718 pi + 10 pro1_tRNA + 2 pro2_tRNA + 2 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b2329_1_cplx + 4 ser1_tRNA + 2 ser2_tRNA + 3 ser3_tRNA + 9 serV_tRNA + 15 thr1_tRNA + 3 thr2_tRNA + 1 thr3_tRNA + 2 thrU_tRNA + 1 trpT_tRNA + 7 tyr1_tRNA + 9 val1_tRNA + 6 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_elo_b2329_21_rib1	Translation elongation 1 b2329 21 ribosome(s)	7560 EF-G.GTP + 441 EF-Tu.GTP.ala1-tRNA + 210 EF-Tu.GTP.ala2-tRNA + 504 EF-Tu.GTP.arg1-tRNA + 42 EF-Tu.GTP.argX-tRNA + 168 EF-Tu.GTP.asn1-tRNA + 609 EF-Tu.GTP.asp1-tRNA + 84 EF-Tu.GTP.cysT-tRNA + 189 EF-Tu.GTP.gln1-tRNA + 147 EF-Tu.GTP.gln2-tRNA + 399 EF-Tu.GTP.glu1-tRNA + 651 EF-Tu.GTP.gly1-tRNA + 105 EF-Tu.GTP.glyT-tRNA + 84 EF-Tu.GTP.glyU-tRNA + 168 EF-Tu.GTP.hisR-tRNA + 609 EF-Tu.GTP.ile1-tRNA + 273 EF-Tu.GTP.leu1-tRNA + 63 EF-Tu.GTP.leu2-tRNA + 147 EF-Tu.GTP.leuU-tRNA + 63 EF-Tu.GTP.leuZ-tRNA + 336 EF-Tu.GTP.lys1-tRNA + 168 EF-Tu.GTP.met1-tRNA + 231 EF-Tu.GTP.phe1-tRNA + 210 EF-Tu.GTP.pro1-tRNA + 42 EF-Tu.GTP.pro2-tRNA + 42 EF-Tu.GTP.proL-tRNA + 63 EF-Tu.GTP.proM-tRNA + 84 EF-Tu.GTP.ser1-tRNA + 42 EF-Tu.GTP.ser2-tRNA + 63 EF-Tu.GTP.ser3-tRNA + 189 EF-Tu.GTP.serV-tRNA + 315 EF-Tu.GTP.thr1-tRNA + 63 EF-Tu.GTP.thr2-tRNA + 21 EF-Tu.GTP.thr3-tRNA + 42 EF-Tu.GTP.thrU-tRNA + 42 EF-Tu.GTP.trpT-tRNA + 147 EF-Tu.GTP.tyr1-tRNA + 189 EF-Tu.GTP.val1-tRNA + 126 EF-Tu.GTP.val2-tRNA + 189 EF-Tu.GTP.val3-tRNA + 37800 mg2 + 1 rib_ini_b2329_21 --> 1 rib_70_elo1_b2329_21_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_elo_b2329_21_rib2	Translation elongation 2 b2329 21 ribosome(s)	7539 h2o + 1 rib_70_elo1_b2329_21_cplx --> 7539 EF-G.GDP + 7539 EF-Tu.GDP + 441 ala1_tRNA + 210 ala2_tRNA + 504 arg1_tRNA + 42 argX_tRNA + 168 asn1_tRNA + 609 asp1_tRNA + 84 cysT_tRNA + 21 fmet_tRNA + 189 gln1_tRNA + 147 gln2_tRNA + 399 glu1_tRNA + 651 gly1_tRNA + 105 glyT_tRNA + 84 glyU_tRNA + 15078 h + 168 hisR_tRNA + 609 ile1_tRNA + 273 leu1_tRNA + 63 leu2_tRNA + 147 leuU_tRNA + 63 leuZ_tRNA + 336 lys1_tRNA + 168 met1_tRNA + 37800 mg2 + 231 phe1_tRNA + 15078 pi + 210 pro1_tRNA + 42 pro2_tRNA + 42 proL_tRNA + 63 proM_tRNA + 1 rib_70_elo2_b2329_21_cplx + 84 ser1_tRNA + 42 ser2_tRNA + 63 ser3_tRNA + 189 serV_tRNA + 315 thr1_tRNA + 63 thr2_tRNA + 21 thr3_tRNA + 42 thrU_tRNA + 21 trpT_tRNA + 147 tyr1_tRNA + 189 val1_tRNA + 126 val2_tRNA + 189 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_elo_b2330_18_rib1	Translation elongation 1 b2330 18 ribosome(s)	5562 EF-G.GTP + 342 EF-Tu.GTP.ala1-tRNA + 108 EF-Tu.GTP.ala2-tRNA + 306 EF-Tu.GTP.arg1-tRNA + 252 EF-Tu.GTP.asn1-tRNA + 486 EF-Tu.GTP.asp1-tRNA + 90 EF-Tu.GTP.cysT-tRNA + 108 EF-Tu.GTP.gln1-tRNA + 54 EF-Tu.GTP.gln2-tRNA + 414 EF-Tu.GTP.glu1-tRNA + 288 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 162 EF-Tu.GTP.hisR-tRNA + 414 EF-Tu.GTP.ile1-tRNA + 324 EF-Tu.GTP.leu1-tRNA + 72 EF-Tu.GTP.leu2-tRNA + 126 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 162 EF-Tu.GTP.lys1-tRNA + 126 EF-Tu.GTP.met1-tRNA + 198 EF-Tu.GTP.phe1-tRNA + 270 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 36 EF-Tu.GTP.proM-tRNA + 54 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 54 EF-Tu.GTP.ser3-tRNA + 108 EF-Tu.GTP.serV-tRNA + 126 EF-Tu.GTP.thr1-tRNA + 54 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.thr3-tRNA + 90 EF-Tu.GTP.trpT-tRNA + 198 EF-Tu.GTP.tyr1-tRNA + 234 EF-Tu.GTP.val1-tRNA + 126 EF-Tu.GTP.val2-tRNA + 72 EF-Tu.GTP.val3-tRNA + 27810 mg2 + 1 rib_ini_b2330_18 --> 1 rib_70_elo1_b2330_18_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_elo_b2330_18_rib2	Translation elongation 2 b2330 18 ribosome(s)	5544 h2o + 1 rib_70_elo1_b2330_18_cplx --> 5544 EF-G.GDP + 5544 EF-Tu.GDP + 342 ala1_tRNA + 108 ala2_tRNA + 306 arg1_tRNA + 252 asn1_tRNA + 468 asp1_tRNA + 90 cysT_tRNA + 18 fmet_tRNA + 108 gln1_tRNA + 54 gln2_tRNA + 414 glu1_tRNA + 288 gly1_tRNA + 18 glyT_tRNA + 11088 h + 162 hisR_tRNA + 414 ile1_tRNA + 324 leu1_tRNA + 72 leu2_tRNA + 126 leuU_tRNA + 18 leuZ_tRNA + 162 lys1_tRNA + 126 met1_tRNA + 27810 mg2 + 198 phe1_tRNA + 11088 pi + 270 pro1_tRNA + 18 pro2_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b2330_18_cplx + 54 ser1_tRNA + 36 ser2_tRNA + 54 ser3_tRNA + 108 serV_tRNA + 126 thr1_tRNA + 54 thr2_tRNA + 18 thr3_tRNA + 90 trpT_tRNA + 198 tyr1_tRNA + 234 val1_tRNA + 126 val2_tRNA + 72 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976

tl_elo_b2330_1_rib1	Translation elongation 1 b2330 1 ribosome(s)	309 EF-G.GTP + 19 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 17 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.asn1-tRNA + 27 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 23 EF-Tu.GTP.glu1-tRNA + 16 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 23 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 11 EF-Tu.GTP.phe1-tRNA + 15 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 11 EF-Tu.GTP.tyr1-tRNA + 13 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1545 mg2 + 1 rib_ini_b2330_1 --> 1 rib_70_elo1_b2330_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_elo_b2330_1_rib2	Translation elongation 2 b2330 1 ribosome(s)	308 h2o + 1 rib_70_elo1_b2330_1_cplx --> 308 EF-G.GDP + 308 EF-Tu.GDP + 19 ala1_tRNA + 6 ala2_tRNA + 17 arg1_tRNA + 14 asn1_tRNA + 26 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 3 gln2_tRNA + 23 glu1_tRNA + 16 gly1_tRNA + 1 glyT_tRNA + 616 h + 9 hisR_tRNA + 23 ile1_tRNA + 18 leu1_tRNA + 4 leu2_tRNA + 7 leuU_tRNA + 1 leuZ_tRNA + 9 lys1_tRNA + 7 met1_tRNA + 1545 mg2 + 11 phe1_tRNA + 616 pi + 15 pro1_tRNA + 1 pro2_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b2330_1_cplx + 3 ser1_tRNA + 2 ser2_tRNA + 3 ser3_tRNA + 6 serV_tRNA + 7 thr1_tRNA + 3 thr2_tRNA + 1 thr3_tRNA + 5 trpT_tRNA + 11 tyr1_tRNA + 13 val1_tRNA + 7 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_elo_b2330_9_rib1	Translation elongation 1 b2330 9 ribosome(s)	2781 EF-G.GTP + 171 EF-Tu.GTP.ala1-tRNA + 54 EF-Tu.GTP.ala2-tRNA + 153 EF-Tu.GTP.arg1-tRNA + 126 EF-Tu.GTP.asn1-tRNA + 243 EF-Tu.GTP.asp1-tRNA + 45 EF-Tu.GTP.cysT-tRNA + 54 EF-Tu.GTP.gln1-tRNA + 27 EF-Tu.GTP.gln2-tRNA + 207 EF-Tu.GTP.glu1-tRNA + 144 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 81 EF-Tu.GTP.hisR-tRNA + 207 EF-Tu.GTP.ile1-tRNA + 162 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 63 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuZ-tRNA + 81 EF-Tu.GTP.lys1-tRNA + 63 EF-Tu.GTP.met1-tRNA + 99 EF-Tu.GTP.phe1-tRNA + 135 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proM-tRNA + 27 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 27 EF-Tu.GTP.ser3-tRNA + 54 EF-Tu.GTP.serV-tRNA + 63 EF-Tu.GTP.thr1-tRNA + 27 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 45 EF-Tu.GTP.trpT-tRNA + 99 EF-Tu.GTP.tyr1-tRNA + 117 EF-Tu.GTP.val1-tRNA + 63 EF-Tu.GTP.val2-tRNA + 36 EF-Tu.GTP.val3-tRNA + 13905 mg2 + 1 rib_ini_b2330_9 --> 1 rib_70_elo1_b2330_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_elo_b2330_9_rib2	Translation elongation 2 b2330 9 ribosome(s)	2772 h2o + 1 rib_70_elo1_b2330_9_cplx --> 2772 EF-G.GDP + 2772 EF-Tu.GDP + 171 ala1_tRNA + 54 ala2_tRNA + 153 arg1_tRNA + 126 asn1_tRNA + 234 asp1_tRNA + 45 cysT_tRNA + 9 fmet_tRNA + 54 gln1_tRNA + 27 gln2_tRNA + 207 glu1_tRNA + 144 gly1_tRNA + 9 glyT_tRNA + 5544 h + 81 hisR_tRNA + 207 ile1_tRNA + 162 leu1_tRNA + 36 leu2_tRNA + 63 leuU_tRNA + 9 leuZ_tRNA + 81 lys1_tRNA + 63 met1_tRNA + 13905 mg2 + 99 phe1_tRNA + 5544 pi + 135 pro1_tRNA + 9 pro2_tRNA + 18 proM_tRNA + 1 rib_70_elo2_b2330_9_cplx + 27 ser1_tRNA + 18 ser2_tRNA + 27 ser3_tRNA + 54 serV_tRNA + 63 thr1_tRNA + 27 thr2_tRNA + 9 thr3_tRNA + 45 trpT_tRNA + 99 tyr1_tRNA + 117 val1_tRNA + 63 val2_tRNA + 36 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_elo_b2400_13_rib1	Translation elongation 1 b2400 13 ribosome(s)	6110 EF-G.GTP + 429 EF-Tu.GTP.ala1-tRNA + 104 EF-Tu.GTP.ala2-tRNA + 416 EF-Tu.GTP.arg1-tRNA + 260 EF-Tu.GTP.asn1-tRNA + 442 EF-Tu.GTP.asp1-tRNA + 91 EF-Tu.GTP.cysT-tRNA + 221 EF-Tu.GTP.gln1-tRNA + 13 EF-Tu.GTP.gln2-tRNA + 507 EF-Tu.GTP.glu1-tRNA + 338 EF-Tu.GTP.gly1-tRNA + 26 EF-Tu.GTP.glyU-tRNA + 247 EF-Tu.GTP.hisR-tRNA + 338 EF-Tu.GTP.ile1-tRNA + 390 EF-Tu.GTP.leu1-tRNA + 26 EF-Tu.GTP.leu2-tRNA + 65 EF-Tu.GTP.leuU-tRNA + 13 EF-Tu.GTP.leuZ-tRNA + 312 EF-Tu.GTP.lys1-tRNA + 143 EF-Tu.GTP.met1-tRNA + 195 EF-Tu.GTP.phe1-tRNA + 182 EF-Tu.GTP.pro1-tRNA + 78 EF-Tu.GTP.proM-tRNA + 65 EF-Tu.GTP.ser1-tRNA + 65 EF-Tu.GTP.ser2-tRNA + 117 EF-Tu.GTP.serV-tRNA + 143 EF-Tu.GTP.thr1-tRNA + 91 EF-Tu.GTP.thr2-tRNA + 52 EF-Tu.GTP.thr3-tRNA + 13 EF-Tu.GTP.thrU-tRNA + 104 EF-Tu.GTP.trpT-tRNA + 234 EF-Tu.GTP.tyr1-tRNA + 156 EF-Tu.GTP.val1-tRNA + 52 EF-Tu.GTP.val2-tRNA + 182 EF-Tu.GTP.val3-tRNA + 30550 mg2 + 1 rib_ini_b2400_13 --> 1 rib_70_elo1_b2400_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.66E+02	165.6044	0	6.92E+00	6.917
tl_elo_b2400_13_rib2	Translation elongation 2 b2400 13 ribosome(s)	6097 h2o + 1 rib_70_elo1_b2400_13_cplx --> 6097 EF-G.GDP + 6097 EF-Tu.GDP + 429 ala1_tRNA + 104 ala2_tRNA + 416 arg1_tRNA + 260 asn1_tRNA + 442 asp1_tRNA + 91 cysT_tRNA + 13 fmet_tRNA + 208 gln1_tRNA + 13 gln2_tRNA + 507 glu1_tRNA + 338 gly1_tRNA + 26 glyU_tRNA + 12194 h + 247 hisR_tRNA + 338 ile1_tRNA + 390 leu1_tRNA + 26 leu2_tRNA + 65 leuU_tRNA + 13 leuZ_tRNA + 312 lys1_tRNA + 143 met1_tRNA + 30550 mg2 + 195 phe1_tRNA + 12194 pi + 182 pro1_tRNA + 78 proM_tRNA + 1 rib_70_elo2_b2400_13_cplx + 65 ser1_tRNA + 65 ser2_tRNA + 117 serV_tRNA + 143 thr1_tRNA + 91 thr2_tRNA + 52 thr3_tRNA + 13 thrU_tRNA + 104 trpT_tRNA + 234 tyr1_tRNA + 156 val1_tRNA + 52 val2_tRNA + 182 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.66E+02	165.6044	0	6.92E+00	6.917
tl_elo_b2400_1_rib1	Translation elongation 1 b2400 1 ribosome(s)	470 EF-G.GTP + 33 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 32 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 34 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 17 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 39 EF-Tu.GTP.glu1-tRNA + 26 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 19 EF-Tu.GTP.hisR-tRNA + 26 EF-Tu.GTP.ile1-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 24 EF-Tu.GTP.lys1-tRNA + 11 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 9 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 14 EF-Tu.GTP.val3-tRNA + 2350 mg2 + 1 rib_ini_b2400_1 --> 1 rib_70_elo1_b2400_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.66E+02	165.6044	0	6.92E+00	6.917

tl_elo_b2400_1_rib2	Translation elongation 2 b2400 1 ribosome(s)	469 h2o + 1 rib_70_elo1_b2400_1_cplx --> 469 EF-G.GDP + 469 EF-Tu.GDP + 33 ala1_tRNA + 8 ala2_tRNA + 32 arg1_tRNA + 20 asn1_tRNA + 34 asp1_tRNA + 7 cysT_tRNA + 1 fmet_tRNA + 16 gln1_tRNA + 1 gln2_tRNA + 39 glu1_tRNA + 26 gly1_tRNA + 2 glyU_tRNA + 938 h + 19 hisR_tRNA + 26 ile1_tRNA + 30 leu1_tRNA + 2 leu2_tRNA + 5 leuU_tRNA + 1 leuZ_tRNA + 24 lys1_tRNA + 11 met1_tRNA + 2350 mg2 + 15 phe1_tRNA + 938 pi + 14 pro1_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b2400_1_cplx + 5 ser1_tRNA + 5 ser2_tRNA + 9 serV_tRNA + 11 thr1_tRNA + 7 thr2_tRNA + 4 thr3_tRNA + 1 thrU_tRNA + 8 trpT_tRNA + 18 tyr1_tRNA + 12 val1_tRNA + 4 val2_tRNA + 14 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.66E+02	165.6044	0	6.92E+00	6.917
tl_elo_b2400_27_rib1	Translation elongation 1 b2400 27 ribosome(s)	12690 EF-G.GTP + 891 EF-Tu.GTP.ala1-tRNA + 216 EF-Tu.GTP.ala2-tRNA + 864 EF-Tu.GTP.arg1-tRNA + 540 EF-Tu.GTP.asn1-tRNA + 918 EF-Tu.GTP.asp1-tRNA + 189 EF-Tu.GTP.cysT-tRNA + 459 EF-Tu.GTP.gln1-tRNA + 27 EF-Tu.GTP.gln2-tRNA + 1053 EF-Tu.GTP.glu1-tRNA + 702 EF-Tu.GTP.gly1-tRNA + 54 EF-Tu.GTP.glyU-tRNA + 513 EF-Tu.GTP.hisR-tRNA + 702 EF-Tu.GTP.ile1-tRNA + 810 EF-Tu.GTP.leu1-tRNA + 54 EF-Tu.GTP.leu2-tRNA + 135 EF-Tu.GTP.leuU-tRNA + 27 EF-Tu.GTP.leuZ-tRNA + 648 EF-Tu.GTP.lys1-tRNA + 297 EF-Tu.GTP.met1-tRNA + 405 EF-Tu.GTP.phe1-tRNA + 378 EF-Tu.GTP.pro1-tRNA + 162 EF-Tu.GTP.proM-tRNA + 135 EF-Tu.GTP.ser1-tRNA + 135 EF-Tu.GTP.ser2-tRNA + 243 EF-Tu.GTP.serV-tRNA + 297 EF-Tu.GTP.thr1-tRNA + 189 EF-Tu.GTP.thr2-tRNA + 108 EF-Tu.GTP.thr3-tRNA + 27 EF-Tu.GTP.thrU-tRNA + 216 EF-Tu.GTP.trpT-tRNA + 486 EF-Tu.GTP.tyr1-tRNA + 324 EF-Tu.GTP.val1-tRNA + 108 EF-Tu.GTP.val2-tRNA + 378 EF-Tu.GTP.val3-tRNA + 63450 mg2 + 1 rib_ini_b2400_27 --> 1 rib_70_elo1_b2400_27_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.48E+02	148.3353	0	6.92E+00	6.917
tl_elo_b2400_27_rib2	Translation elongation 2 b2400 27 ribosome(s)	12663 h2o + 1 rib_70_elo1_b2400_27_cplx --> 12663 EF-G.GDP + 12663 EF-Tu.GDP + 891 ala1_tRNA + 216 ala2_tRNA + 864 arg1_tRNA + 540 asn1_tRNA + 918 asp1_tRNA + 189 cysT_tRNA + 27 fmet_tRNA + 432 gln1_tRNA + 27 gln2_tRNA + 1053 glu1_tRNA + 702 gly1_tRNA + 54 glyU_tRNA + 25326 h + 513 hisR_tRNA + 702 ile1_tRNA + 810 leu1_tRNA + 54 leu2_tRNA + 135 leuU_tRNA + 27 leuZ_tRNA + 648 lys1_tRNA + 297 met1_tRNA + 63450 mg2 + 405 phe1_tRNA + 25326 pi + 378 pro1_tRNA + 162 proM_tRNA + 1 rib_70_elo2_b2400_27_cplx + 135 ser1_tRNA + 135 ser2_tRNA + 243 serV_tRNA + 297 thr1_tRNA + 189 thr2_tRNA + 108 thr3_tRNA + 27 thrU_tRNA + 216 trpT_tRNA + 486 tyr1_tRNA + 324 val1_tRNA + 108 val2_tRNA + 378 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.48E+02	148.3353	0	6.92E+00	6.917
tl_elo_b2514_12_rib1	Translation elongation 1 b2514 12 ribosome(s)	5076 EF-G.GTP + 360 EF-Tu.GTP.ala1-tRNA + 132 EF-Tu.GTP.ala2-tRNA + 384 EF-Tu.GTP.arg1-tRNA + 204 EF-Tu.GTP.asn1-tRNA + 264 EF-Tu.GTP.asp1-tRNA + 60 EF-Tu.GTP.cysT-tRNA + 168 EF-Tu.GTP.gln1-tRNA + 60 EF-Tu.GTP.gln2-tRNA + 408 EF-Tu.GTP.glu1-tRNA + 444 EF-Tu.GTP.gly1-tRNA + 48 EF-Tu.GTP.glyU-tRNA + 96 EF-Tu.GTP.hisR-tRNA + 168 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.ile2-tRNA + 312 EF-Tu.GTP.leu1-tRNA + 72 EF-Tu.GTP.leu2-tRNA + 132 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuW-tRNA + 60 EF-Tu.GTP.leuZ-tRNA + 192 EF-Tu.GTP.lys1-tRNA + 96 EF-Tu.GTP.met1-tRNA + 144 EF-Tu.GTP.phe1-tRNA + 132 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.ser1-tRNA + 60 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serT-tRNA + 72 EF-Tu.GTP.serV-tRNA + 84 EF-Tu.GTP.thr1-tRNA + 60 EF-Tu.GTP.thr2-tRNA + 48 EF-Tu.GTP.thr3-tRNA + 48 EF-Tu.GTP.thrU-tRNA + 72 EF-Tu.GTP.trpT-tRNA + 180 EF-Tu.GTP.tyr1-tRNA + 276 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val2-tRNA + 84 EF-Tu.GTP.val3-tRNA + 25380 mg2 + 1 rib_ini_b2514_12 --> 1 rib_70_elo1_b2514_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_elo_b2514_12_rib2	Translation elongation 2 b2514 12 ribosome(s)	5064 h2o + 1 rib_70_elo1_b2514_12_cplx --> 5064 EF-G.GDP + 5064 EF-Tu.GDP + 360 ala1_tRNA + 132 ala2_tRNA + 384 arg1_tRNA + 204 asn1_tRNA + 264 asp1_tRNA + 60 cysT_tRNA + 12 fmet_tRNA + 168 gln1_tRNA + 60 gln2_tRNA + 408 glu1_tRNA + 432 gly1_tRNA + 48 glyU_tRNA + 10128 h + 96 hisR_tRNA + 168 ile1_tRNA + 12 ile2_tRNA + 312 leu1_tRNA + 72 leu2_tRNA + 132 leuU_tRNA + 12 leuW_tRNA + 60 leuZ_tRNA + 192 lys1_tRNA + 96 met1_tRNA + 25380 mg2 + 144 phe1_tRNA + 10128 pi + 132 pro1_tRNA + 36 pro2_tRNA + 1 rib_70_elo2_b2514_12_cplx + 24 ser1_tRNA + 60 ser2_tRNA + 12 ser3_tRNA + 24 serT_tRNA + 72 serV_tRNA + 84 thr1_tRNA + 60 thr2_tRNA + 48 thr3_tRNA + 48 thrU_tRNA + 72 trpT_tRNA + 180 tyr1_tRNA + 276 val1_tRNA + 36 val2_tRNA + 84 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_elo_b2514_1_rib1	Translation elongation 1 b2514 1 ribosome(s)	423 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.ala2-tRNA + 32 EF-Tu.GTP.arg1-tRNA + 17 EF-Tu.GTP.asn1-tRNA + 22 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 14 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 34 EF-Tu.GTP.glu1-tRNA + 37 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 14 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 26 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 23 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 2115 mg2 + 1 rib_ini_b2514_1 --> 1 rib_70_elo1_b2514_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219

tl_elo_b2514_1_rib2	Translation elongation 2 b2514 1 ribosome(s)	422 h2o + 1 rib_70_elo1_b2514_1_cplx --> 422 EF-G.GDP + 422 EF-Tu.GDP + 30 ala1_tRNA + 11 ala2_tRNA + 32 arg1_tRNA + 17 asn1_tRNA + 22 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 14 gln1_tRNA + 5 gln2_tRNA + 34 glu1_tRNA + 36 gly1_tRNA + 4 glyU_tRNA + 844 h + 8 hisR_tRNA + 14 ile1_tRNA + 1 ile2_tRNA + 26 leu1_tRNA + 6 leu2_tRNA + 11 leuU_tRNA + 1 leuW_tRNA + 5 leuZ_tRNA + 16 lys1_tRNA + 8 met1_tRNA + 2115 mg2 + 12 phe1_tRNA + 844 pi + 11 pro1_tRNA + 3 pro2_tRNA + 1 rib_70_elo2_b2514_1_cplx + 2 ser1_tRNA + 5 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 6 serV_tRNA + 7 thr1_tRNA + 5 thr2_tRNA + 4 thr3_tRNA + 4 thrU_tRNA + 6 trpT_tRNA + 15 tyr1_tRNA + 23 val1_tRNA + 3 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_elo_b2514_24_rib1	Translation elongation 1 b2514 24 ribosome(s)	10152 EF-G.GTP + 720 EF-Tu.GTP.ala1-tRNA + 264 EF-Tu.GTP.ala2-tRNA + 768 EF-Tu.GTP.arg1-tRNA + 408 EF-Tu.GTP.asn1-tRNA + 528 EF-Tu.GTP.asp1-tRNA + 120 EF-Tu.GTP.cysT-tRNA + 336 EF-Tu.GTP.gln1-tRNA + 120 EF-Tu.GTP.gln2-tRNA + 816 EF-Tu.GTP.glu1-tRNA + 888 EF-Tu.GTP.gly1-tRNA + 96 EF-Tu.GTP.glyU-tRNA + 192 EF-Tu.GTP.hisR-tRNA + 336 EF-Tu.GTP.ile1-tRNA + 24 EF-Tu.GTP.ile2-tRNA + 624 EF-Tu.GTP.leu1-tRNA + 144 EF-Tu.GTP.leu2-tRNA + 264 EF-Tu.GTP.leuU-tRNA + 24 EF-Tu.GTP.leuW-tRNA + 120 EF-Tu.GTP.leuZ-tRNA + 384 EF-Tu.GTP.lys1-tRNA + 192 EF-Tu.GTP.met1-tRNA + 288 EF-Tu.GTP.phe1-tRNA + 264 EF-Tu.GTP.pro1-tRNA + 72 EF-Tu.GTP.pro2-tRNA + 48 EF-Tu.GTP.ser1-tRNA + 120 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 48 EF-Tu.GTP.serT-tRNA + 144 EF-Tu.GTP.serV-tRNA + 168 EF-Tu.GTP.thr1-tRNA + 120 EF-Tu.GTP.thr2-tRNA + 96 EF-Tu.GTP.thr3-tRNA + 96 EF-Tu.GTP.thrU-tRNA + 144 EF-Tu.GTP.trpT-tRNA + 360 EF-Tu.GTP.tyr1-tRNA + 552 EF-Tu.GTP.val1-tRNA + 72 EF-Tu.GTP.val2-tRNA + 168 EF-Tu.GTP.val3-tRNA + 50760 mg2 + 1 rib_ini_b2514_24 --> 1 rib_70_elo1_b2514_24_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_elo_b2514_24_rib2	Translation elongation 2 b2514 24 ribosome(s)	10128 h2o + 1 rib_70_elo1_b2514_24_cplx --> 10128 EF-G.GDP + 10128 EF-Tu.GDP + 720 ala1_tRNA + 264 ala2_tRNA + 768 arg1_tRNA + 408 asn1_tRNA + 528 asp1_tRNA + 120 cysT_tRNA + 24 fmet_tRNA + 336 gln1_tRNA + 120 gln2_tRNA + 816 glu1_tRNA + 864 gly1_tRNA + 96 glyU_tRNA + 20256 h + 192 hisR_tRNA + 336 ile1_tRNA + 24 ile2_tRNA + 624 leu1_tRNA + 144 leu2_tRNA + 264 leuU_tRNA + 24 leuW_tRNA + 120 leuZ_tRNA + 384 lys1_tRNA + 192 met1_tRNA + 50760 mg2 + 288 phe1_tRNA + 20256 pi + 264 pro1_tRNA + 72 pro2_tRNA + 1 rib_70_elo2_b2514_24_cplx + 48 ser1_tRNA + 120 ser2_tRNA + 24 ser3_tRNA + 48 serT_tRNA + 144 serV_tRNA + 168 thr1_tRNA + 120 thr2_tRNA + 96 thr3_tRNA + 96 thrU_tRNA + 144 trpT_tRNA + 360 tyr1_tRNA + 552 val1_tRNA + 72 val2_tRNA + 168 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_elo_b2528_1_rib1	Translation elongation 1 b2528 1 ribosome(s)	106 EF-G.GTP + 5 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 2 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 530 mg2 + 1 rib_ini_b2528_1 --> 1 rib_70_elo1_b2528_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868
tl_elo_b2528_1_rib2	Translation elongation 2 b2528 1 ribosome(s)	105 h2o + 1 rib_70_elo1_b2528_1_cplx --> 105 EF-G.GDP + 105 EF-Tu.GDP + 5 ala1_tRNA + 3 arg1_tRNA + 1 argU_tRNA + 5 asn1_tRNA + 8 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 1 gln2_tRNA + 8 glu1_tRNA + 10 gly1_tRNA + 3 glyU_tRNA + 210 h + 1 hisR_tRNA + 2 ile1_tRNA + 9 leu1_tRNA + 7 lys1_tRNA + 1 met1_tRNA + 530 mg2 + 9 phe1_tRNA + 210 pi + 3 pro1_tRNA + 1 rib_70_elo2_b2528_1_cplx + 1 ser1_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 4 serV_tRNA + 3 thr1_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 1 tyr1_tRNA + 7 val1_tRNA + 3 val2_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868
tl_elo_b2528_3_rib1	Translation elongation 1 b2528 3 ribosome(s)	318 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argU-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 24 EF-Tu.GTP.asp1-tRNA + 9 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 30 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 27 EF-Tu.GTP.leu1-tRNA + 21 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 27 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 12 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 21 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1590 mg2 + 1 rib_ini_b2528_3 --> 1 rib_70_elo1_b2528_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868
tl_elo_b2528_3_rib2	Translation elongation 2 b2528 3 ribosome(s)	315 h2o + 1 rib_70_elo1_b2528_3_cplx --> 315 EF-G.GDP + 315 EF-Tu.GDP + 15 ala1_tRNA + 9 arg1_tRNA + 3 argU_tRNA + 15 asn1_tRNA + 24 asp1_tRNA + 9 cysT_tRNA + 3 fmet_tRNA + 3 gln1_tRNA + 3 gln2_tRNA + 24 glu1_tRNA + 30 gly1_tRNA + 9 glyU_tRNA + 630 h + 3 hisR_tRNA + 6 ile1_tRNA + 27 leu1_tRNA + 21 lys1_tRNA + 3 met1_tRNA + 1590 mg2 + 27 phe1_tRNA + 630 pi + 9 pro1_tRNA + 1 rib_70_elo2_b2528_3_cplx + 3 ser1_tRNA + 3 ser3_tRNA + 3 serT_tRNA + 12 serV_tRNA + 9 thr1_tRNA + 6 thr3_tRNA + 3 thrU_tRNA + 3 tyr1_tRNA + 21 val1_tRNA + 9 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868

tl_elo_b2528_6_rib1	Translation elongation 1 b2528 6 ribosome(s)	636 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argU-tRNA + 30 EF-Tu.GTP.asn1-tRNA + 48 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 48 EF-Tu.GTP.glu1-tRNA + 60 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 54 EF-Tu.GTP.leu1-tRNA + 42 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 54 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serT-tRNA + 24 EF-Tu.GTP.serV-tRNA + 18 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 42 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 3180 mg2 + 1 rib_ini_b2528_6 --> 1 rib_70_elo1_b2528_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868
tl_elo_b2528_6_rib2	Translation elongation 2 b2528 6 ribosome(s)	630 h2o + 1 rib_70_elo1_b2528_6_cplx --> 630 EF-G.GDP + 630 EF-Tu.GDP + 30 ala1_tRNA + 18 arg1_tRNA + 6 argU_tRNA + 30 asn1_tRNA + 48 asp1_tRNA + 18 cysT_tRNA + 6 fmet_tRNA + 6 gln1_tRNA + 6 gln2_tRNA + 48 glu1_tRNA + 60 gly1_tRNA + 18 glyU_tRNA + 1260 h + 6 hisR_tRNA + 12 ile1_tRNA + 54 leu1_tRNA + 42 lys1_tRNA + 6 met1_tRNA + 3180 mg2 + 54 phe1_tRNA + 1260 pi + 18 pro1_tRNA + 1 rib_70_elo2_b2528_6_cplx + 6 ser1_tRNA + 6 ser3_tRNA + 6 serT_tRNA + 24 serV_tRNA + 18 thr1_tRNA + 12 thr3_tRNA + 6 thrU_tRNA + 6 tyr1_tRNA + 42 val1_tRNA + 18 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868
tl_elo_b2529_1_rib1	Translation elongation 1 b2529 1 ribosome(s)	127 EF-G.GTP + 12 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 3 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 7 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 1 EF-Tu.GTP.val3-tRNA + 635 mg2 + 1 rib_ini_b2529_1 --> 1 rib_70_elo1_b2529_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_elo_b2529_1_rib2	Translation elongation 2 b2529 1 ribosome(s)	126 h2o + 1 rib_70_elo1_b2529_1_cplx --> 126 EF-G.GDP + 126 EF-Tu.GDP + 12 ala1_tRNA + 3 ala2_tRNA + 3 arg1_tRNA + 7 asn1_tRNA + 10 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 12 glu1_tRNA + 7 gly1_tRNA + 2 glyU_tRNA + 252 h + 2 hisR_tRNA + 11 ile1_tRNA + 3 leu1_tRNA + 1 leu2_tRNA + 2 leuU_tRNA + 11 lys1_tRNA + 2 met1_tRNA + 635 mg2 + 2 phe1_tRNA + 252 pi + 4 pro1_tRNA + 1 rib_70_elo2_b2529_1_cplx + 4 ser1_tRNA + 2 ser2_tRNA + 4 serV_tRNA + 2 thr1_tRNA + 1 thr2_tRNA + 1 trpT_tRNA + 4 tyr1_tRNA + 5 val1_tRNA + 3 val2_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_elo_b2529_3_rib1	Translation elongation 1 b2529 3 ribosome(s)	381 EF-G.GTP + 36 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 9 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.asn1-tRNA + 30 EF-Tu.GTP.asp1-tRNA + 9 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 36 EF-Tu.GTP.glu1-tRNA + 21 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 33 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 1905 mg2 + 1 rib_ini_b2529_3 --> 1 rib_70_elo1_b2529_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_elo_b2529_3_rib2	Translation elongation 2 b2529 3 ribosome(s)	378 h2o + 1 rib_70_elo1_b2529_3_cplx --> 378 EF-G.GDP + 378 EF-Tu.GDP + 36 ala1_tRNA + 9 ala2_tRNA + 9 arg1_tRNA + 21 asn1_tRNA + 30 asp1_tRNA + 9 cysT_tRNA + 3 fmet_tRNA + 6 gln1_tRNA + 36 glu1_tRNA + 21 gly1_tRNA + 6 glyU_tRNA + 756 h + 6 hisR_tRNA + 33 ile1_tRNA + 9 leu1_tRNA + 3 leu2_tRNA + 6 leuU_tRNA + 33 lys1_tRNA + 6 met1_tRNA + 1905 mg2 + 6 phe1_tRNA + 756 pi + 12 pro1_tRNA + 1 rib_70_elo2_b2529_3_cplx + 12 ser1_tRNA + 6 ser2_tRNA + 12 serV_tRNA + 6 thr1_tRNA + 3 thr2_tRNA + 3 trpT_tRNA + 12 tyr1_tRNA + 15 val1_tRNA + 9 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_elo_b2529_7_rib1	Translation elongation 1 b2529 7 ribosome(s)	889 EF-G.GTP + 84 EF-Tu.GTP.ala1-tRNA + 21 EF-Tu.GTP.ala2-tRNA + 21 EF-Tu.GTP.arg1-tRNA + 49 EF-Tu.GTP.asn1-tRNA + 70 EF-Tu.GTP.asp1-tRNA + 21 EF-Tu.GTP.cysT-tRNA + 14 EF-Tu.GTP.gln1-tRNA + 84 EF-Tu.GTP.glu1-tRNA + 49 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyU-tRNA + 14 EF-Tu.GTP.hisR-tRNA + 77 EF-Tu.GTP.ile1-tRNA + 21 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 14 EF-Tu.GTP.leuU-tRNA + 84 EF-Tu.GTP.lys1-tRNA + 14 EF-Tu.GTP.met1-tRNA + 14 EF-Tu.GTP.phe1-tRNA + 28 EF-Tu.GTP.pro1-tRNA + 28 EF-Tu.GTP.ser1-tRNA + 14 EF-Tu.GTP.ser2-tRNA + 28 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 28 EF-Tu.GTP.tyr1-tRNA + 35 EF-Tu.GTP.val1-tRNA + 21 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 4445 mg2 + 1 rib_ini_b2529_7 --> 1 rib_70_elo1_b2529_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_elo_b2529_7_rib2	Translation elongation 2 b2529 7 ribosome(s)	882 h2o + 1 rib_70_elo1_b2529_7_cplx --> 882 EF-G.GDP + 882 EF-Tu.GDP + 84 ala1_tRNA + 21 ala2_tRNA + 21 arg1_tRNA + 49 asn1_tRNA + 70 asp1_tRNA + 21 cysT_tRNA + 7 fmet_tRNA + 14 gln1_tRNA + 84 glu1_tRNA + 49 gly1_tRNA + 14 glyU_tRNA + 1764 h + 14 hisR_tRNA + 77 ile1_tRNA + 21 leu1_tRNA + 7 leu2_tRNA + 14 leuU_tRNA + 77 lys1_tRNA + 14 met1_tRNA + 4445 mg2 + 14 phe1_tRNA + 1764 pi + 28 pro1_tRNA + 1 rib_70_elo2_b2529_7_cplx + 28 ser1_tRNA + 14 ser2_tRNA + 28 serV_tRNA + 14 thr1_tRNA + 7 thr2_tRNA + 7 trpT_tRNA + 28 tyr1_tRNA + 35 val1_tRNA + 21 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668

tl_elo_b2530_11_rib1	Translation elongation 1 b2530 11 ribosome(s)	4433 EF-G.GTP + 286 EF-Tu.GTP.ala1-tRNA + 77 EF-Tu.GTP.ala2-tRNA + 308 EF-Tu.GTP.arg1-tRNA + 165 EF-Tu.GTP.asn1-tRNA + 242 EF-Tu.GTP.asp1-tRNA + 33 EF-Tu.GTP.cysT-tRNA + 121 EF-Tu.GTP.gln1-tRNA + 11 EF-Tu.GTP.gln2-tRNA + 363 EF-Tu.GTP.glu1-tRNA + 341 EF-Tu.GTP.gly1-tRNA + 22 EF-Tu.GTP.glyT-tRNA + 11 EF-Tu.GTP.glyU-tRNA + 143 EF-Tu.GTP.hisR-tRNA + 341 EF-Tu.GTP.ile1-tRNA + 275 EF-Tu.GTP.leu1-tRNA + 11 EF-Tu.GTP.leu2-tRNA + 77 EF-Tu.GTP.leuU-tRNA + 33 EF-Tu.GTP.leuZ-tRNA + 209 EF-Tu.GTP.lys1-tRNA + 165 EF-Tu.GTP.met1-tRNA + 110 EF-Tu.GTP.phe1-tRNA + 121 EF-Tu.GTP.pro1-tRNA + 22 EF-Tu.GTP.pro2-tRNA + 88 EF-Tu.GTP.ser1-tRNA + 88 EF-Tu.GTP.ser2-tRNA + 11 EF-Tu.GTP.ser3-tRNA + 22 EF-Tu.GTP.serT-tRNA + 77 EF-Tu.GTP.serV-tRNA + 132 EF-Tu.GTP.thr1-tRNA + 33 EF-Tu.GTP.thr2-tRNA + 33 EF-Tu.GTP.thr3-tRNA + 44 EF-Tu.GTP.trpT-tRNA + 143 EF-Tu.GTP.tyr1-tRNA + 132 EF-Tu.GTP.val1-tRNA + 55 EF-Tu.GTP.val2-tRNA + 88 EF-Tu.GTP.val3-tRNA + 22165 mg2 + 1 rib_ini_b2530_11 --> 1 rib_70_elo1_b2530_11_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_elo_b2530_11_rib2	Translation elongation 2 b2530 11 ribosome(s)	4422 h2o + 1 rib_70_elo1_b2530_11_cplx --> 4422 EF-G.GDP + 4422 EF-Tu.GDP + 286 ala1_tRNA + 77 ala2_tRNA + 308 arg1_tRNA + 165 asn1_tRNA + 242 asp1_tRNA + 33 cysT_tRNA + 11 fmet_tRNA + 121 gln1_tRNA + 11 gln2_tRNA + 363 glu1_tRNA + 341 gly1_tRNA + 22 glyT_tRNA + 11 glyU_tRNA + 8844 h + 132 hisR_tRNA + 341 ile1_tRNA + 275 leu1_tRNA + 11 leu2_tRNA + 77 leuU_tRNA + 33 leuZ_tRNA + 209 lys1_tRNA + 165 met1_tRNA + 22165 mg2 + 110 phe1_tRNA + 8844 pi + 121 pro1_tRNA + 22 pro2_tRNA + 1 rib_70_elo2_b2530_11_cplx + 88 ser1_tRNA + 88 ser2_tRNA + 11 ser3_tRNA + 22 serT_tRNA + 77 serV_tRNA + 132 thr1_tRNA + 33 thr2_tRNA + 33 thr3_tRNA + 44 trpT_tRNA + 143 tyr1_tRNA + 132 val1_tRNA + 55 val2_tRNA + 88 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_elo_b2530_1_rib1	Translation elongation 1 b2530 1 ribosome(s)	403 EF-G.GTP + 26 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 28 EF-Tu.GTP.arg1-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 22 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 11 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 33 EF-Tu.GTP.glu1-tRNA + 31 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 13 EF-Tu.GTP.hisR-tRNA + 31 EF-Tu.GTP.ile1-tRNA + 25 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 19 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 13 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 2015 mg2 + 1 rib_ini_b2530_1 --> 1 rib_70_elo1_b2530_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_elo_b2530_1_rib2	Translation elongation 2 b2530 1 ribosome(s)	402 h2o + 1 rib_70_elo1_b2530_1_cplx --> 402 EF-G.GDP + 402 EF-Tu.GDP + 26 ala1_tRNA + 7 ala2_tRNA + 28 arg1_tRNA + 15 asn1_tRNA + 22 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 11 gln1_tRNA + 1 gln2_tRNA + 33 glu1_tRNA + 31 gly1_tRNA + 2 glyT_tRNA + 1 glyU_tRNA + 804 h + 12 hisR_tRNA + 31 ile1_tRNA + 25 leu1_tRNA + 1 leu2_tRNA + 7 leuU_tRNA + 3 leuZ_tRNA + 19 lys1_tRNA + 15 met1_tRNA + 2015 mg2 + 10 phe1_tRNA + 804 pi + 11 pro1_tRNA + 2 pro2_tRNA + 1 rib_70_elo2_b2530_1_cplx + 8 ser1_tRNA + 8 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 7 serV_tRNA + 12 thr1_tRNA + 3 thr2_tRNA + 3 thr3_tRNA + 4 trpT_tRNA + 13 tyr1_tRNA + 12 val1_tRNA + 5 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_elo_b2530_23_rib1	Translation elongation 1 b2530 23 ribosome(s)	9269 EF-G.GTP + 598 EF-Tu.GTP.ala1-tRNA + 161 EF-Tu.GTP.ala2-tRNA + 644 EF-Tu.GTP.arg1-tRNA + 345 EF-Tu.GTP.asn1-tRNA + 506 EF-Tu.GTP.asp1-tRNA + 69 EF-Tu.GTP.cysT-tRNA + 253 EF-Tu.GTP.gln1-tRNA + 23 EF-Tu.GTP.gln2-tRNA + 759 EF-Tu.GTP.glu1-tRNA + 713 EF-Tu.GTP.gly1-tRNA + 46 EF-Tu.GTP.glyT-tRNA + 23 EF-Tu.GTP.glyU-tRNA + 299 EF-Tu.GTP.hisR-tRNA + 713 EF-Tu.GTP.ile1-tRNA + 575 EF-Tu.GTP.leu1-tRNA + 23 EF-Tu.GTP.leu2-tRNA + 161 EF-Tu.GTP.leuU-tRNA + 69 EF-Tu.GTP.leuZ-tRNA + 437 EF-Tu.GTP.lys1-tRNA + 345 EF-Tu.GTP.met1-tRNA + 230 EF-Tu.GTP.phe1-tRNA + 253 EF-Tu.GTP.pro1-tRNA + 46 EF-Tu.GTP.pro2-tRNA + 184 EF-Tu.GTP.ser1-tRNA + 184 EF-Tu.GTP.ser2-tRNA + 23 EF-Tu.GTP.ser3-tRNA + 46 EF-Tu.GTP.serT-tRNA + 161 EF-Tu.GTP.serV-tRNA + 276 EF-Tu.GTP.thr1-tRNA + 69 EF-Tu.GTP.thr2-tRNA + 69 EF-Tu.GTP.thr3-tRNA + 92 EF-Tu.GTP.trpT-tRNA + 299 EF-Tu.GTP.tyr1-tRNA + 276 EF-Tu.GTP.val1-tRNA + 115 EF-Tu.GTP.val2-tRNA + 184 EF-Tu.GTP.val3-tRNA + 46345 mg2 + 1 rib_ini_b2530_23 --> 1 rib_70_elo1_b2530_23_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_elo_b2530_23_rib2	Translation elongation 2 b2530 23 ribosome(s)	9246 h2o + 1 rib_70_elo1_b2530_23_cplx --> 9246 EF-G.GDP + 9246 EF-Tu.GDP + 598 ala1_tRNA + 161 ala2_tRNA + 644 arg1_tRNA + 345 asn1_tRNA + 506 asp1_tRNA + 69 cysT_tRNA + 23 fmet_tRNA + 253 gln1_tRNA + 23 gln2_tRNA + 759 glu1_tRNA + 713 gly1_tRNA + 46 glyT_tRNA + 23 glyU_tRNA + 18492 h + 276 hisR_tRNA + 713 ile1_tRNA + 575 leu1_tRNA + 23 leu2_tRNA + 161 leuU_tRNA + 69 leuZ_tRNA + 437 lys1_tRNA + 345 met1_tRNA + 46345 mg2 + 230 phe1_tRNA + 18492 pi + 253 pro1_tRNA + 46 pro2_tRNA + 1 rib_70_elo2_b2530_23_cplx + 184 ser1_tRNA + 184 ser2_tRNA + 23 ser3_tRNA + 46 serT_tRNA + 161 serV_tRNA + 276 thr1_tRNA + 69 thr2_tRNA + 69 thr3_tRNA + 92 trpT_tRNA + 299 tyr1_tRNA + 276 val1_tRNA + 115 val2_tRNA + 184 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088

tl_elo_b2531_1_rib1	Translation elongation 1 b2531 1 ribosome(s)	161 EF-G.GTP + 8 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 7 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 6 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val3-tRNA + 805 mg2 + 1 rib_ini_b2531_1 --> 1 rib_70_elo1_b2531_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_elo_b2531_1_rib2	Translation elongation 2 b2531 1 ribosome(s)	160 h2o + 1 rib_70_elo1_b2531_1_cplx --> 160 EF-G.GDP + 160 EF-Tu.GDP + 7 ala1_tRNA + 5 ala2_tRNA + 12 arg1_tRNA + 1 argU_tRNA + 6 asn1_tRNA + 12 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 2 gln2_tRNA + 7 glu1_tRNA + 15 gly1_tRNA + 2 glyT_tRNA + 1 glyU_tRNA + 320 h + 3 hisR_tRNA + 6 ile1_tRNA + 10 leu1_tRNA + 2 leu2_tRNA + 5 leuU_tRNA + 3 leuZ_tRNA + 6 lys1_tRNA + 1 met1_tRNA + 805 mg2 + 2 phe1_tRNA + 320 pi + 2 pro1_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b2531_1_cplx + 4 ser1_tRNA + 5 ser2_tRNA + 5 serV_tRNA + 5 thr1_tRNA + 2 thr2_tRNA + 2 thrU_tRNA + 1 trpT_tRNA + 3 tyr1_tRNA + 7 val1_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_elo_b2531_4_rib1	Translation elongation 1 b2531 4 ribosome(s)	644 EF-G.GTP + 32 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 48 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argU-tRNA + 24 EF-Tu.GTP.asn1-tRNA + 48 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 20 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 28 EF-Tu.GTP.glu1-tRNA + 60 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 24 EF-Tu.GTP.ile1-tRNA + 40 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 20 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 24 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 20 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 28 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val3-tRNA + 3220 mg2 + 1 rib_ini_b2531_4 --> 1 rib_70_elo1_b2531_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_elo_b2531_4_rib2	Translation elongation 2 b2531 4 ribosome(s)	640 h2o + 1 rib_70_elo1_b2531_4_cplx --> 640 EF-G.GDP + 640 EF-Tu.GDP + 28 ala1_tRNA + 20 ala2_tRNA + 48 arg1_tRNA + 4 argU_tRNA + 24 asn1_tRNA + 48 asp1_tRNA + 12 cysT_tRNA + 4 fmet_tRNA + 20 gln1_tRNA + 8 gln2_tRNA + 28 glu1_tRNA + 60 gly1_tRNA + 8 glyT_tRNA + 4 glyU_tRNA + 1280 h + 12 hisR_tRNA + 24 ile1_tRNA + 40 leu1_tRNA + 8 leu2_tRNA + 20 leuU_tRNA + 12 leuZ_tRNA + 24 lys1_tRNA + 4 met1_tRNA + 3220 mg2 + 8 phe1_tRNA + 1280 pi + 8 pro1_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b2531_4_cplx + 16 ser1_tRNA + 20 ser2_tRNA + 20 serV_tRNA + 20 thr1_tRNA + 8 thr2_tRNA + 8 thrU_tRNA + 4 trpT_tRNA + 12 tyr1_tRNA + 28 val1_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_elo_b2531_9_rib1	Translation elongation 1 b2531 9 ribosome(s)	1449 EF-G.GTP + 72 EF-Tu.GTP.ala1-tRNA + 45 EF-Tu.GTP.ala2-tRNA + 108 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argU-tRNA + 54 EF-Tu.GTP.asn1-tRNA + 108 EF-Tu.GTP.asp1-tRNA + 27 EF-Tu.GTP.cysT-tRNA + 45 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 63 EF-Tu.GTP.glu1-tRNA + 135 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 9 EF-Tu.GTP.glyU-tRNA + 27 EF-Tu.GTP.hisR-tRNA + 54 EF-Tu.GTP.ile1-tRNA + 90 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.leu2-tRNA + 45 EF-Tu.GTP.leuU-tRNA + 27 EF-Tu.GTP.leuZ-tRNA + 54 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 18 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.proM-tRNA + 36 EF-Tu.GTP.ser1-tRNA + 45 EF-Tu.GTP.ser2-tRNA + 45 EF-Tu.GTP.serV-tRNA + 45 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 9 EF-Tu.GTP.trpT-tRNA + 27 EF-Tu.GTP.tyr1-tRNA + 63 EF-Tu.GTP.val1-tRNA + 54 EF-Tu.GTP.val3-tRNA + 7245 mg2 + 1 rib_ini_b2531_9 --> 1 rib_70_elo1_b2531_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_elo_b2531_9_rib2	Translation elongation 2 b2531 9 ribosome(s)	1440 h2o + 1 rib_70_elo1_b2531_9_cplx --> 1440 EF-G.GDP + 1440 EF-Tu.GDP + 63 ala1_tRNA + 45 ala2_tRNA + 108 arg1_tRNA + 9 argU_tRNA + 54 asn1_tRNA + 108 asp1_tRNA + 27 cysT_tRNA + 9 fmet_tRNA + 45 gln1_tRNA + 18 gln2_tRNA + 63 glu1_tRNA + 135 gly1_tRNA + 18 glyT_tRNA + 9 glyU_tRNA + 2880 h + 27 hisR_tRNA + 54 ile1_tRNA + 90 leu1_tRNA + 18 leu2_tRNA + 45 leuU_tRNA + 27 leuZ_tRNA + 54 lys1_tRNA + 9 met1_tRNA + 7245 mg2 + 18 phe1_tRNA + 2880 pi + 18 pro1_tRNA + 18 proM_tRNA + 1 rib_70_elo2_b2531_9_cplx + 36 ser1_tRNA + 45 ser2_tRNA + 45 serV_tRNA + 45 thr1_tRNA + 18 thr2_tRNA + 18 thrU_tRNA + 9 trpT_tRNA + 27 tyr1_tRNA + 63 val1_tRNA + 54 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_elo_b2559_10_rib1	Translation elongation 1 b2559 10 ribosome(s)	1770 EF-G.GTP + 160 EF-Tu.GTP.ala1-tRNA + 40 EF-Tu.GTP.ala2-tRNA + 140 EF-Tu.GTP.arg1-tRNA + 30 EF-Tu.GTP.argX-tRNA + 50 EF-Tu.GTP.asn1-tRNA + 80 EF-Tu.GTP.asp1-tRNA + 30 EF-Tu.GTP.cysT-tRNA + 30 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 120 EF-Tu.GTP.glu1-tRNA + 100 EF-Tu.GTP.gly1-tRNA + 40 EF-Tu.GTP.glyT-tRNA + 90 EF-Tu.GTP.hisR-tRNA + 80 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.ile2-tRNA + 70 EF-Tu.GTP.leu1-tRNA + 30 EF-Tu.GTP.leu2-tRNA + 20 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 50 EF-Tu.GTP.lys1-tRNA + 80 EF-Tu.GTP.met1-tRNA + 70 EF-Tu.GTP.phe1-tRNA + 30 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.proM-tRNA + 10 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.ser3-tRNA + 30 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 50 EF-Tu.GTP.thr3-tRNA + 30 EF-Tu.GTP.trpT-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 90 EF-Tu.GTP.val1-tRNA + 40 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 8850 mg2 + 1 rib_ini_b2559_10 --> 1 rib_70_elo1_b2559_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041

tl_elo_b2559_10_rib2	Translation elongation 2 b2559 10 ribosome(s)	1760 h2o + 1 rib_70_elo1_b2559_10_cplx --> 1760 EF-G.GDP + 1760 EF-Tu.GDP + 160 ala1_tRNA + 40 ala2_tRNA + 140 arg1_tRNA + 30 argX_tRNA + 50 asn1_tRNA + 70 asp1_tRNA + 30 cysT_tRNA + 10 fmet_tRNA + 30 gln1_tRNA + 20 gln2_tRNA + 120 glu1_tRNA + 100 gly1_tRNA + 40 glyT_tRNA + 3520 h + 90 hisR_tRNA + 80 ile1_tRNA + 20 ile2_tRNA + 70 leu1_tRNA + 30 leu2_tRNA + 20 leuU_tRNA + 20 leuZ_tRNA + 50 lys1_tRNA + 80 met1_tRNA + 8850 mg2 + 70 phe1_tRNA + 3520 pi + 30 pro1_tRNA + 10 proL_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b2559_10_cplx + 10 ser1_tRNA + 20 ser2_tRNA + 10 ser3_tRNA + 30 serV_tRNA + 20 thr1_tRNA + 10 thr2_tRNA + 50 thr3_tRNA + 30 trpT_tRNA + 30 tyr1_tRNA + 90 val1_tRNA + 40 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_elo_b2559_1_rib1	Translation elongation 1 b2559 1 ribosome(s)	177 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argX-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 7 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 5 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 1 EF-Tu.GTP.val3-tRNA + 885 mg2 + 1 rib_ini_b2559_1 --> 1 rib_70_elo1_b2559_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_elo_b2559_1_rib2	Translation elongation 2 b2559 1 ribosome(s)	176 h2o + 1 rib_70_elo1_b2559_1_cplx --> 176 EF-G.GDP + 176 EF-Tu.GDP + 16 ala1_tRNA + 4 ala2_tRNA + 14 arg1_tRNA + 3 argX_tRNA + 5 asn1_tRNA + 7 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 2 gln2_tRNA + 12 glu1_tRNA + 10 gly1_tRNA + 4 glyT_tRNA + 352 h + 9 hisR_tRNA + 8 ile1_tRNA + 2 ile2_tRNA + 7 leu1_tRNA + 3 leu2_tRNA + 2 leuU_tRNA + 2 leuZ_tRNA + 5 lys1_tRNA + 8 met1_tRNA + 885 mg2 + 7 phe1_tRNA + 352 pi + 3 pro1_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b2559_1_cplx + 1 ser1_tRNA + 2 ser2_tRNA + 1 ser3_tRNA + 3 serV_tRNA + 2 thr1_tRNA + 1 thr2_tRNA + 5 thr3_tRNA + 3 trpT_tRNA + 3 tyr1_tRNA + 9 val1_tRNA + 4 val2_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_elo_b2559_5_rib1	Translation elongation 1 b2559 5 ribosome(s)	885 EF-G.GTP + 80 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 70 EF-Tu.GTP.arg1-tRNA + 15 EF-Tu.GTP.argX-tRNA + 25 EF-Tu.GTP.asn1-tRNA + 40 EF-Tu.GTP.asp1-tRNA + 15 EF-Tu.GTP.cysT-tRNA + 15 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 60 EF-Tu.GTP.glu1-tRNA + 50 EF-Tu.GTP.gly1-tRNA + 20 EF-Tu.GTP.glyT-tRNA + 45 EF-Tu.GTP.hisR-tRNA + 40 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.ile2-tRNA + 35 EF-Tu.GTP.leu1-tRNA + 15 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 25 EF-Tu.GTP.lys1-tRNA + 40 EF-Tu.GTP.met1-tRNA + 35 EF-Tu.GTP.phe1-tRNA + 15 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 15 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 25 EF-Tu.GTP.thr3-tRNA + 15 EF-Tu.GTP.trpT-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 45 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 4425 mg2 + 1 rib_ini_b2559_5 --> 1 rib_70_elo1_b2559_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_elo_b2559_5_rib2	Translation elongation 2 b2559 5 ribosome(s)	880 h2o + 1 rib_70_elo1_b2559_5_cplx --> 880 EF-G.GDP + 880 EF-Tu.GDP + 80 ala1_tRNA + 20 ala2_tRNA + 70 arg1_tRNA + 15 argX_tRNA + 25 asn1_tRNA + 35 asp1_tRNA + 15 cysT_tRNA + 5 fmet_tRNA + 15 gln1_tRNA + 10 gln2_tRNA + 60 glu1_tRNA + 50 gly1_tRNA + 20 glyT_tRNA + 1760 h + 45 hisR_tRNA + 40 ile1_tRNA + 10 ile2_tRNA + 35 leu1_tRNA + 15 leu2_tRNA + 10 leuU_tRNA + 10 leuZ_tRNA + 25 lys1_tRNA + 40 met1_tRNA + 4425 mg2 + 35 phe1_tRNA + 1760 pi + 15 pro1_tRNA + 5 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b2559_5_cplx + 5 ser1_tRNA + 10 ser2_tRNA + 5 ser3_tRNA + 15 serV_tRNA + 10 thr1_tRNA + 5 thr2_tRNA + 25 thr3_tRNA + 15 trpT_tRNA + 15 tyr1_tRNA + 45 val1_tRNA + 20 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_elo_b2560_12_rib1	Translation elongation 1 b2560 12 ribosome(s)	2520 EF-G.GTP + 108 EF-Tu.GTP.ala1-tRNA + 48 EF-Tu.GTP.ala2-tRNA + 204 EF-Tu.GTP.arg1-tRNA + 24 EF-Tu.GTP.argX-tRNA + 60 EF-Tu.GTP.asn1-tRNA + 120 EF-Tu.GTP.asp1-tRNA + 36 EF-Tu.GTP.cysT-tRNA + 120 EF-Tu.GTP.gln1-tRNA + 48 EF-Tu.GTP.gln2-tRNA + 96 EF-Tu.GTP.glu1-tRNA + 120 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.glyU-tRNA + 60 EF-Tu.GTP.hisR-tRNA + 84 EF-Tu.GTP.ile1-tRNA + 24 EF-Tu.GTP.ile2-tRNA + 180 EF-Tu.GTP.leu1-tRNA + 72 EF-Tu.GTP.leu2-tRNA + 60 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuW-tRNA + 96 EF-Tu.GTP.leuZ-tRNA + 36 EF-Tu.GTP.lys1-tRNA + 36 EF-Tu.GTP.met1-tRNA + 120 EF-Tu.GTP.phe1-tRNA + 132 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.proL-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 96 EF-Tu.GTP.serV-tRNA + 60 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 36 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.thrU-tRNA + 84 EF-Tu.GTP.trpT-tRNA + 84 EF-Tu.GTP.tyr1-tRNA + 60 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val2-tRNA + 60 EF-Tu.GTP.val3-tRNA + 12600 mg2 + 1 rib_ini_b2560_12 --> 1 rib_70_elo1_b2560_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641
tl_elo_b2560_12_rib2	Translation elongation 2 b2560 12 ribosome(s)	2508 h2o + 1 rib_70_elo1_b2560_12_cplx --> 2508 EF-G.GDP + 2508 EF-Tu.GDP + 108 ala1_tRNA + 48 ala2_tRNA + 204 arg1_tRNA + 24 argX_tRNA + 60 asn1_tRNA + 120 asp1_tRNA + 36 cysT_tRNA + 12 fmet_tRNA + 120 gln1_tRNA + 48 gln2_tRNA + 84 glu1_tRNA + 120 gly1_tRNA + 24 glyT_tRNA + 12 glyU_tRNA + 5016 h + 60 hisR_tRNA + 84 ile1_tRNA + 24 ile2_tRNA + 180 leu1_tRNA + 72 leu2_tRNA + 60 leuU_tRNA + 12 leuW_tRNA + 96 leuZ_tRNA + 36 lys1_tRNA + 36 met1_tRNA + 12600 mg2 + 120 phe1_tRNA + 5016 pi + 132 pro1_tRNA + 12 proL_tRNA + 1 rib_70_elo2_b2560_12_cplx + 12 ser1_tRNA + 12 ser2_tRNA + 96 serV_tRNA + 60 thr1_tRNA + 36 thr2_tRNA + 36 thr3_tRNA + 12 thrU_tRNA + 84 trpT_tRNA + 84 tyr1_tRNA + 60 val1_tRNA + 24 val2_tRNA + 60 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641

tl_elo_b2560_1_rib1	Translation elongation 1 b2560 1 ribosome(s)	210 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 17 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 3 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1050 mg2 + 1 rib_ini_b2560_1 --> 1 rib_70_elo1_b2560_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641
tl_elo_b2560_1_rib2	Translation elongation 2 b2560 1 ribosome(s)	209 h2o + 1 rib_70_elo1_b2560_1_cplx --> 209 EF-G.GDP + 209 EF-Tu.GDP + 9 ala1_tRNA + 4 ala2_tRNA + 17 arg1_tRNA + 2 argX_tRNA + 5 asn1_tRNA + 10 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 10 gln1_tRNA + 4 gln2_tRNA + 7 glu1_tRNA + 10 gly1_tRNA + 2 glyT_tRNA + 1 glyU_tRNA + 418 h + 5 hisR_tRNA + 7 ile1_tRNA + 2 ile2_tRNA + 15 leu1_tRNA + 6 leu2_tRNA + 5 leuU_tRNA + 1 leuW_tRNA + 8 leuZ_tRNA + 3 lys1_tRNA + 3 met1_tRNA + 1050 mg2 + 10 phe1_tRNA + 418 pi + 11 pro1_tRNA + 1 proL_tRNA + 1 rib_70_elo2_b2560_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 8 serV_tRNA + 5 thr1_tRNA + 3 thr2_tRNA + 3 thr3_tRNA + 1 thrU_tRNA + 7 trpT_tRNA + 7 tyr1_tRNA + 5 val1_tRNA + 2 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641
tl_elo_b2560_6_rib1	Translation elongation 1 b2560 6 ribosome(s)	1260 EF-G.GTP + 54 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 102 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argX-tRNA + 30 EF-Tu.GTP.asn1-tRNA + 60 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.cysT-tRNA + 60 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 48 EF-Tu.GTP.glu1-tRNA + 60 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 30 EF-Tu.GTP.hisR-tRNA + 42 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.ile2-tRNA + 90 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 30 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.leuW-tRNA + 48 EF-Tu.GTP.leuZ-tRNA + 18 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 60 EF-Tu.GTP.phe1-tRNA + 66 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 48 EF-Tu.GTP.serV-tRNA + 30 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 42 EF-Tu.GTP.trpT-tRNA + 42 EF-Tu.GTP.tyr1-tRNA + 30 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 30 EF-Tu.GTP.val3-tRNA + 6300 mg2 + 1 rib_ini_b2560_6 --> 1 rib_70_elo1_b2560_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641
tl_elo_b2560_6_rib2	Translation elongation 2 b2560 6 ribosome(s)	1254 h2o + 1 rib_70_elo1_b2560_6_cplx --> 1254 EF-G.GDP + 1254 EF-Tu.GDP + 54 ala1_tRNA + 24 ala2_tRNA + 102 arg1_tRNA + 12 argX_tRNA + 30 asn1_tRNA + 60 asp1_tRNA + 18 cysT_tRNA + 6 fmet_tRNA + 60 gln1_tRNA + 24 gln2_tRNA + 42 glu1_tRNA + 60 gly1_tRNA + 12 glyT_tRNA + 6 glyU_tRNA + 2508 h + 30 hisR_tRNA + 42 ile1_tRNA + 12 ile2_tRNA + 90 leu1_tRNA + 36 leu2_tRNA + 30 leuU_tRNA + 6 leuW_tRNA + 48 leuZ_tRNA + 18 lys1_tRNA + 18 met1_tRNA + 6300 mg2 + 60 phe1_tRNA + 2508 pi + 66 pro1_tRNA + 6 proL_tRNA + 1 rib_70_elo2_b2560_6_cplx + 6 ser1_tRNA + 6 ser2_tRNA + 48 serV_tRNA + 30 thr1_tRNA + 18 thr2_tRNA + 18 thr3_tRNA + 6 thrU_tRNA + 42 trpT_tRNA + 42 tyr1_tRNA + 30 val1_tRNA + 12 val2_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641
tl_elo_b2563_1_rib1	Translation elongation 1 b2563 1 ribosome(s)	125 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argX-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 10 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val3-tRNA + 625 mg2 + 1 rib_ini_b2563_1 --> 1 rib_70_elo1_b2563_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_elo_b2563_1_rib2	Translation elongation 2 b2563 1 ribosome(s)	124 h2o + 1 rib_70_elo1_b2563_1_cplx --> 124 EF-G.GDP + 124 EF-Tu.GDP + 16 ala1_tRNA + 3 ala2_tRNA + 8 arg1_tRNA + 3 argX_tRNA + 5 asn1_tRNA + 5 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 1 gln2_tRNA + 10 glu1_tRNA + 8 gly1_tRNA + 1 glyU_tRNA + 248 h + 4 hisR_tRNA + 8 ile1_tRNA + 1 ile2_tRNA + 6 leu1_tRNA + 1 leuU_tRNA + 2 leuW_tRNA + 4 leuZ_tRNA + 7 lys1_tRNA + 1 met1_tRNA + 625 mg2 + 6 phe1_tRNA + 248 pi + 1 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b2563_1_cplx + 1 ser1_tRNA + 1 serV_tRNA + 1 thr1_tRNA + 4 thr3_tRNA + 3 trpT_tRNA + 1 tyr1_tRNA + 8 val1_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506

tl_elo_b2563_3_rib1	Translation elongation 1 b2563 3 ribosome(s)	375 EF-G.GTP + 48 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argX-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 30 EF-Tu.GTP.glu1-tRNA + 24 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 24 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.leuW-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 21 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 18 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 24 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val3-tRNA + 1875 mg2 + 1 rib_ini_b2563_3 --> 1 rib_70_elo1_b2563_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_elo_b2563_3_rib2	Translation elongation 2 b2563 3 ribosome(s)	372 h2o + 1 rib_70_elo1_b2563_3_cplx --> 372 EF-G.GDP + 372 EF-Tu.GDP + 48 ala1_tRNA + 9 ala2_tRNA + 24 arg1_tRNA + 9 argX_tRNA + 15 asn1_tRNA + 15 asp1_tRNA + 3 cysT_tRNA + 3 fmet_tRNA + 3 gln1_tRNA + 3 gln2_tRNA + 30 glu1_tRNA + 24 gly1_tRNA + 3 glyU_tRNA + 744 h + 12 hisR_tRNA + 24 ile1_tRNA + 3 ile2_tRNA + 18 leu1_tRNA + 3 leuU_tRNA + 6 leuW_tRNA + 12 leuZ_tRNA + 21 lys1_tRNA + 3 met1_tRNA + 1875 mg2 + 18 phe1_tRNA + 744 pi + 3 pro1_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b2563_3_cplx + 3 ser1_tRNA + 3 serV_tRNA + 3 thr1_tRNA + 12 thr3_tRNA + 9 trpT_tRNA + 3 tyr1_tRNA + 24 val1_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_elo_b2563_7_rib1	Translation elongation 1 b2563 7 ribosome(s)	875 EF-G.GTP + 112 EF-Tu.GTP.ala1-tRNA + 21 EF-Tu.GTP.ala2-tRNA + 56 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.argX-tRNA + 35 EF-Tu.GTP.asn1-tRNA + 35 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 70 EF-Tu.GTP.glu1-tRNA + 56 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 28 EF-Tu.GTP.hisR-tRNA + 56 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.ile2-tRNA + 42 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.leuW-tRNA + 28 EF-Tu.GTP.leuZ-tRNA + 49 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 42 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 14 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 28 EF-Tu.GTP.thr3-tRNA + 21 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val3-tRNA + 4375 mg2 + 1 rib_ini_b2563_7 --> 1 rib_70_elo1_b2563_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_elo_b2563_7_rib2	Translation elongation 2 b2563 7 ribosome(s)	868 h2o + 1 rib_70_elo1_b2563_7_cplx --> 868 EF-G.GDP + 868 EF-Tu.GDP + 112 ala1_tRNA + 21 ala2_tRNA + 56 arg1_tRNA + 21 argX_tRNA + 35 asn1_tRNA + 35 asp1_tRNA + 7 cysT_tRNA + 7 fmet_tRNA + 7 gln1_tRNA + 7 gln2_tRNA + 70 glu1_tRNA + 56 gly1_tRNA + 7 glyU_tRNA + 1736 h + 28 hisR_tRNA + 56 ile1_tRNA + 7 ile2_tRNA + 42 leu1_tRNA + 7 leuU_tRNA + 14 leuW_tRNA + 28 leuZ_tRNA + 49 lys1_tRNA + 7 met1_tRNA + 4375 mg2 + 42 phe1_tRNA + 1736 pi + 7 pro1_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b2563_7_cplx + 7 ser1_tRNA + 7 serV_tRNA + 7 thr1_tRNA + 28 thr3_tRNA + 21 trpT_tRNA + 7 tyr1_tRNA + 56 val1_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_elo_b2564_14_rib1	Translation elongation 1 b2564 14 ribosome(s)	3388 EF-G.GTP + 336 EF-Tu.GTP.ala1-tRNA + 224 EF-Tu.GTP.ala2-tRNA + 238 EF-Tu.GTP.arg1-tRNA + 84 EF-Tu.GTP.asn1-tRNA + 224 EF-Tu.GTP.asp1-tRNA + 56 EF-Tu.GTP.cysT-tRNA + 112 EF-Tu.GTP.gln1-tRNA + 14 EF-Tu.GTP.gln2-tRNA + 280 EF-Tu.GTP.glu1-tRNA + 168 EF-Tu.GTP.gly1-tRNA + 42 EF-Tu.GTP.glyT-tRNA + 28 EF-Tu.GTP.glyU-tRNA + 126 EF-Tu.GTP.hisR-tRNA + 252 EF-Tu.GTP.ile1-tRNA + 238 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leuU-tRNA + 42 EF-Tu.GTP.leuZ-tRNA + 154 EF-Tu.GTP.lys1-tRNA + 112 EF-Tu.GTP.met1-tRNA + 70 EF-Tu.GTP.phe1-tRNA + 56 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proM-tRNA + 14 EF-Tu.GTP.ser2-tRNA + 14 EF-Tu.GTP.serV-tRNA + 126 EF-Tu.GTP.thr1-tRNA + 28 EF-Tu.GTP.thr2-tRNA + 42 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.thrU-tRNA + 42 EF-Tu.GTP.tyr1-tRNA + 126 EF-Tu.GTP.val1-tRNA + 28 EF-Tu.GTP.val2-tRNA + 56 EF-Tu.GTP.val3-tRNA + 16940 mg2 + 1 rib_ini_b2564_14 --> 1 rib_70_elo1_b2564_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_elo_b2564_14_rib2	Translation elongation 2 b2564 14 ribosome(s)	3374 h2o + 1 rib_70_elo1_b2564_14_cplx --> 3374 EF-G.GDP + 3374 EF-Tu.GDP + 336 ala1_tRNA + 224 ala2_tRNA + 238 arg1_tRNA + 84 asn1_tRNA + 224 asp1_tRNA + 56 cysT_tRNA + 14 fmet_tRNA + 112 gln1_tRNA + 14 gln2_tRNA + 280 glu1_tRNA + 15 gly1_tRNA + 42 glyT_tRNA + 28 glyU_tRNA + 6748 h + 126 hisR_tRNA + 252 ile1_tRNA + 238 leu1_tRNA + 14 leuU_tRNA + 42 leuZ_tRNA + 154 lys1_tRNA + 112 met1_tRNA + 16940 mg2 + 70 phe1_tRNA + 6748 pi + 56 pro1_tRNA + 14 pro2_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b2564_14_cplx + 14 ser2_tRNA + 14 serV_tRNA + 126 thr1_tRNA + 28 thr2_tRNA + 42 thr3_tRNA + 14 thrU_tRNA + 42 tyr1_tRNA + 126 val1_tRNA + 28 val2_tRNA + 56 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_elo_b2564_1_rib1	Translation elongation 1 b2564 1 ribosome(s)	242 EF-G.GTP + 24 EF-Tu.GTP.ala1-tRNA + 16 EF-Tu.GTP.ala2-tRNA + 17 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 16 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 17 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1210 mg2 + 1 rib_ini_b2564_1 --> 1 rib_70_elo1_b2564_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626

tl_elo_b2564_1_rib2	Translation elongation 2 b2564 1 ribosome(s)	241 h2o + 1 rib_70_elo1_b2564_1_cplx --> 241 EF-G.GDP + 241 EF-Tu.GDP + 24 ala1_tRNA + 16 ala2_tRNA + 17 arg1_tRNA + 6 asn1_tRNA + 16 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 1 gln2_tRNA + 20 glu1_tRNA + 11 gly1_tRNA + 3 glyT_tRNA + 2 glyU_tRNA + 482 h + 9 hisR_tRNA + 18 ile1_tRNA + 17 leu1_tRNA + 1 leuU_tRNA + 3 leuZ_tRNA + 11 lys1_tRNA + 8 met1_tRNA + 1210 mg2 + 5 phe1_tRNA + 482 pi + 4 pro1_tRNA + 1 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b2564_1_cplx + 1 ser2_tRNA + 1 serV_tRNA + 9 thr1_tRNA + 2 thr2_tRNA + 3 thr3_tRNA + 1 thrU_tRNA + 3 tyr1_tRNA + 9 val1_tRNA + 2 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_elo_b2564_7_rib1	Translation elongation 1 b2564 7 ribosome(s)	1694 EF-G.GTP + 168 EF-Tu.GTP.ala1-tRNA + 112 EF-Tu.GTP.ala2-tRNA + 119 EF-Tu.GTP.arg1-tRNA + 42 EF-Tu.GTP.asn1-tRNA + 112 EF-Tu.GTP.asp1-tRNA + 28 EF-Tu.GTP.cysT-tRNA + 56 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 140 EF-Tu.GTP.glu1-tRNA + 84 EF-Tu.GTP.gly1-tRNA + 21 EF-Tu.GTP.glyT-tRNA + 14 EF-Tu.GTP.glyU-tRNA + 63 EF-Tu.GTP.hisR-tRNA + 126 EF-Tu.GTP.ile1-tRNA + 119 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 21 EF-Tu.GTP.leuZ-tRNA + 77 EF-Tu.GTP.lys1-tRNA + 56 EF-Tu.GTP.met1-tRNA + 35 EF-Tu.GTP.phe1-tRNA + 28 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.serV-tRNA + 63 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 21 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 21 EF-Tu.GTP.tyr1-tRNA + 63 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 28 EF-Tu.GTP.val3-tRNA + 8470 mg2 + 1 rib_ini_b2564_7 --> 1 rib_70_elo1_b2564_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_elo_b2564_7_rib2	Translation elongation 2 b2564 7 ribosome(s)	1687 h2o + 1 rib_70_elo1_b2564_7_cplx --> 1687 EF-G.GDP + 1687 EF-Tu.GDP + 168 ala1_tRNA + 112 ala2_tRNA + 119 arg1_tRNA + 42 asn1_tRNA + 112 asp1_tRNA + 28 cysT_tRNA + 7 fmet_tRNA + 56 gln1_tRNA + 7 gln2_tRNA + 140 glu1_tRNA + 77 gly1_tRNA + 21 glyT_tRNA + 14 glyU_tRNA + 3374 h + 63 hisR_tRNA + 126 ile1_tRNA + 119 leu1_tRNA + 7 leuU_tRNA + 21 leuZ_tRNA + 77 lys1_tRNA + 56 met1_tRNA + 8470 mg2 + 35 phe1_tRNA + 3374 pi + 28 pro1_tRNA + 7 pro2_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b2564_7_cplx + 7 ser2_tRNA + 7 serV_tRNA + 63 thr1_tRNA + 14 thr2_tRNA + 21 thr3_tRNA + 7 thrU_tRNA + 21 tyr1_tRNA + 63 val1_tRNA + 14 val2_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_elo_b2565_14_rib1	Translation elongation 1 b2565 14 ribosome(s)	3374 EF-G.GTP + 210 EF-Tu.GTP.ala1-tRNA + 42 EF-Tu.GTP.ala2-tRNA + 266 EF-Tu.GTP.arg1-tRNA + 28 EF-Tu.GTP.argW-tRNA + 28 EF-Tu.GTP.argX-tRNA + 56 EF-Tu.GTP.asn1-tRNA + 98 EF-Tu.GTP.asp1-tRNA + 28 EF-Tu.GTP.cysT-tRNA + 70 EF-Tu.GTP.gln1-tRNA + 252 EF-Tu.GTP.glu1-tRNA + 196 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyT-tRNA + 70 EF-Tu.GTP.glyU-tRNA + 70 EF-Tu.GTP.hisR-tRNA + 70 EF-Tu.GTP.ile1-tRNA + 224 EF-Tu.GTP.leu1-tRNA + 28 EF-Tu.GTP.leu2-tRNA + 126 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.leuW-tRNA + 70 EF-Tu.GTP.leuZ-tRNA + 182 EF-Tu.GTP.lys1-tRNA + 56 EF-Tu.GTP.met1-tRNA + 210 EF-Tu.GTP.phe1-tRNA + 42 EF-Tu.GTP.pro1-tRNA + 70 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proL-tRNA + 28 EF-Tu.GTP.proM-tRNA + 14 EF-Tu.GTP.ser1-tRNA + 56 EF-Tu.GTP.ser2-tRNA + 28 EF-Tu.GTP.ser3-tRNA + 126 EF-Tu.GTP.serV-tRNA + 98 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 112 EF-Tu.GTP.thr3-tRNA + 28 EF-Tu.GTP.thrU-tRNA + 28 EF-Tu.GTP.trpT-tRNA + 126 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 98 EF-Tu.GTP.val2-tRNA + 28 EF-Tu.GTP.val3-tRNA + 16870 mg2 + 1 rib_ini_b2565_14 --> 1 rib_70_elo1_b2565_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726
tl_elo_b2565_14_rib2	Translation elongation 2 b2565 14 ribosome(s)	3360 h2o + 1 rib_70_elo1_b2565_14_cplx --> 3360 EF-G.GDP + 3360 EF-Tu.GDP + 210 ala1_tRNA + 42 ala2_tRNA + 266 arg1_tRNA + 28 argW_tRNA + 28 argX_tRNA + 56 asn1_tRNA + 98 asp1_tRNA + 28 cysT_tRNA + 14 fmet_tRNA + 70 gln1_tRNA + 238 glu1_tRNA + 196 gly1_tRNA + 14 glyT_tRNA + 70 glyU_tRNA + 6726 h + 70 hisR_tRNA + 70 ile1_tRNA + 224 leu1_tRNA + 28 leu2_tRNA + 126 leuU_tRNA + 14 leuW_tRNA + 70 leuZ_tRNA + 182 lys1_tRNA + 56 met1_tRNA + 16870 mg2 + 210 phe1_tRNA + 6720 pi + 42 pro1_tRNA + 70 pro2_tRNA + 14 proL_tRNA + 28 proM_tRNA + 1 rib_70_elo2_b2565_14_cplx + 14 ser1_tRNA + 56 ser2_tRNA + 28 ser3_tRNA + 126 serV_tRNA + 98 thr1_tRNA + 14 thr2_tRNA + 112 thr3_tRNA + 28 thrU_tRNA + 28 trpT_tRNA + 126 tyr1_tRNA + 56 val1_tRNA + 98 val2_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726
tl_elo_b2565_1_rib1	Translation elongation 1 b2565 1 ribosome(s)	241 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 19 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argW-tRNA + 2 EF-Tu.GTP.argX-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 7 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 14 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 5 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 1205 mg2 + 1 rib_ini_b2565_1 --> 1 rib_70_elo1_b2565_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726
tl_elo_b2565_1_rib2	Translation elongation 2 b2565 1 ribosome(s)	240 h2o + 1 rib_70_elo1_b2565_1_cplx --> 240 EF-G.GDP + 240 EF-Tu.GDP + 15 ala1_tRNA + 3 ala2_tRNA + 19 arg1_tRNA + 2 argW_tRNA + 2 argX_tRNA + 4 asn1_tRNA + 7 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 17 glu1_tRNA + 14 gly1_tRNA + 1 glyT_tRNA + 5 glyU_tRNA + 480 h + 5 hisR_tRNA + 5 ile1_tRNA + 16 leu1_tRNA + 2 leu2_tRNA + 9 leuU_tRNA + 1 leuW_tRNA + 5 leuZ_tRNA + 13 lys1_tRNA + 4 met1_tRNA + 1205 mg2 + 15 phe1_tRNA + 480 pi + 3 pro1_tRNA + 5 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b2565_1_cplx + 1 ser1_tRNA + 4 ser2_tRNA + 2 ser3_tRNA + 9 serV_tRNA + 7 thr1_tRNA + 1 thr2_tRNA + 8 thr3_tRNA + 2 thrU_tRNA + 2 trpT_tRNA + 9 tyr1_tRNA + 4 val1_tRNA + 7 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726

tl_elo_b2565_7_rib1	Translation elongation 1 b2565 7 ribosome(s)	1687 EF-G.GTP + 105 EF-Tu.GTP.ala1-tRNA + 21 EF-Tu.GTP.ala2-tRNA + 133 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.argW-tRNA + 14 EF-Tu.GTP.argX-tRNA + 28 EF-Tu.GTP.asn1-tRNA + 49 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.cysT-tRNA + 35 EF-Tu.GTP.gln1-tRNA + 126 EF-Tu.GTP.glu1-tRNA + 98 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyT-tRNA + 35 EF-Tu.GTP.glyU-tRNA + 35 EF-Tu.GTP.hisR-tRNA + 35 EF-Tu.GTP.ile1-tRNA + 112 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leu2-tRNA + 63 EF-Tu.GTP.leuU-tRNA + 7 EF-Tu.GTP.leuW-tRNA + 35 EF-Tu.GTP.leuZ-tRNA + 91 EF-Tu.GTP.lys1-tRNA + 28 EF-Tu.GTP.met1-tRNA + 105 EF-Tu.GTP.phe1-tRNA + 21 EF-Tu.GTP.pro1-tRNA + 35 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proL-tRNA + 14 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 28 EF-Tu.GTP.ser2-tRNA + 14 EF-Tu.GTP.ser3-tRNA + 63 EF-Tu.GTP.serV-tRNA + 49 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 56 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.thrU-tRNA + 14 EF-Tu.GTP.trpT-tRNA + 63 EF-Tu.GTP.tyr1-tRNA + 28 EF-Tu.GTP.val1-tRNA + 49 EF-Tu.GTP.val2-tRNA + 14 EF-Tu.GTP.val3-tRNA + 8435 mg2 + 1 rib_ini_b2565_7 --> 1 rib_70_elo1_b2565_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726
tl_elo_b2565_7_rib2	Translation elongation 2 b2565 7 ribosome(s)	1680 h2o + 1 rib_70_elo1_b2565_7_cplx --> 1680 EF-G.GDP + 1680 EF-Tu.GDP + 105 ala1_tRNA + 21 ala2_tRNA + 133 arg1_tRNA + 14 argW_tRNA + 14 argX_tRNA + 28 asn1_tRNA + 49 asp1_tRNA + 14 cysT_tRNA + 7 fmet_tRNA + 35 gln1_tRNA + 119 glu1_tRNA + 98 gly1_tRNA + 7 glyT_tRNA + 35 glyU_tRNA + 3360 h + 35 hisR_tRNA + 35 ile1_tRNA + 112 leu1_tRNA + 14 leu2_tRNA + 63 leuU_tRNA + 7 leuW_tRNA + 35 leuZ_tRNA + 91 lys1_tRNA + 28 met1_tRNA + 8435 mg2 + 105 phe1_tRNA + 3360 pi + 21 pro1_tRNA + 35 pro2_tRNA + 7 proL_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b2565_7_cplx + 7 ser1_tRNA + 28 ser2_tRNA + 14 ser3_tRNA + 63 serV_tRNA + 49 thr1_tRNA + 7 thr2_tRNA + 56 thr3_tRNA + 14 thrU_tRNA + 14 trpT_tRNA + 63 tyr1_tRNA + 28 val1_tRNA + 49 val2_tRNA + 14 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726
tl_elo_b2566_17_rib1	Translation elongation 1 b2566 17 ribosome(s)	5100 EF-G.GTP + 272 EF-Tu.GTP.ala1-tRNA + 102 EF-Tu.GTP.ala2-tRNA + 323 EF-Tu.GTP.arg1-tRNA + 204 EF-Tu.GTP.asn1-tRNA + 289 EF-Tu.GTP.asp1-tRNA + 17 EF-Tu.GTP.cysT-tRNA + 153 EF-Tu.GTP.gln1-tRNA + 408 EF-Tu.GTP.glu1-tRNA + 221 EF-Tu.GTP.gly1-tRNA + 34 EF-Tu.GTP.glyT-tRNA + 102 EF-Tu.GTP.glyU-tRNA + 136 EF-Tu.GTP.hisR-tRNA + 442 EF-Tu.GTP.ile1-tRNA + 255 EF-Tu.GTP.leu1-tRNA + 51 EF-Tu.GTP.leu2-tRNA + 136 EF-Tu.GTP.leuU-tRNA + 17 EF-Tu.GTP.leuW-tRNA + 357 EF-Tu.GTP.lys1-tRNA + 153 EF-Tu.GTP.met1-tRNA + 153 EF-Tu.GTP.phe1-tRNA + 119 EF-Tu.GTP.pro1-tRNA + 34 EF-Tu.GTP.pro2-tRNA + 17 EF-Tu.GTP.proM-tRNA + 85 EF-Tu.GTP.ser1-tRNA + 68 EF-Tu.GTP.ser2-tRNA + 17 EF-Tu.GTP.serT-tRNA + 102 EF-Tu.GTP.serV-tRNA + 85 EF-Tu.GTP.thr1-tRNA + 85 EF-Tu.GTP.thr2-tRNA + 17 EF-Tu.GTP.thr3-tRNA + 51 EF-Tu.GTP.thrU-tRNA + 51 EF-Tu.GTP.trpT-tRNA + 119 EF-Tu.GTP.tyr1-tRNA + 221 EF-Tu.GTP.val1-tRNA + 85 EF-Tu.GTP.val2-tRNA + 119 EF-Tu.GTP.val3-tRNA + 25500 mg2 + 1 rib_ini_b2566_17 --> 1 rib_70_elo1_b2566_17_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_elo_b2566_17_rib2	Translation elongation 2 b2566 17 ribosome(s)	5083 h2o + 1 rib_70_elo1_b2566_17_cplx --> 5083 EF-G.GDP + 5083 EF-Tu.GDP + 272 ala1_tRNA + 102 ala2_tRNA + 323 arg1_tRNA + 204 asn1_tRNA + 289 asp1_tRNA + 17 cysT_tRNA + 17 fmet_tRNA + 153 gln1_tRNA + 408 glu1_tRNA + 221 gly1_tRNA + 34 glyT_tRNA + 102 glyU_tRNA + 10166 h + 136 hisR_tRNA + 442 ile1_tRNA + 255 leu1_tRNA + 51 leu2_tRNA + 119 leuU_tRNA + 17 leuW_tRNA + 357 lys1_tRNA + 153 met1_tRNA + 25500 mg2 + 153 phe1_tRNA + 10166 pi + 119 pro1_tRNA + 34 pro2_tRNA + 17 proM_tRNA + 1 rib_70_elo2_b2566_17_cplx + 85 ser1_tRNA + 68 ser2_tRNA + 17 serT_tRNA + 102 serV_tRNA + 85 thr1_tRNA + 85 thr2_tRNA + 17 thr3_tRNA + 51 thrU_tRNA + 51 trpT_tRNA + 119 tyr1_tRNA + 221 val1_tRNA + 85 val2_tRNA + 119 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_elo_b2566_1_rib1	Translation elongation 1 b2566 1 ribosome(s)	300 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 19 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 17 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 9 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 26 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 21 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 13 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 1500 mg2 + 1 rib_ini_b2566_1 --> 1 rib_70_elo1_b2566_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_elo_b2566_1_rib2	Translation elongation 2 b2566 1 ribosome(s)	299 h2o + 1 rib_70_elo1_b2566_1_cplx --> 299 EF-G.GDP + 299 EF-Tu.GDP + 16 ala1_tRNA + 6 ala2_tRNA + 19 arg1_tRNA + 12 asn1_tRNA + 17 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 9 gln1_tRNA + 24 glu1_tRNA + 13 gly1_tRNA + 2 glyT_tRNA + 6 glyU_tRNA + 598 h + 8 hisR_tRNA + 26 ile1_tRNA + 15 leu1_tRNA + 3 leu2_tRNA + 7 leuU_tRNA + 1 leuW_tRNA + 21 lys1_tRNA + 9 met1_tRNA + 1500 mg2 + 9 phe1_tRNA + 598 pi + 7 pro1_tRNA + 2 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b2566_1_cplx + 5 ser1_tRNA + 4 ser2_tRNA + 1 serT_tRNA + 6 serV_tRNA + 5 thr1_tRNA + 5 thr2_tRNA + 1 thr3_tRNA + 3 thrU_tRNA + 3 trpT_tRNA + 7 tyr1_tRNA + 13 val1_tRNA + 5 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475

tl_elo_b2566_8_rib1	Translation elongation 1 b2566 8 ribosome(s)	2400 EF-G.GTP + 128 EF-Tu.GTP.ala1-tRNA + 48 EF-Tu.GTP.ala2-tRNA + 152 EF-Tu.GTP.arg1-tRNA + 96 EF-Tu.GTP.asn1-tRNA + 136 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 72 EF-Tu.GTP.gln1-tRNA + 192 EF-Tu.GTP.glu1-tRNA + 104 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 48 EF-Tu.GTP.glyU-tRNA + 64 EF-Tu.GTP.hisR-tRNA + 208 EF-Tu.GTP.ile1-tRNA + 120 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.leu2-tRNA + 64 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuW-tRNA + 168 EF-Tu.GTP.lys1-tRNA + 72 EF-Tu.GTP.met1-tRNA + 72 EF-Tu.GTP.phe1-tRNA + 56 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proM-tRNA + 40 EF-Tu.GTP.ser1-tRNA + 32 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.serT-tRNA + 48 EF-Tu.GTP.serV-tRNA + 40 EF-Tu.GTP.thr1-tRNA + 40 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 24 EF-Tu.GTP.thrU-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 56 EF-Tu.GTP.tyr1-tRNA + 104 EF-Tu.GTP.val1-tRNA + 40 EF-Tu.GTP.val2-tRNA + 56 EF-Tu.GTP.val3-tRNA + 12000 mg2 + 1 rib_ini_b2566_8 --> 1 rib_70_elo1_b2566_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_elo_b2566_8_rib2	Translation elongation 2 b2566 8 ribosome(s)	2392 h2o + 1 rib_70_elo1_b2566_8_cplx --> 2392 EF-G.GDP + 2392 EF-Tu.GDP + 128 ala1_tRNA + 48 ala2_tRNA + 152 arg1_tRNA + 96 asn1_tRNA + 136 asp1_tRNA + 8 cysT_tRNA + 8 fmet_tRNA + 72 gln1_tRNA + 192 glu1_tRNA + 104 gly1_tRNA + 16 glyT_tRNA + 48 glyU_tRNA + 4784 h + 64 hisR_tRNA + 208 ile1_tRNA + 120 leu1_tRNA + 24 leu2_tRNA + 56 leuU_tRNA + 8 leuW_tRNA + 168 lys1_tRNA + 72 met1_tRNA + 12000 mg2 + 72 phe1_tRNA + 4784 pi + 56 pro1_tRNA + 16 pro2_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b2566_8_cplx + 40 ser1_tRNA + 32 ser2_tRNA + 8 serT_tRNA + 48 serV_tRNA + 40 thr1_tRNA + 40 thr2_tRNA + 8 thr3_tRNA + 24 thrU_tRNA + 24 trpT_tRNA + 56 tyr1_tRNA + 104 val1_tRNA + 40 val2_tRNA + 56 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_elo_b2567_13_rib1	Translation elongation 1 b2567 13 ribosome(s)	2925 EF-G.GTP + 117 EF-Tu.GTP.ala1-tRNA + 78 EF-Tu.GTP.ala2-tRNA + 208 EF-Tu.GTP.arg1-tRNA + 39 EF-Tu.GTP.argX-tRNA + 91 EF-Tu.GTP.asn1-tRNA + 130 EF-Tu.GTP.asp1-tRNA + 26 EF-Tu.GTP.cysT-tRNA + 117 EF-Tu.GTP.gln1-tRNA + 65 EF-Tu.GTP.gln2-tRNA + 273 EF-Tu.GTP.glu1-tRNA + 195 EF-Tu.GTP.gly1-tRNA + 13 EF-Tu.GTP.glyT-tRNA + 13 EF-Tu.GTP.glyU-tRNA + 91 EF-Tu.GTP.hisR-tRNA + 130 EF-Tu.GTP.ile1-tRNA + 156 EF-Tu.GTP.leu1-tRNA + 65 EF-Tu.GTP.leu2-tRNA + 78 EF-Tu.GTP.leuU-tRNA + 104 EF-Tu.GTP.leuZ-tRNA + 130 EF-Tu.GTP.lys1-tRNA + 26 EF-Tu.GTP.met1-tRNA + 91 EF-Tu.GTP.phe1-tRNA + 52 EF-Tu.GTP.pro1-tRNA + 13 EF-Tu.GTP.pro2-tRNA + 13 EF-Tu.GTP.proL-tRNA + 26 EF-Tu.GTP.proM-tRNA + 13 EF-Tu.GTP.ser2-tRNA + 26 EF-Tu.GTP.serT-tRNA + 143 EF-Tu.GTP.serV-tRNA + 26 EF-Tu.GTP.thr1-tRNA + 65 EF-Tu.GTP.thr2-tRNA + 39 EF-Tu.GTP.thr3-tRNA + 13 EF-Tu.GTP.thrU-tRNA + 13 EF-Tu.GTP.trpT-tRNA + 78 EF-Tu.GTP.tyr1-tRNA + 78 EF-Tu.GTP.val1-tRNA + 65 EF-Tu.GTP.val2-tRNA + 26 EF-Tu.GTP.val3-tRNA + 14625 mg2 + 1 rib_ini_b2567_13 --> 1 rib_70_elo1_b2567_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085
tl_elo_b2567_13_rib2	Translation elongation 2 b2567 13 ribosome(s)	2912 h2o + 1 rib_70_elo1_b2567_13_cplx --> 2912 EF-G.GDP + 2912 EF-Tu.GDP + 117 ala1_tRNA + 78 ala2_tRNA + 208 arg1_tRNA + 39 argX_tRNA + 91 asn1_tRNA + 130 asp1_tRNA + 26 cysT_tRNA + 13 fmet_tRNA + 117 gln1_tRNA + 65 gln2_tRNA + 260 glu1_tRNA + 195 gly1_tRNA + 13 glyT_tRNA + 13 glyU_tRNA + 5824 h + 91 hisR_tRNA + 130 ile1_tRNA + 156 leu1_tRNA + 65 leu2_tRNA + 78 leuU_tRNA + 104 leuZ_tRNA + 130 lys1_tRNA + 26 met1_tRNA + 14625 mg2 + 91 phe1_tRNA + 5824 pi + 52 pro1_tRNA + 13 pro2_tRNA + 13 proL_tRNA + 26 proM_tRNA + 1 rib_70_elo2_b2567_13_cplx + 13 ser2_tRNA + 26 serT_tRNA + 143 serV_tRNA + 26 thr1_tRNA + 65 thr2_tRNA + 39 thr3_tRNA + 13 thrU_tRNA + 13 trpT_tRNA + 78 tyr1_tRNA + 78 val1_tRNA + 65 val2_tRNA + 26 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085
tl_elo_b2567_1_rib1	Translation elongation 1 b2567 1 ribosome(s)	225 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 16 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 9 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 21 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serT-tRNA + 11 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 1125 mg2 + 1 rib_ini_b2567_1 --> 1 rib_70_elo1_b2567_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085
tl_elo_b2567_1_rib2	Translation elongation 2 b2567 1 ribosome(s)	224 h2o + 1 rib_70_elo1_b2567_1_cplx --> 224 EF-G.GDP + 224 EF-Tu.GDP + 9 ala1_tRNA + 6 ala2_tRNA + 16 arg1_tRNA + 3 argX_tRNA + 7 asn1_tRNA + 10 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 9 gln1_tRNA + 5 gln2_tRNA + 20 glu1_tRNA + 15 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 448 h + 7 hisR_tRNA + 10 ile1_tRNA + 12 leu1_tRNA + 5 leu2_tRNA + 6 leuU_tRNA + 8 leuZ_tRNA + 10 lys1_tRNA + 2 met1_tRNA + 1125 mg2 + 7 phe1_tRNA + 448 pi + 4 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b2567_1_cplx + 1 ser2_tRNA + 2 serT_tRNA + 11 serV_tRNA + 2 thr1_tRNA + 5 thr2_tRNA + 3 thr3_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 6 tyr1_tRNA + 6 val1_tRNA + 5 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085

tl_elo_b2567_6_rib1	Translation elongation 1 b2567 6 ribosome(s)	1350 EF-G.GTP + 54 EF-Tu.GTP.ala1-tRNA + 36 EF-Tu.GTP.ala2-tRNA + 96 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argX-tRNA + 42 EF-Tu.GTP.asn1-tRNA + 60 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 54 EF-Tu.GTP.gln1-tRNA + 30 EF-Tu.GTP.gln2-tRNA + 126 EF-Tu.GTP.glu1-tRNA + 90 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 42 EF-Tu.GTP.hisR-tRNA + 60 EF-Tu.GTP.ile1-tRNA + 72 EF-Tu.GTP.leu1-tRNA + 30 EF-Tu.GTP.leu2-tRNA + 36 EF-Tu.GTP.leuU-tRNA + 48 EF-Tu.GTP.leuZ-tRNA + 60 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 42 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 12 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.serT-tRNA + 66 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 36 EF-Tu.GTP.tyr1-tRNA + 36 EF-Tu.GTP.val1-tRNA + 30 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 6750 mg2 + 1 rib_ini_b2567_6 --> 1 rib_70_elo1_b2567_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085
tl_elo_b2567_6_rib2	Translation elongation 2 b2567 6 ribosome(s)	1344 h2o + 1 rib_70_elo1_b2567_6_cplx --> 1344 EF-G.GDP + 1344 EF-Tu.GDP + 54 ala1_tRNA + 36 ala2_tRNA + 96 arg1_tRNA + 18 argX_tRNA + 42 asn1_tRNA + 60 asp1_tRNA + 12 cysT_tRNA + 6 fmet_tRNA + 54 gln1_tRNA + 30 gln2_tRNA + 120 glu1_tRNA + 90 gly1_tRNA + 6 glyT_tRNA + 6 glyU_tRNA + 2688 h + 42 hisR_tRNA + 60 ile1_tRNA + 72 leu1_tRNA + 30 leu2_tRNA + 36 leuU_tRNA + 48 leuZ_tRNA + 60 lys1_tRNA + 12 met1_tRNA + 6750 mg2 + 42 phe1_tRNA + 2688 pi + 24 pro1_tRNA + 6 pro2_tRNA + 6 proL_tRNA + 12 proM_tRNA + 1 rib_70_elo2_b2567_6_cplx + 6 ser2_tRNA + 12 serT_tRNA + 66 serV_tRNA + 12 thr1_tRNA + 30 thr2_tRNA + 18 thr3_tRNA + 6 thrU_tRNA + 6 trpT_tRNA + 36 tyr1_tRNA + 36 val1_tRNA + 30 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085
tl_elo_b2570_1_rib1	Translation elongation 1 b2570 1 ribosome(s)	158 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 5 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 4 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 7 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 5 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 8 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 790 mg2 + 1 rib_ini_b2570_1 --> 1 rib_70_elo1_b2570_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269
tl_elo_b2570_1_rib2	Translation elongation 2 b2570 1 ribosome(s)	157 h2o + 1 rib_70_elo1_b2570_1_cplx --> 157 EF-G.GDP + 157 EF-Tu.GDP + 15 ala1_tRNA + 3 ala2_tRNA + 5 arg1_tRNA + 1 argX_tRNA + 2 asn1_tRNA + 4 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 4 gln2_tRNA + 7 glu1_tRNA + 10 gly1_tRNA + 1 glyT_tRNA + 4 glyU_tRNA + 314 h + 1 hisR_tRNA + 9 ile1_tRNA + 5 leu1_tRNA + 2 leu2_tRNA + 6 leuU_tRNA + 2 leuW_tRNA + 6 leuZ_tRNA + 5 lys1_tRNA + 1 met1_tRNA + 790 mg2 + 6 phe1_tRNA + 314 pi + 6 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 1 rib_70_elo2_b2570_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 4 ser3_tRNA + 2 serT_tRNA + 8 serV_tRNA + 3 thr1_tRNA + 1 thr3_tRNA + 1 thrU_tRNA + 3 trpT_tRNA + 2 tyr1_tRNA + 7 val1_tRNA + 5 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269
tl_elo_b2570_4_rib1	Translation elongation 1 b2570 4 ribosome(s)	632 EF-G.GTP + 60 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argX-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 16 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.gln2-tRNA + 28 EF-Tu.GTP.glu1-tRNA + 40 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 16 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 36 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 24 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuW-tRNA + 24 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 16 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serT-tRNA + 32 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 28 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 3160 mg2 + 1 rib_ini_b2570_4 --> 1 rib_70_elo1_b2570_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269
tl_elo_b2570_4_rib2	Translation elongation 2 b2570 4 ribosome(s)	628 h2o + 1 rib_70_elo1_b2570_4_cplx --> 628 EF-G.GDP + 628 EF-Tu.GDP + 60 ala1_tRNA + 12 ala2_tRNA + 20 arg1_tRNA + 4 argX_tRNA + 8 asn1_tRNA + 16 asp1_tRNA + 24 cysT_tRNA + 4 fmet_tRNA + 8 gln1_tRNA + 16 gln2_tRNA + 28 glu1_tRNA + 40 gly1_tRNA + 4 glyT_tRNA + 16 glyU_tRNA + 1256 h + 4 hisR_tRNA + 36 ile1_tRNA + 20 leu1_tRNA + 8 leu2_tRNA + 24 leuU_tRNA + 8 leuW_tRNA + 24 leuZ_tRNA + 20 lys1_tRNA + 4 met1_tRNA + 3160 mg2 + 24 phe1_tRNA + 1256 pi + 24 pro1_tRNA + 4 pro2_tRNA + 4 proL_tRNA + 1 rib_70_elo2_b2570_4_cplx + 8 ser1_tRNA + 8 ser2_tRNA + 16 ser3_tRNA + 8 serT_tRNA + 32 serV_tRNA + 12 thr1_tRNA + 4 thr3_tRNA + 4 thrU_tRNA + 12 trpT_tRNA + 8 tyr1_tRNA + 28 val1_tRNA + 20 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269

tl_elo_b2570_9_rib1	Translation elongation 1 b2570 9 ribosome(s)	1422 EF-G.GTP + 135 EF-Tu.GTP.ala1-tRNA + 27 EF-Tu.GTP.ala2-tRNA + 45 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argX-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 36 EF-Tu.GTP.asp1-tRNA + 54 EF-Tu.GTP.cysT-tRNA + 27 EF-Tu.GTP.gln1-tRNA + 36 EF-Tu.GTP.gln2-tRNA + 63 EF-Tu.GTP.glu1-tRNA + 90 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 36 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 81 EF-Tu.GTP.ile1-tRNA + 45 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.leu2-tRNA + 54 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuW-tRNA + 54 EF-Tu.GTP.leuZ-tRNA + 45 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 54 EF-Tu.GTP.phe1-tRNA + 54 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.proL-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 36 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serT-tRNA + 72 EF-Tu.GTP.serV-tRNA + 27 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 27 EF-Tu.GTP.trpT-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 63 EF-Tu.GTP.val1-tRNA + 45 EF-Tu.GTP.val2-tRNA + 18 EF-Tu.GTP.val3-tRNA + 7110 mg2 + 1 rib_ini_b2570_9 --> 1 rib_70_elo1_b2570_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269
tl_elo_b2570_9_rib2	Translation elongation 2 b2570 9 ribosome(s)	1413 h2o + 1 rib_70_elo1_b2570_9_cplx --> 1413 EF-G.GDP + 1413 EF-Tu.GDP + 135 ala1_tRNA + 27 ala2_tRNA + 45 arg1_tRNA + 9 argX_tRNA + 18 asn1_tRNA + 36 asp1_tRNA + 54 cysT_tRNA + 9 fmet_tRNA + 18 gln1_tRNA + 36 gln2_tRNA + 63 glu1_tRNA + 90 gly1_tRNA + 9 glyT_tRNA + 36 glyU_tRNA + 2826 h + 9 hisR_tRNA + 81 ile1_tRNA + 45 leu1_tRNA + 18 leu2_tRNA + 54 leuU_tRNA + 18 leuW_tRNA + 54 leuZ_tRNA + 45 lys1_tRNA + 9 met1_tRNA + 7110 mg2 + 54 phe1_tRNA + 2826 pi + 54 pro1_tRNA + 9 pro2_tRNA + 9 proL_tRNA + 1 rib_70_elo2_b2570_9_cplx + 18 ser1_tRNA + 18 ser2_tRNA + 36 ser3_tRNA + 18 serT_tRNA + 72 serV_tRNA + 27 thr1_tRNA + 9 thr3_tRNA + 9 thrU_tRNA + 27 trpT_tRNA + 18 tyr1_tRNA + 63 val1_tRNA + 45 val2_tRNA + 18 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269
tl_elo_b2571_18_rib1	Translation elongation 1 b2571 18 ribosome(s)	5706 EF-G.GTP + 252 EF-Tu.GTP.ala1-tRNA + 126 EF-Tu.GTP.ala2-tRNA + 414 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argU-tRNA + 36 EF-Tu.GTP.argX-tRNA + 270 EF-Tu.GTP.asn1-tRNA + 306 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.cysT-tRNA + 162 EF-Tu.GTP.gln1-tRNA + 108 EF-Tu.GTP.gln2-tRNA + 288 EF-Tu.GTP.glu1-tRNA + 180 EF-Tu.GTP.gly1-tRNA + 54 EF-Tu.GTP.glyT-tRNA + 54 EF-Tu.GTP.glyU-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 288 EF-Tu.GTP.ile1-tRNA + 162 EF-Tu.GTP.leu1-tRNA + 108 EF-Tu.GTP.leu2-tRNA + 216 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuW-tRNA + 108 EF-Tu.GTP.leuZ-tRNA + 162 EF-Tu.GTP.lys1-tRNA + 162 EF-Tu.GTP.met1-tRNA + 252 EF-Tu.GTP.phe1-tRNA + 180 EF-Tu.GTP.pro1-tRNA + 72 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proL-tRNA + 72 EF-Tu.GTP.proM-tRNA + 72 EF-Tu.GTP.ser1-tRNA + 90 EF-Tu.GTP.ser2-tRNA + 90 EF-Tu.GTP.ser3-tRNA + 72 EF-Tu.GTP.serT-tRNA + 288 EF-Tu.GTP.serV-tRNA + 126 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 144 EF-Tu.GTP.thr3-tRNA + 54 EF-Tu.GTP.thrU-tRNA + 72 EF-Tu.GTP.trpT-tRNA + 180 EF-Tu.GTP.tyr1-tRNA + 162 EF-Tu.GTP.val1-tRNA + 90 EF-Tu.GTP.val2-tRNA + 126 EF-Tu.GTP.val3-tRNA + 28530 mg2 + 1 rib	irreversible	Translation	0.00E+00	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459
tl_elo_b2571_18_rib2	Translation elongation 2 b2571 18 ribosome(s)	5688 h2o + 1 rib_70_elo1_b2571_18_cplx --> 5688 EF-G.GDP + 5688 EF-Tu.GDP + 252 ala1_tRNA + 126 ala2_tRNA + 414 arg1_tRNA + 18 argU_tRNA + 36 argX_tRNA + 270 asn1_tRNA + 306 asp1_tRNA + 18 cysT_tRNA + 18 fmet_tRNA + 162 gln1_tRNA + 90 gln2_tRNA + 288 glu1_tRNA + 180 gly1_tRNA + 54 glyT_tRNA + 54 glyU_tRNA + 11376 h + 18 hisR_tRNA + 288 ile1_tRNA + 162 leu1_tRNA + 108 leu2_tRNA + 216 leuU_tRNA + 18 leuW_tRNA + 108 leuZ_tRNA + 162 lys1_tRNA + 162 met1_tRNA + 28530 mg2 + 252 phe1_tRNA + 11376 pi + 180 pro1_tRNA + 72 pro2_tRNA + 18 proL_tRNA + 72 proM_tRNA + 1 rib_70_elo2_b2571_18_cplx + 72 ser1_tRNA + 90 ser2_tRNA + 90 ser3_tRNA + 72 serT_tRNA + 288 serV_tRNA + 126 thr1_tRNA + 18 thr2_tRNA + 144 thr3_tRNA + 54 thrU_tRNA + 72 trpT_tRNA + 180 tyr1_tRNA + 162 val1_tRNA + 90 val2_tRNA + 126 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459
tl_elo_b2571_1_rib1	Translation elongation 1 b2571 1 ribosome(s)	317 EF-G.GTP + 14 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 23 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 2 EF-Tu.GTP.argX-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 17 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 9 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 14 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 16 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 1585 mg2 + 1 rib_ini_b2571_1 --> 1 rib_70_elo1_b2571_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459
tl_elo_b2571_1_rib2	Translation elongation 2 b2571 1 ribosome(s)	316 h2o + 1 rib_70_elo1_b2571_1_cplx --> 316 EF-G.GDP + 316 EF-Tu.GDP + 14 ala1_tRNA + 7 ala2_tRNA + 23 arg1_tRNA + 1 argU_tRNA + 2 argX_tRNA + 15 asn1_tRNA + 17 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 9 gln1_tRNA + 5 gln2_tRNA + 16 glu1_tRNA + 10 gly1_tRNA + 3 glyT_tRNA + 3 glyU_tRNA + 632 h + 1 hisR_tRNA + 16 ile1_tRNA + 9 leu1_tRNA + 6 leu2_tRNA + 12 leuU_tRNA + 1 leuW_tRNA + 6 leuZ_tRNA + 9 lys1_tRNA + 9 met1_tRNA + 1585 mg2 + 14 phe1_tRNA + 632 pi + 10 pro1_tRNA + 4 pro2_tRNA + 1 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b2571_1_cplx + 4 ser1_tRNA + 5 ser2_tRNA + 5 ser3_tRNA + 4 serT_tRNA + 16 serV_tRNA + 7 thr1_tRNA + 1 thr2_tRNA + 8 thr3_tRNA + 3 thrU_tRNA + 4 trpT_tRNA + 10 tyr1_tRNA + 9 val1_tRNA + 5 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459

tl_elo_b2571_9_rib1	Translation elongation 1 b2571 9 ribosome(s)	2853 EF-G.GTP + 126 EF-Tu.GTP.ala1-tRNA + 63 EF-Tu.GTP.ala2-tRNA + 207 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argU-tRNA + 18 EF-Tu.GTP.argX-tRNA + 135 EF-Tu.GTP.asn1-tRNA + 153 EF-Tu.GTP.asp1-tRNA + 9 EF-Tu.GTP.cysT-tRNA + 81 EF-Tu.GTP.gln1-tRNA + 54 EF-Tu.GTP.gln2-tRNA + 144 EF-Tu.GTP.glu1-tRNA + 90 EF-Tu.GTP.gly1-tRNA + 27 EF-Tu.GTP.glyT-tRNA + 27 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 144 EF-Tu.GTP.ile1-tRNA + 81 EF-Tu.GTP.leu1-tRNA + 54 EF-Tu.GTP.leu2-tRNA + 108 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuW-tRNA + 54 EF-Tu.GTP.leuZ-tRNA + 81 EF-Tu.GTP.lys1-tRNA + 81 EF-Tu.GTP.met1-tRNA + 126 EF-Tu.GTP.phe1-tRNA + 90 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.proL-tRNA + 36 EF-Tu.GTP.proM-tRNA + 36 EF-Tu.GTP.ser1-tRNA + 45 EF-Tu.GTP.ser2-tRNA + 45 EF-Tu.GTP.ser3-tRNA + 36 EF-Tu.GTP.serT-tRNA + 144 EF-Tu.GTP.serV-tRNA + 63 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 72 EF-Tu.GTP.thr3-tRNA + 27 EF-Tu.GTP.thrU-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 90 EF-Tu.GTP.tyr1-tRNA + 81 EF-Tu.GTP.val1-tRNA + 45 EF-Tu.GTP.val2-tRNA + 63 EF-Tu.GTP.val3-tRNA + 14265 mg2 + 1 rib_	irreversible	Translation	0.00E+00	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459
tl_elo_b2571_9_rib2	Translation elongation 2 b2571 9 ribosome(s)	2844 h2o + 1 rib_70_elo1_b2571_9_cplx --> 2844 EF-G.GDP + 2844 EF-Tu.GDP + 126 ala1_tRNA + 63 ala2_tRNA + 207 arg1_tRNA + 9 argU_tRNA + 18 argX_tRNA + 135 asn1_tRNA + 153 asp1_tRNA + 9 cysT_tRNA + 9 fmet_tRNA + 81 gln1_tRNA + 45 gln2_tRNA + 144 glu1_tRNA + 90 gly1_tRNA + 27 glyT_tRNA + 27 glyU_tRNA + 5688 h + 9 hisR_tRNA + 144 ile1_tRNA + 81 leu1_tRNA + 54 leu2_tRNA + 108 leuU_tRNA + 9 leuW_tRNA + 54 leuZ_tRNA + 81 lys1_tRNA + 81 met1_tRNA + 14265 mg2 + 126 phe1_tRNA + 5688 pi + 90 pro1_tRNA + 36 pro2_tRNA + 9 proL_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b2571_9_cplx + 36 ser1_tRNA + 45 ser2_tRNA + 45 ser3_tRNA + 36 serT_tRNA + 144 serV_tRNA + 63 thr1_tRNA + 9 thr2_tRNA + 72 thr3_tRNA + 27 thrU_tRNA + 36 trpT_tRNA + 90 tyr1_tRNA + 81 val1_tRNA + 45 val2_tRNA + 63 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459
tl_elo_b2572_12_rib1	Translation elongation 1 b2572 12 ribosome(s)	2580 EF-G.GTP + 156 EF-Tu.GTP.ala1-tRNA + 72 EF-Tu.GTP.ala2-tRNA + 108 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argX-tRNA + 84 EF-Tu.GTP.asn1-tRNA + 72 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 252 EF-Tu.GTP.gln1-tRNA + 132 EF-Tu.GTP.gln2-tRNA + 216 EF-Tu.GTP.glu1-tRNA + 72 EF-Tu.GTP.gly1-tRNA + 48 EF-Tu.GTP.glyT-tRNA + 72 EF-Tu.GTP.hisR-tRNA + 84 EF-Tu.GTP.ile1-tRNA + 72 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.leu2-tRNA + 84 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 60 EF-Tu.GTP.lys1-tRNA + 108 EF-Tu.GTP.met1-tRNA + 48 EF-Tu.GTP.phe1-tRNA + 84 EF-Tu.GTP.pro1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proL-tRNA + 48 EF-Tu.GTP.proM-tRNA + 24 EF-Tu.GTP.ser1-tRNA + 48 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serT-tRNA + 48 EF-Tu.GTP.serV-tRNA + 48 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr2-tRNA + 48 EF-Tu.GTP.thr3-tRNA + 24 EF-Tu.GTP.thrU-tRNA + 48 EF-Tu.GTP.trpT-tRNA + 36 EF-Tu.GTP.tyr1-tRNA + 144 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 24 EF-Tu.GTP.val3-tRNA + 12900 mg2 + 1 rib_ini_b2572_12 --> 1 rib_70_elo1_b2572_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_elo_b2572_12_rib2	Translation elongation 2 b2572 12 ribosome(s)	2568 h2o + 1 rib_70_elo1_b2572_12_cplx --> 2568 EF-G.GDP + 2568 EF-Tu.GDP + 156 ala1_tRNA + 72 ala2_tRNA + 108 arg1_tRNA + 12 argX_tRNA + 84 asn1_tRNA + 72 asp1_tRNA + 12 cysT_tRNA + 12 fmet_tRNA + 240 gln1_tRNA + 132 gln2_tRNA + 216 glu1_tRNA + 72 gly1_tRNA + 48 glyT_tRNA + 5136 h + 72 hisR_tRNA + 84 ile1_tRNA + 72 leu1_tRNA + 24 leu2_tRNA + 84 leuU_tRNA + 36 leuZ_tRNA + 60 lys1_tRNA + 108 met1_tRNA + 12900 mg2 + 48 phe1_tRNA + 5136 pi + 84 pro1_tRNA + 24 pro2_tRNA + 24 proL_tRNA + 48 proM_tRNA + 1 rib_70_elo2_b2572_12_cplx + 24 ser1_tRNA + 48 ser2_tRNA + 24 ser3_tRNA + 24 serT_tRNA + 48 serV_tRNA + 48 thr1_tRNA + 24 thr2_tRNA + 48 thr3_tRNA + 24 thrU_tRNA + 48 trpT_tRNA + 36 tyr1_tRNA + 144 val1_tRNA + 12 val2_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_elo_b2572_1_rib1	Translation elongation 1 b2572 1 ribosome(s)	215 EF-G.GTP + 13 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 9 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 21 EF-Tu.GTP.gln1-tRNA + 11 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 5 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 1075 mg2 + 1 rib_ini_b2572_1 --> 1 rib_70_elo1_b2572_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_elo_b2572_1_rib2	Translation elongation 2 b2572 1 ribosome(s)	214 h2o + 1 rib_70_elo1_b2572_1_cplx --> 214 EF-G.GDP + 214 EF-Tu.GDP + 13 ala1_tRNA + 6 ala2_tRNA + 9 arg1_tRNA + 1 argX_tRNA + 7 asn1_tRNA + 6 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 20 gln1_tRNA + 11 gln2_tRNA + 18 glu1_tRNA + 6 gly1_tRNA + 4 glyT_tRNA + 428 h + 6 hisR_tRNA + 7 ile1_tRNA + 6 leu1_tRNA + 2 leu2_tRNA + 7 leuU_tRNA + 3 leuZ_tRNA + 5 lys1_tRNA + 9 met1_tRNA + 1075 mg2 + 4 phe1_tRNA + 428 pi + 7 pro1_tRNA + 2 pro2_tRNA + 2 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b2572_1_cplx + 2 ser1_tRNA + 4 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 4 serV_tRNA + 4 thr1_tRNA + 2 thr2_tRNA + 4 thr3_tRNA + 2 thrU_tRNA + 4 trpT_tRNA + 3 tyr1_tRNA + 12 val1_tRNA + 1 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999

tl_elo_b2572_6_rib1	Translation elongation 1 b2572 6 ribosome(s)	1290 EF-G.GTP + 78 EF-Tu.GTP.ala1-tRNA + 36 EF-Tu.GTP.ala2-tRNA + 54 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argX-tRNA + 42 EF-Tu.GTP.asn1-tRNA + 36 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 126 EF-Tu.GTP.gln1-tRNA + 66 EF-Tu.GTP.gln2-tRNA + 108 EF-Tu.GTP.glu1-tRNA + 36 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.glyT-tRNA + 36 EF-Tu.GTP.hisR-tRNA + 42 EF-Tu.GTP.ile1-tRNA + 36 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 42 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 30 EF-Tu.GTP.lys1-tRNA + 54 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 42 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proL-tRNA + 24 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 12 EF-Tu.GTP.serT-tRNA + 24 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 24 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.thrU-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 72 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 6450 mg2 + 1 rib_ini_b2572_6 --> 1 rib_70_elo1_b2572_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_elo_b2572_6_rib2	Translation elongation 2 b2572 6 ribosome(s)	1284 h2o + 1 rib_70_elo1_b2572_6_cplx --> 1284 EF-G.GDP + 1284 EF-Tu.GDP + 78 ala1_tRNA + 36 ala2_tRNA + 54 arg1_tRNA + 6 argX_tRNA + 42 asn1_tRNA + 36 asp1_tRNA + 6 cysT_tRNA + 6 fmet_tRNA + 120 gln1_tRNA + 66 gln2_tRNA + 108 glu1_tRNA + 36 gly1_tRNA + 24 glyT_tRNA + 2568 h + 36 hisR_tRNA + 42 ile1_tRNA + 36 leu1_tRNA + 12 leu2_tRNA + 42 leuU_tRNA + 18 leuZ_tRNA + 30 lys1_tRNA + 54 met1_tRNA + 6450 mg2 + 24 phe1_tRNA + 2568 pi + 42 pro1_tRNA + 12 pro2_tRNA + 12 proL_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b2572_6_cplx + 12 ser1_tRNA + 24 ser2_tRNA + 12 ser3_tRNA + 12 serT_tRNA + 24 serV_tRNA + 24 thr1_tRNA + 12 thr2_tRNA + 24 thr3_tRNA + 12 thrU_tRNA + 24 trpT_tRNA + 18 tyr1_tRNA + 72 val1_tRNA + 6 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_elo_b2573_11_rib1	Translation elongation 1 b2573 11 ribosome(s)	2090 EF-G.GTP + 143 EF-Tu.GTP.ala1-tRNA + 44 EF-Tu.GTP.ala2-tRNA + 121 EF-Tu.GTP.arg1-tRNA + 11 EF-Tu.GTP.argU-tRNA + 22 EF-Tu.GTP.argW-tRNA + 44 EF-Tu.GTP.argX-tRNA + 77 EF-Tu.GTP.asn1-tRNA + 132 EF-Tu.GTP.asp1-tRNA + 11 EF-Tu.GTP.cysT-tRNA + 77 EF-Tu.GTP.gln1-tRNA + 22 EF-Tu.GTP.gln2-tRNA + 176 EF-Tu.GTP.glu1-tRNA + 55 EF-Tu.GTP.gly1-tRNA + 22 EF-Tu.GTP.glyT-tRNA + 11 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 99 EF-Tu.GTP.ile1-tRNA + 33 EF-Tu.GTP.ile2-tRNA + 99 EF-Tu.GTP.leu1-tRNA + 33 EF-Tu.GTP.leu2-tRNA + 22 EF-Tu.GTP.leuU-tRNA + 44 EF-Tu.GTP.leuZ-tRNA + 77 EF-Tu.GTP.lys1-tRNA + 33 EF-Tu.GTP.met1-tRNA + 77 EF-Tu.GTP.phe1-tRNA + 44 EF-Tu.GTP.pro1-tRNA + 22 EF-Tu.GTP.pro2-tRNA + 11 EF-Tu.GTP.proL-tRNA + 11 EF-Tu.GTP.proM-tRNA + 33 EF-Tu.GTP.ser1-tRNA + 33 EF-Tu.GTP.ser3-tRNA + 22 EF-Tu.GTP.serT-tRNA + 66 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 11 EF-Tu.GTP.thr2-tRNA + 22 EF-Tu.GTP.thr3-tRNA + 22 EF-Tu.GTP.thrU-tRNA + 11 EF-Tu.GTP.trpT-tRNA + 77 EF-Tu.GTP.tyr1-tRNA + 110 EF-Tu.GTP.val1-tRNA + 22 EF-Tu.GTP.val2-tRNA + 66 EF-Tu.GTP.val3-tRNA + 10450 mg2 + 1 rib_	irreversible	Translation	0.00E+00	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579
tl_elo_b2573_11_rib2	Translation elongation 2 b2573 11 ribosome(s)	2079 h2o + 1 rib_70_elo1_b2573_11_cplx --> 2079 EF-G.GDP + 2079 EF-Tu.GDP + 143 ala1_tRNA + 44 ala2_tRNA + 110 arg1_tRNA + 11 argU_tRNA + 22 argW_tRNA + 44 argX_tRNA + 77 asn1_tRNA + 132 asp1_tRNA + 11 cysT_tRNA + 11 fmet_tRNA + 77 gln1_tRNA + 22 gln2_tRNA + 176 glu1_tRNA + 55 gly1_tRNA + 22 glyT_tRNA + 11 glyU_tRNA + 4158 h + 11 hisR_tRNA + 99 ile1_tRNA + 33 ile2_tRNA + 99 leu1_tRNA + 33 leu2_tRNA + 22 leuU_tRNA + 44 leuZ_tRNA + 77 lys1_tRNA + 33 met1_tRNA + 10450 mg2 + 77 phe1_tRNA + 4158 pi + 44 pro1_tRNA + 22 pro2_tRNA + 11 proL_tRNA + 11 proM_tRNA + 1 rib_70_elo2_b2573_11_cplx + 33 ser1_tRNA + 33 ser3_tRNA + 22 serT_tRNA + 66 serV_tRNA + 11 thr1_tRNA + 11 thr2_tRNA + 22 thr3_tRNA + 22 thrU_tRNA + 11 trpT_tRNA + 77 tyr1_tRNA + 110 val1_tRNA + 22 val2_tRNA + 66 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579
tl_elo_b2573_1_rib1	Translation elongation 1 b2573 1 ribosome(s)	190 EF-G.GTP + 13 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 2 EF-Tu.GTP.argW-tRNA + 4 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 950 mg2 + 1 rib_ini_b2573_1 --> 1 rib_70_elo1_b2573_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579
tl_elo_b2573_1_rib2	Translation elongation 2 b2573 1 ribosome(s)	189 h2o + 1 rib_70_elo1_b2573_1_cplx --> 189 EF-G.GDP + 189 EF-Tu.GDP + 13 ala1_tRNA + 4 ala2_tRNA + 10 arg1_tRNA + 1 argU_tRNA + 2 argW_tRNA + 4 argX_tRNA + 7 asn1_tRNA + 12 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 2 gln2_tRNA + 16 glu1_tRNA + 5 gly1_tRNA + 2 glyT_tRNA + 1 glyU_tRNA + 378 h + 1 hisR_tRNA + 9 ile1_tRNA + 3 ile2_tRNA + 9 leu1_tRNA + 3 leu2_tRNA + 2 leuU_tRNA + 4 leuZ_tRNA + 7 lys1_tRNA + 3 met1_tRNA + 950 mg2 + 7 phe1_tRNA + 378 pi + 4 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b2573_1_cplx + 3 ser1_tRNA + 3 ser3_tRNA + 2 serT_tRNA + 6 serV_tRNA + 1 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 2 thrU_tRNA + 1 trpT_tRNA + 7 tyr1_tRNA + 10 val1_tRNA + 2 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579

tl_elo_b2573_5_rib1	Translation elongation 1 b2573 5 ribosome(s)	950 EF-G.GTP + 65 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 55 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argU-tRNA + 10 EF-Tu.GTP.argW-tRNA + 20 EF-Tu.GTP.argX-tRNA + 35 EF-Tu.GTP.asn1-tRNA + 60 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 35 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 80 EF-Tu.GTP.glu1-tRNA + 25 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 45 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.ile2-tRNA + 45 EF-Tu.GTP.leu1-tRNA + 15 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 35 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 35 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 15 EF-Tu.GTP.ser1-tRNA + 15 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serT-tRNA + 30 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 35 EF-Tu.GTP.tyr1-tRNA + 50 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 30 EF-Tu.GTP.val3-tRNA + 4750 mg2 + 1 rib_ini_b2573_5 -->	irreversible	Translation	0.00E+00	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579
tl_elo_b2573_5_rib2	Translation elongation 2 b2573 5 ribosome(s)	945 h2o + 1 rib_70_elo1_b2573_5_cplx --> 945 EF-G.GDP + 945 EF-Tu.GDP + 65 ala1_tRNA + 20 ala2_tRNA + 50 arg1_tRNA + 5 argU_tRNA + 10 argW_tRNA + 20 argX_tRNA + 35 asn1_tRNA + 60 asp1_tRNA + 5 cysT_tRNA + 5 fmet_tRNA + 35 gln1_tRNA + 10 gln2_tRNA + 80 glu1_tRNA + 25 gly1_tRNA + 10 glyT_tRNA + 5 glyU_tRNA + 1890 h + 5 hisR_tRNA + 45 ile1_tRNA + 15 ile2_tRNA + 45 leu1_tRNA + 15 leu2_tRNA + 10 leuU_tRNA + 20 leuZ_tRNA + 35 lys1_tRNA + 15 met1_tRNA + 4750 mg2 + 35 phe1_tRNA + 1890 pi + 20 pro1_tRNA + 10 pro2_tRNA + 5 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b2573_5_cplx + 15 ser1_tRNA + 15 ser3_tRNA + 10 serT_tRNA + 30 serV_tRNA + 5 thr1_tRNA + 5 thr2_tRNA + 10 thr3_tRNA + 10 thrU_tRNA + 5 trpT_tRNA + 35 tyr1_tRNA + 50 val1_tRNA + 10 val2_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579
tl_elo_b2593_14_rib1	Translation elongation 1 b2593 14 ribosome(s)	3388 EF-G.GTP + 294 EF-Tu.GTP.ala1-tRNA + 126 EF-Tu.GTP.ala2-tRNA + 168 EF-Tu.GTP.arg1-tRNA + 28 EF-Tu.GTP.argX-tRNA + 140 EF-Tu.GTP.asn1-tRNA + 168 EF-Tu.GTP.asp1-tRNA + 112 EF-Tu.GTP.cysT-tRNA + 84 EF-Tu.GTP.gln1-tRNA + 14 EF-Tu.GTP.gln2-tRNA + 196 EF-Tu.GTP.glu1-tRNA + 238 EF-Tu.GTP.gly1-tRNA + 28 EF-Tu.GTP.glyT-tRNA + 42 EF-Tu.GTP.glyU-tRNA + 70 EF-Tu.GTP.hisR-tRNA + 112 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.ile2-tRNA + 98 EF-Tu.GTP.leu1-tRNA + 28 EF-Tu.GTP.leu2-tRNA + 126 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.leuZ-tRNA + 140 EF-Tu.GTP.lys1-tRNA + 42 EF-Tu.GTP.met1-tRNA + 140 EF-Tu.GTP.phe1-tRNA + 98 EF-Tu.GTP.pro1-tRNA + 42 EF-Tu.GTP.pro2-tRNA + 28 EF-Tu.GTP.proL-tRNA + 28 EF-Tu.GTP.proM-tRNA + 28 EF-Tu.GTP.ser1-tRNA + 42 EF-Tu.GTP.ser2-tRNA + 28 EF-Tu.GTP.serT-tRNA + 84 EF-Tu.GTP.serV-tRNA + 28 EF-Tu.GTP.thr1-tRNA + 56 EF-Tu.GTP.thr2-tRNA + 70 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.thrU-tRNA + 70 EF-Tu.GTP.trpT-tRNA + 98 EF-Tu.GTP.tyr1-tRNA + 126 EF-Tu.GTP.val1-tRNA + 42 EF-Tu.GTP.val2-tRNA + 84 EF-Tu.GTP.val3-tRNA + 16940 mg2 + 1 rib_ini_b2593_14 --> 1 rib_70_elo1_b2593_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_elo_b2593_14_rib2	Translation elongation 2 b2593 14 ribosome(s)	3374 h2o + 1 rib_70_elo1_b2593_14_cplx --> 3374 EF-G.GDP + 3374 EF-Tu.GDP + 294 ala1_tRNA + 126 ala2_tRNA + 168 arg1_tRNA + 28 argX_tRNA + 140 asn1_tRNA + 168 asp1_tRNA + 112 cysT_tRNA + 14 fmet_tRNA + 84 gln1_tRNA + 14 gln2_tRNA + 196 glu1_tRNA + 238 gly1_tRNA + 28 glyT_tRNA + 42 glyU_tRNA + 6748 h + 70 hisR_tRNA + 112 ile1_tRNA + 98 leu1_tRNA + 28 leu2_tRNA + 126 leuU_tRNA + 14 leuZ_tRNA + 140 lys1_tRNA + 42 met1_tRNA + 16940 mg2 + 140 phe1_tRNA + 6748 pi + 98 pro1_tRNA + 42 pro2_tRNA + 28 proL_tRNA + 28 proM_tRNA + 1 rib_70_elo2_b2593_14_cplx + 28 ser1_tRNA + 42 ser2_tRNA + 28 serT_tRNA + 84 serV_tRNA + 28 thr1_tRNA + 56 thr2_tRNA + 70 thr3_tRNA + 14 thrU_tRNA + 70 trpT_tRNA + 98 tyr1_tRNA + 126 val1_tRNA + 42 val2_tRNA + 84 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_elo_b2593_1_rib1	Translation elongation 1 b2593 1 ribosome(s)	242 EF-G.GTP + 21 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 17 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 7 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1210 mg2 + 1 rib_ini_b2593_1 --> 1 rib_70_elo1_b2593_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_elo_b2593_1_rib2	Translation elongation 2 b2593 1 ribosome(s)	241 h2o + 1 rib_70_elo1_b2593_1_cplx --> 241 EF-G.GDP + 241 EF-Tu.GDP + 21 ala1_tRNA + 9 ala2_tRNA + 12 arg1_tRNA + 2 argX_tRNA + 10 asn1_tRNA + 12 asp1_tRNA + 8 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 1 gln2_tRNA + 14 glu1_tRNA + 17 gly1_tRNA + 2 glyT_tRNA + 3 glyU_tRNA + 482 h + 5 hisR_tRNA + 8 ile1_tRNA + 7 leu1_tRNA + 2 leu2_tRNA + 9 leuU_tRNA + 1 leuZ_tRNA + 10 lys1_tRNA + 3 met1_tRNA + 1210 mg2 + 10 phe1_tRNA + 482 pi + 7 pro1_tRNA + 3 pro2_tRNA + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b2593_1_cplx + 2 ser1_tRNA + 3 ser2_tRNA + 2 serT_tRNA + 6 serV_tRNA + 2 thr1_tRNA + 4 thr2_tRNA + 5 thr3_tRNA + 1 thrU_tRNA + 5 trpT_tRNA + 7 tyr1_tRNA + 9 val1_tRNA + 3 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716

tl_elo_b2593_7_rib1	Translation elongation 1 b2593 7 ribosome(s)	1694 EF-G.GTP + 147 EF-Tu.GTP.ala1-tRNA + 63 EF-Tu.GTP.ala2-tRNA + 84 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.argX-tRNA + 70 EF-Tu.GTP.asn1-tRNA + 84 EF-Tu.GTP.asp1-tRNA + 56 EF-Tu.GTP.cysT-tRNA + 42 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 98 EF-Tu.GTP.glu1-tRNA + 119 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyT-tRNA + 21 EF-Tu.GTP.glyU-tRNA + 35 EF-Tu.GTP.hisR-tRNA + 56 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.ile2-tRNA + 49 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leu2-tRNA + 63 EF-Tu.GTP.leuU-tRNA + 7 EF-Tu.GTP.leuZ-tRNA + 70 EF-Tu.GTP.lys1-tRNA + 21 EF-Tu.GTP.met1-tRNA + 70 EF-Tu.GTP.phe1-tRNA + 49 EF-Tu.GTP.pro1-tRNA + 21 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proL-tRNA + 14 EF-Tu.GTP.proM-tRNA + 14 EF-Tu.GTP.ser1-tRNA + 21 EF-Tu.GTP.ser2-tRNA + 14 EF-Tu.GTP.serT-tRNA + 42 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 28 EF-Tu.GTP.thr2-tRNA + 35 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 35 EF-Tu.GTP.trpT-tRNA + 49 EF-Tu.GTP.tyr1-tRNA + 63 EF-Tu.GTP.val1-tRNA + 21 EF-Tu.GTP.val2-tRNA + 42 EF-Tu.GTP.val3-tRNA + 8470 mg2 + 1 rib_ini_b2593_7 --> 1 rib_70_elo1_b2593_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_elo_b2593_7_rib2	Translation elongation 2 b2593 7 ribosome(s)	1687 h2o + 1 rib_70_elo1_b2593_7_cplx --> 1687 EF-G.GDP + 1687 EF-Tu.GDP + 147 ala1_tRNA + 63 ala2_tRNA + 84 arg1_tRNA + 14 argX_tRNA + 70 asn1_tRNA + 84 asp1_tRNA + 56 cysT_tRNA + 7 fmet_tRNA + 42 gln1_tRNA + 7 gln2_tRNA + 98 glu1_tRNA + 119 gly1_tRNA + 14 glyT_tRNA + 21 glyU_tRNA + 3374 h + 35 hisR_tRNA + 56 ile1_tRNA + 49 leu1_tRNA + 14 leu2_tRNA + 63 leuU_tRNA + 7 leuZ_tRNA + 70 lys1_tRNA + 21 met1_tRNA + 8470 mg2 + 70 phe1_tRNA + 3374 pi + 49 pro1_tRNA + 21 pro2_tRNA + 14 proL_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b2593_7_cplx + 14 ser1_tRNA + 21 ser2_tRNA + 14 serT_tRNA + 42 serV_tRNA + 14 thr1_tRNA + 28 thr2_tRNA + 35 thr3_tRNA + 7 thrU_tRNA + 35 trpT_tRNA + 49 tyr1_tRNA + 63 val1_tRNA + 21 val2_tRNA + 42 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_elo_b2594_19_rib1	Translation elongation 1 b2594 19 ribosome(s)	6175 EF-G.GTP + 380 EF-Tu.GTP.ala1-tRNA + 95 EF-Tu.GTP.ala2-tRNA + 494 EF-Tu.GTP.arg1-tRNA + 38 EF-Tu.GTP.argX-tRNA + 114 EF-Tu.GTP.asn1-tRNA + 380 EF-Tu.GTP.asp1-tRNA + 19 EF-Tu.GTP.cysT-tRNA + 152 EF-Tu.GTP.gln1-tRNA + 95 EF-Tu.GTP.gln2-tRNA + 513 EF-Tu.GTP.glu1-tRNA + 342 EF-Tu.GTP.gly1-tRNA + 19 EF-Tu.GTP.glyT-tRNA + 342 EF-Tu.GTP.hisR-tRNA + 418 EF-Tu.GTP.ile1-tRNA + 19 EF-Tu.GTP.ile2-tRNA + 228 EF-Tu.GTP.leu1-tRNA + 95 EF-Tu.GTP.leu2-tRNA + 95 EF-Tu.GTP.leuU-tRNA + 19 EF-Tu.GTP.leuW-tRNA + 57 EF-Tu.GTP.leuZ-tRNA + 247 EF-Tu.GTP.lys1-tRNA + 209 EF-Tu.GTP.met1-tRNA + 114 EF-Tu.GTP.phe1-tRNA + 285 EF-Tu.GTP.pro1-tRNA + 38 EF-Tu.GTP.pro2-tRNA + 19 EF-Tu.GTP.proL-tRNA + 95 EF-Tu.GTP.proM-tRNA + 57 EF-Tu.GTP.ser1-tRNA + 19 EF-Tu.GTP.ser2-tRNA + 38 EF-Tu.GTP.ser3-tRNA + 19 EF-Tu.GTP.serT-tRNA + 19 EF-Tu.GTP.serV-tRNA + 114 EF-Tu.GTP.thr1-tRNA + 114 EF-Tu.GTP.thr2-tRNA + 133 EF-Tu.GTP.thr3-tRNA + 57 EF-Tu.GTP.trpT-tRNA + 152 EF-Tu.GTP.tyr1-tRNA + 361 EF-Tu.GTP.val1-tRNA + 57 EF-Tu.GTP.val2-tRNA + 114 EF-Tu.GTP.val3-tRNA + 30875 mg2 + 1 rib_ini_b2594_19 --> 1 rib_70_elo1_b2594_19_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916
tl_elo_b2594_19_rib2	Translation elongation 2 b2594 19 ribosome(s)	6156 h2o + 1 rib_70_elo1_b2594_19_cplx --> 6156 EF-G.GDP + 6156 EF-Tu.GDP + 380 ala1_tRNA + 95 ala2_tRNA + 494 arg1_tRNA + 38 argX_tRNA + 114 asn1_tRNA + 380 asp1_tRNA + 19 cysT_tRNA + 19 fmet_tRNA + 152 gln1_tRNA + 95 gln2_tRNA + 513 glu1_tRNA + 342 gly1_tRNA + 19 glyT_tRNA + 12312 h + 342 hisR_tRNA + 418 ile1_tRNA + 19 ile2_tRNA + 228 leu1_tRNA + 95 leu2_tRNA + 95 leuU_tRNA + 19 leuW_tRNA + 38 leuZ_tRNA + 247 lys1_tRNA + 209 met1_tRNA + 30875 mg2 + 114 phe1_tRNA + 12312 pi + 285 pro1_tRNA + 38 pro2_tRNA + 19 proL_tRNA + 95 proM_tRNA + 1 rib_70_elo2_b2594_19_cplx + 57 ser1_tRNA + 19 ser2_tRNA + 38 ser3_tRNA + 19 serT_tRNA + 19 serV_tRNA + 114 thr1_tRNA + 114 thr2_tRNA + 133 thr3_tRNA + 57 trpT_tRNA + 152 tyr1_tRNA + 361 val1_tRNA + 57 val2_tRNA + 114 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916
tl_elo_b2594_1_rib1	Translation elongation 1 b2594 1 ribosome(s)	325 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 26 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 20 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 27 EF-Tu.GTP.glu1-tRNA + 18 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 22 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 11 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 15 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 1 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 19 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1625 mg2 + 1 rib_ini_b2594_1 --> 1 rib_70_elo1_b2594_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916
tl_elo_b2594_1_rib2	Translation elongation 2 b2594 1 ribosome(s)	324 h2o + 1 rib_70_elo1_b2594_1_cplx --> 324 EF-G.GDP + 324 EF-Tu.GDP + 20 ala1_tRNA + 5 ala2_tRNA + 26 arg1_tRNA + 2 argX_tRNA + 6 asn1_tRNA + 20 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 5 gln2_tRNA + 27 glu1_tRNA + 18 gly1_tRNA + 1 glyT_tRNA + 648 h + 18 hisR_tRNA + 22 ile1_tRNA + 1 ile2_tRNA + 12 leu1_tRNA + 5 leu2_tRNA + 5 leuU_tRNA + 1 leuW_tRNA + 2 leuZ_tRNA + 13 lys1_tRNA + 11 met1_tRNA + 1625 mg2 + 6 phe1_tRNA + 648 pi + 15 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b2594_1_cplx + 3 ser1_tRNA + 1 ser2_tRNA + 2 ser3_tRNA + 1 serT_tRNA + 1 serV_tRNA + 6 thr1_tRNA + 6 thr2_tRNA + 7 thr3_tRNA + 3 trpT_tRNA + 8 tyr1_tRNA + 19 val1_tRNA + 3 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916

tl_elo_b2594_9_rib1	Translation elongation 1 b2594 9 ribosome(s)	2925 EF-G.GTP + 180 EF-Tu.GTP.ala1-tRNA + 45 EF-Tu.GTP.ala2-tRNA + 234 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argX-tRNA + 54 EF-Tu.GTP.asn1-tRNA + 180 EF-Tu.GTP.asp1-tRNA + 9 EF-Tu.GTP.cysT-tRNA + 72 EF-Tu.GTP.gln1-tRNA + 45 EF-Tu.GTP.gln2-tRNA + 243 EF-Tu.GTP.glu1-tRNA + 162 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 162 EF-Tu.GTP.hisR-tRNA + 198 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.ile2-tRNA + 108 EF-Tu.GTP.leu1-tRNA + 45 EF-Tu.GTP.leu2-tRNA + 45 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuW-tRNA + 27 EF-Tu.GTP.leuZ-tRNA + 117 EF-Tu.GTP.lys1-tRNA + 99 EF-Tu.GTP.met1-tRNA + 54 EF-Tu.GTP.phe1-tRNA + 135 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.proL-tRNA + 45 EF-Tu.GTP.proM-tRNA + 27 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serT-tRNA + 9 EF-Tu.GTP.serV-tRNA + 54 EF-Tu.GTP.thr1-tRNA + 54 EF-Tu.GTP.thr2-tRNA + 63 EF-Tu.GTP.thr3-tRNA + 27 EF-Tu.GTP.trpT-tRNA + 72 EF-Tu.GTP.tyr1-tRNA + 171 EF-Tu.GTP.val1-tRNA + 27 EF-Tu.GTP.val2-tRNA + 54 EF-Tu.GTP.val3-tRNA + 14625 mg2 + 1 rib_ini_b2594_9 --> 1 rib_70_elo1_b2594_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916
tl_elo_b2594_9_rib2	Translation elongation 2 b2594 9 ribosome(s)	2916 h2o + 1 rib_70_elo1_b2594_9_cplx --> 2916 EF-G.GDP + 2916 EF-Tu.GDP + 180 ala1_tRNA + 45 ala2_tRNA + 234 arg1_tRNA + 18 argX_tRNA + 54 asn1_tRNA + 180 asp1_tRNA + 9 cysT_tRNA + 9 fmet_tRNA + 72 gln1_tRNA + 45 gln2_tRNA + 243 glu1_tRNA + 162 gly1_tRNA + 9 glyT_tRNA + 5832 h + 162 hisR_tRNA + 198 ile1_tRNA + 9 ile2_tRNA + 108 leu1_tRNA + 45 leu2_tRNA + 45 leuU_tRNA + 9 leuW_tRNA + 18 leuZ_tRNA + 117 lys1_tRNA + 99 met1_tRNA + 14625 mg2 + 54 phe1_tRNA + 5832 pi + 135 pro1_tRNA + 18 pro2_tRNA + 9 proL_tRNA + 45 proM_tRNA + 1 rib_70_elo2_b2594_9_cplx + 27 ser1_tRNA + 9 ser2_tRNA + 18 ser3_tRNA + 9 serT_tRNA + 9 serV_tRNA + 54 thr1_tRNA + 54 thr2_tRNA + 63 thr3_tRNA + 27 trpT_tRNA + 72 tyr1_tRNA + 171 val1_tRNA + 27 val2_tRNA + 54 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916
tl_elo_b2606_1_rib1	Translation elongation 1 b2606 1 ribosome(s)	114 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 9 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 570 mg2 + 1 rib_ini_b2606_1 --> 1 rib_70_elo1_b2606_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	2.29E+01	22.9428
tl_elo_b2606_1_rib2	Translation elongation 2 b2606 1 ribosome(s)	113 h2o + 1 rib_70_elo1_b2606_1_cplx --> 113 EF-G.GDP + 113 EF-Tu.GDP + 7 ala1_tRNA + 13 arg1_tRNA + 3 asn1_tRNA + 3 asp1_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 2 gln2_tRNA + 9 glu1_tRNA + 8 gly1_tRNA + 226 h + 2 hisR_tRNA + 7 ile1_tRNA + 4 leu1_tRNA + 2 leuU_tRNA + 11 lys1_tRNA + 1 met1_tRNA + 570 mg2 + 4 phe1_tRNA + 226 pi + 2 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b2606_1_cplx + 3 ser1_tRNA + 3 ser2_tRNA + 2 serV_tRNA + 1 thr1_tRNA + 3 thr2_tRNA + 1 trpT_tRNA + 2 tyr1_tRNA + 6 val1_tRNA + 2 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	2.29E+01	22.9428
tl_elo_b2606_3_rib1	Translation elongation 1 b2606 3 ribosome(s)	342 EF-G.GTP + 21 EF-Tu.GTP.ala1-tRNA + 39 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 27 EF-Tu.GTP.glu1-tRNA + 24 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 33 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 18 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 21 EF-Tu.GTP.val3-tRNA + 1710 mg2 + 1 rib_ini_b2606_3 --> 1 rib_70_elo1_b2606_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.65E+01	3.65E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b2606_3_rib2	Translation elongation 2 b2606 3 ribosome(s)	339 h2o + 1 rib_70_elo1_b2606_3_cplx --> 339 EF-G.GDP + 339 EF-Tu.GDP + 21 ala1_tRNA + 39 arg1_tRNA + 9 asn1_tRNA + 9 asp1_tRNA + 3 fmet_tRNA + 12 gln1_tRNA + 6 gln2_tRNA + 27 glu1_tRNA + 24 gly1_tRNA + 678 h + 6 hisR_tRNA + 21 ile1_tRNA + 12 leu1_tRNA + 6 leuU_tRNA + 33 lys1_tRNA + 3 met1_tRNA + 1710 mg2 + 12 phe1_tRNA + 678 pi + 6 pro1_tRNA + 3 pro2_tRNA + 1 rib_70_elo2_b2606_3_cplx + 9 ser1_tRNA + 9 ser2_tRNA + 6 serV_tRNA + 3 thr1_tRNA + 9 thr2_tRNA + 3 trpT_tRNA + 6 tyr1_tRNA + 18 val1_tRNA + 6 val2_tRNA + 21 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.65E+01	3.65E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b2606_6_rib1	Translation elongation 1 b2606 6 ribosome(s)	684 EF-G.GTP + 42 EF-Tu.GTP.ala1-tRNA + 78 EF-Tu.GTP.arg1-tRNA + 24 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 54 EF-Tu.GTP.glu1-tRNA + 48 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 42 EF-Tu.GTP.ile1-tRNA + 24 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 66 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 36 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 42 EF-Tu.GTP.val3-tRNA + 3420 mg2 + 1 rib_ini_b2606_6 --> 1 rib_70_elo1_b2606_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b2606_6_rib2	Translation elongation 2 b2606 6 ribosome(s)	678 h2o + 1 rib_70_elo1_b2606_6_cplx --> 678 EF-G.GDP + 678 EF-Tu.GDP + 42 ala1_tRNA + 78 arg1_tRNA + 18 asn1_tRNA + 18 asp1_tRNA + 6 fmet_tRNA + 24 gln1_tRNA + 12 gln2_tRNA + 54 glu1_tRNA + 48 gly1_tRNA + 1356 h + 12 hisR_tRNA + 42 ile1_tRNA + 24 leu1_tRNA + 12 leuU_tRNA + 66 lys1_tRNA + 6 met1_tRNA + 3420 mg2 + 24 phe1_tRNA + 1356 pi + 12 pro1_tRNA + 6 pro2_tRNA + 1 rib_70_elo2_b2606_6_cplx + 18 ser1_tRNA + 18 ser2_tRNA + 12 serV_tRNA + 6 thr1_tRNA + 18 thr2_tRNA + 6 trpT_tRNA + 12 tyr1_tRNA + 36 val1_tRNA + 12 val2_tRNA + 42 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333

tl_elo_b2607_15_rib1	Translation elongation 1 b2607 15 ribosome(s)	3810 EF-G.GTP + 255 EF-Tu.GTP.ala1-tRNA + 60 EF-Tu.GTP.ala2-tRNA + 165 EF-Tu.GTP.arg1-tRNA + 30 EF-Tu.GTP.argU-tRNA + 15 EF-Tu.GTP.argW-tRNA + 75 EF-Tu.GTP.argX-tRNA + 60 EF-Tu.GTP.asn1-tRNA + 210 EF-Tu.GTP.asp1-tRNA + 30 EF-Tu.GTP.cysT-tRNA + 60 EF-Tu.GTP.gln1-tRNA + 105 EF-Tu.GTP.gln2-tRNA + 330 EF-Tu.GTP.glu1-tRNA + 225 EF-Tu.GTP.gly1-tRNA + 75 EF-Tu.GTP.glyT-tRNA + 60 EF-Tu.GTP.glyU-tRNA + 135 EF-Tu.GTP.hisR-tRNA + 180 EF-Tu.GTP.ile1-tRNA + 45 EF-Tu.GTP.ile2-tRNA + 225 EF-Tu.GTP.leu1-tRNA + 75 EF-Tu.GTP.leu2-tRNA + 60 EF-Tu.GTP.leuU-tRNA + 60 EF-Tu.GTP.leuZ-tRNA + 120 EF-Tu.GTP.lys1-tRNA + 105 EF-Tu.GTP.met1-tRNA + 90 EF-Tu.GTP.phe1-tRNA + 60 EF-Tu.GTP.pro1-tRNA + 75 EF-Tu.GTP.pro2-tRNA + 15 EF-Tu.GTP.proL-tRNA + 45 EF-Tu.GTP.proM-tRNA + 45 EF-Tu.GTP.ser1-tRNA + 45 EF-Tu.GTP.ser3-tRNA + 30 EF-Tu.GTP.serT-tRNA + 90 EF-Tu.GTP.serV-tRNA + 60 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 90 EF-Tu.GTP.thr3-tRNA + 75 EF-Tu.GTP.trpT-tRNA + 90 EF-Tu.GTP.tyr1-tRNA + 135 EF-Tu.GTP.val1-tRNA + 15 EF-Tu.GTP.val2-tRNA + 60 EF-Tu.GTP.val3-tRNA + 19050 mg2 + 1 rib_ini_b2607_15 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_elo_b2607_15_rib2	Translation elongation 2 b2607 15 ribosome(s)	3795 h2o + 1 rib_70_elo1_b2607_15_cplx --> 3795 EF-G.GDP + 3795 EF-Tu.GDP + 240 ala1_tRNA + 60 ala2_tRNA + 165 arg1_tRNA + 30 argU_tRNA + 15 argW_tRNA + 75 argX_tRNA + 60 asn1_tRNA + 210 asp1_tRNA + 30 cysT_tRNA + 15 fmet_tRNA + 60 gln1_tRNA + 105 gln2_tRNA + 330 glu1_tRNA + 225 gly1_tRNA + 75 glyT_tRNA + 60 glyU_tRNA + 7590 h + 135 hisR_tRNA + 180 ile1_tRNA + 45 ile2_tRNA + 225 leu1_tRNA + 75 leu2_tRNA + 60 leuU_tRNA + 60 leuZ_tRNA + 120 lys1_tRNA + 105 met1_tRNA + 19050 mg2 + 90 phe1_tRNA + 7590 pi + 60 pro1_tRNA + 75 pro2_tRNA + 15 proL_tRNA + 45 proM_tRNA + 1 rib_70_elo2_b2607_15_cplx + 45 ser1_tRNA + 45 ser3_tRNA + 30 serT_tRNA + 90 serV_tRNA + 60 thr1_tRNA + 30 thr2_tRNA + 90 thr3_tRNA + 75 trpT_tRNA + 90 tyr1_tRNA + 135 val1_tRNA + 15 val2_tRNA + 60 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_elo_b2607_1_rib1	Translation elongation 1 b2607 1 ribosome(s)	254 EF-G.GTP + 17 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argW-tRNA + 5 EF-Tu.GTP.argX-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 22 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1270 mg2 + 1 rib_ini_b2607_1 --> 1 rib_70_elo1_b2607_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_elo_b2607_1_rib2	Translation elongation 2 b2607 1 ribosome(s)	253 h2o + 1 rib_70_elo1_b2607_1_cplx --> 253 EF-G.GDP + 253 EF-Tu.GDP + 16 ala1_tRNA + 4 ala2_tRNA + 11 arg1_tRNA + 2 argU_tRNA + 1 argW_tRNA + 5 argX_tRNA + 4 asn1_tRNA + 14 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 7 gln2_tRNA + 22 glu1_tRNA + 15 gly1_tRNA + 5 glyT_tRNA + 4 glyU_tRNA + 506 h + 9 hisR_tRNA + 12 ile1_tRNA + 3 ile2_tRNA + 15 leu1_tRNA + 5 leu2_tRNA + 4 leuU_tRNA + 4 leuZ_tRNA + 8 lys1_tRNA + 7 met1_tRNA + 1270 mg2 + 6 phe1_tRNA + 506 pi + 4 pro1_tRNA + 5 pro2_tRNA + 1 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b2607_1_cplx + 3 ser1_tRNA + 3 ser3_tRNA + 2 serT_tRNA + 6 serV_tRNA + 4 thr1_tRNA + 2 thr2_tRNA + 6 thr3_tRNA + 5 trpT_tRNA + 6 tyr1_tRNA + 9 val1_tRNA + 1 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_elo_b2607_7_rib1	Translation elongation 1 b2607 7 ribosome(s)	1778 EF-G.GTP + 119 EF-Tu.GTP.ala1-tRNA + 28 EF-Tu.GTP.ala2-tRNA + 77 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.argU-tRNA + 7 EF-Tu.GTP.argW-tRNA + 35 EF-Tu.GTP.argX-tRNA + 28 EF-Tu.GTP.asn1-tRNA + 98 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.cysT-tRNA + 28 EF-Tu.GTP.gln1-tRNA + 49 EF-Tu.GTP.gln2-tRNA + 154 EF-Tu.GTP.glu1-tRNA + 105 EF-Tu.GTP.gly1-tRNA + 35 EF-Tu.GTP.glyT-tRNA + 28 EF-Tu.GTP.glyU-tRNA + 63 EF-Tu.GTP.hisR-tRNA + 84 EF-Tu.GTP.ile1-tRNA + 21 EF-Tu.GTP.ile2-tRNA + 105 EF-Tu.GTP.leu1-tRNA + 35 EF-Tu.GTP.leu2-tRNA + 28 EF-Tu.GTP.leuU-tRNA + 28 EF-Tu.GTP.leuZ-tRNA + 56 EF-Tu.GTP.lys1-tRNA + 49 EF-Tu.GTP.met1-tRNA + 42 EF-Tu.GTP.phe1-tRNA + 28 EF-Tu.GTP.pro1-tRNA + 35 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proL-tRNA + 21 EF-Tu.GTP.proM-tRNA + 21 EF-Tu.GTP.ser1-tRNA + 21 EF-Tu.GTP.ser3-tRNA + 14 EF-Tu.GTP.serT-tRNA + 42 EF-Tu.GTP.serV-tRNA + 28 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 42 EF-Tu.GTP.thr3-tRNA + 35 EF-Tu.GTP.trpT-tRNA + 42 EF-Tu.GTP.tyr1-tRNA + 63 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 28 EF-Tu.GTP.val3-tRNA + 8890 mg2 + 1 rib_ini_b2607_7 --> 1 rib_70_elo1_b2607_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_elo_b2607_7_rib2	Translation elongation 2 b2607 7 ribosome(s)	1771 h2o + 1 rib_70_elo1_b2607_7_cplx --> 1771 EF-G.GDP + 1771 EF-Tu.GDP + 112 ala1_tRNA + 28 ala2_tRNA + 77 arg1_tRNA + 14 argU_tRNA + 7 argW_tRNA + 35 argX_tRNA + 28 asn1_tRNA + 98 asp1_tRNA + 14 cysT_tRNA + 7 fmet_tRNA + 28 gln1_tRNA + 49 gln2_tRNA + 154 glu1_tRNA + 105 gly1_tRNA + 35 glyT_tRNA + 28 glyU_tRNA + 3542 h + 63 hisR_tRNA + 84 ile1_tRNA + 21 ile2_tRNA + 105 leu1_tRNA + 35 leu2_tRNA + 28 leuU_tRNA + 28 leuZ_tRNA + 56 lys1_tRNA + 49 met1_tRNA + 8890 mg2 + 42 phe1_tRNA + 3542 pi + 28 pro1_tRNA + 35 pro2_tRNA + 7 proL_tRNA + 21 proM_tRNA + 1 rib_70_elo2_b2607_7_cplx + 21 ser1_tRNA + 21 ser3_tRNA + 14 serT_tRNA + 42 serV_tRNA + 28 thr1_tRNA + 14 thr2_tRNA + 42 thr3_tRNA + 35 trpT_tRNA + 42 tyr1_tRNA + 63 val1_tRNA + 7 val2_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479

tl_elo_b2608_10_rib1	Translation elongation 1 b2608 10 ribosome(s)	1810 EF-G.GTP + 70 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 40 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argU-tRNA + 50 EF-Tu.GTP.asn1-tRNA + 180 EF-Tu.GTP.asp1-tRNA + 20 EF-Tu.GTP.cysT-tRNA + 100 EF-Tu.GTP.gln1-tRNA + 30 EF-Tu.GTP.gln2-tRNA + 100 EF-Tu.GTP.glu1-tRNA + 90 EF-Tu.GTP.gly1-tRNA + 20 EF-Tu.GTP.glyT-tRNA + 30 EF-Tu.GTP.glyU-tRNA + 20 EF-Tu.GTP.hisR-tRNA + 110 EF-Tu.GTP.ile1-tRNA + 70 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 80 EF-Tu.GTP.leuU-tRNA + 130 EF-Tu.GTP.lys1-tRNA + 50 EF-Tu.GTP.met1-tRNA + 60 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 30 EF-Tu.GTP.pro2-tRNA + 20 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.ser1-tRNA + 30 EF-Tu.GTP.ser2-tRNA + 20 EF-Tu.GTP.ser3-tRNA + 20 EF-Tu.GTP.serT-tRNA + 30 EF-Tu.GTP.serV-tRNA + 40 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 60 EF-Tu.GTP.trpT-tRNA + 50 EF-Tu.GTP.tyr1-tRNA + 60 EF-Tu.GTP.val1-tRNA + 60 EF-Tu.GTP.val2-tRNA + 50 EF-Tu.GTP.val3-tRNA + 9050 mg2 + 1 rib_ini_b2608_10 --> 1 rib_70_elo1_b2608_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_elo_b2608_10_rib2	Translation elongation 2 b2608 10 ribosome(s)	1800 h2o + 1 rib_70_elo1_b2608_10_cplx --> 1800 EF-G.GDP + 1800 EF-Tu.GDP + 70 ala1_tRNA + 10 ala2_tRNA + 40 arg1_tRNA + 10 argU_tRNA + 50 asn1_tRNA + 180 asp1_tRNA + 20 cysT_tRNA + 10 fmet_tRNA + 100 gln1_tRNA + 30 gln2_tRNA + 100 glu1_tRNA + 90 gly1_tRNA + 20 glyT_tRNA + 30 glyU_tRNA + 3600 h + 20 hisR_tRNA + 110 ile1_tRNA + 70 leu1_tRNA + 10 leu2_tRNA + 80 leuU_tRNA + 130 lys1_tRNA + 50 met1_tRNA + 9050 mg2 + 50 phe1_tRNA + 3600 pi + 10 pro1_tRNA + 30 pro2_tRNA + 20 proL_tRNA + 1 rib_70_elo2_b2608_10_cplx + 10 ser1_tRNA + 30 ser2_tRNA + 20 ser3_tRNA + 20 serT_tRNA + 30 serV_tRNA + 40 thr1_tRNA + 30 thr2_tRNA + 10 thr3_tRNA + 60 trpT_tRNA + 50 tyr1_tRNA + 60 val1_tRNA + 60 val2_tRNA + 50 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_elo_b2608_1_rib1	Translation elongation 1 b2608 1 ribosome(s)	181 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 4 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 10 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 905 mg2 + 1 rib_ini_b2608_1 --> 1 rib_70_elo1_b2608_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_elo_b2608_1_rib2	Translation elongation 2 b2608 1 ribosome(s)	180 h2o + 1 rib_70_elo1_b2608_1_cplx --> 180 EF-G.GDP + 180 EF-Tu.GDP + 7 ala1_tRNA + 1 ala2_tRNA + 4 arg1_tRNA + 1 argU_tRNA + 5 asn1_tRNA + 18 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 10 gln1_tRNA + 3 gln2_tRNA + 10 glu1_tRNA + 9 gly1_tRNA + 2 glyT_tRNA + 3 glyU_tRNA + 360 h + 2 hisR_tRNA + 11 ile1_tRNA + 7 leu1_tRNA + 1 leu2_tRNA + 8 leuU_tRNA + 13 lys1_tRNA + 5 met1_tRNA + 905 mg2 + 5 phe1_tRNA + 360 pi + 1 pro1_tRNA + 3 pro2_tRNA + 2 proL_tRNA + 1 rib_70_elo2_b2608_1_cplx + 1 ser1_tRNA + 3 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 3 serV_tRNA + 4 thr1_tRNA + 3 thr2_tRNA + 1 thr3_tRNA + 6 trpT_tRNA + 5 tyr1_tRNA + 6 val1_tRNA + 6 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_elo_b2608_5_rib1	Translation elongation 1 b2608 5 ribosome(s)	905 EF-G.GTP + 35 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argU-tRNA + 25 EF-Tu.GTP.asn1-tRNA + 90 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.cysT-tRNA + 50 EF-Tu.GTP.gln1-tRNA + 15 EF-Tu.GTP.gln2-tRNA + 50 EF-Tu.GTP.glu1-tRNA + 45 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 15 EF-Tu.GTP.glyU-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 55 EF-Tu.GTP.ile1-tRNA + 35 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 40 EF-Tu.GTP.leuU-tRNA + 65 EF-Tu.GTP.lys1-tRNA + 25 EF-Tu.GTP.met1-tRNA + 30 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 15 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 15 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serT-tRNA + 15 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 15 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 30 EF-Tu.GTP.trpT-tRNA + 25 EF-Tu.GTP.tyr1-tRNA + 30 EF-Tu.GTP.val1-tRNA + 30 EF-Tu.GTP.val2-tRNA + 25 EF-Tu.GTP.val3-tRNA + 4525 mg2 + 1 rib_ini_b2608_5 --> 1 rib_70_elo1_b2608_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_elo_b2608_5_rib2	Translation elongation 2 b2608 5 ribosome(s)	900 h2o + 1 rib_70_elo1_b2608_5_cplx --> 900 EF-G.GDP + 900 EF-Tu.GDP + 35 ala1_tRNA + 5 ala2_tRNA + 20 arg1_tRNA + 5 argU_tRNA + 25 asn1_tRNA + 90 asp1_tRNA + 10 cysT_tRNA + 5 fmet_tRNA + 50 gln1_tRNA + 15 gln2_tRNA + 50 glu1_tRNA + 45 gly1_tRNA + 10 glyT_tRNA + 15 glyU_tRNA + 1800 h + 10 hisR_tRNA + 55 ile1_tRNA + 35 leu1_tRNA + 5 leu2_tRNA + 40 leuU_tRNA + 65 lys1_tRNA + 25 met1_tRNA + 4525 mg2 + 25 phe1_tRNA + 1800 pi + 5 pro1_tRNA + 15 pro2_tRNA + 10 proL_tRNA + 1 rib_70_elo2_b2608_5_cplx + 5 ser1_tRNA + 15 ser2_tRNA + 10 ser3_tRNA + 10 serT_tRNA + 15 serV_tRNA + 20 thr1_tRNA + 15 thr2_tRNA + 5 thr3_tRNA + 30 trpT_tRNA + 25 tyr1_tRNA + 30 val1_tRNA + 30 val2_tRNA + 25 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_elo_b2609_1_rib1	Translation elongation 1 b2609 1 ribosome(s)	81 EF-G.GTP + 11 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 4 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 5 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 405 mg2 + 1 rib_ini_b2609_1 --> 1 rib_70_elo1_b2609_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.02E+01	9.02E+01	0	8.29E+01	82.88	0	2.67E+01	26.71867

tl_elo_b2609_1_rib2	Translation elongation 2 b2609 1 ribosome(s)	80 h2o + 1 rib_70_elo1_b2609_1_cplx --> 80 EF-G.GDP + 80 EF-Tu.GDP + 10 ala1_tRNA + 10 arg1_tRNA + 4 asn1_tRNA + 4 asp1_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 5 glu1_tRNA + 6 gly1_tRNA + 160 h + 2 hisR_tRNA + 6 ile1_tRNA + 3 leu1_tRNA + 1 leuZ_tRNA + 5 lys1_tRNA + 405 mg2 + 4 phe1_tRNA + 160 pi + 1 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b2609_1_cplx + 1 ser2_tRNA + 2 serV_tRNA + 3 thr2_tRNA + 1 trpT_tRNA + 1 tyr1_tRNA + 2 val1_tRNA + 1 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.02E+01	9.02E+01	0	8.29E+01	82.88	0	2.67E+01	26.71867
tl_elo_b2609_2_rib1	Translation elongation 1 b2609 2 ribosome(s)	162 EF-G.GTP + 22 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 810 mg2 + 1 rib_ini_b2609_2 --> 1 rib_70_elo1_b2609_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.28E+01	5.28E+01	0	4.14E+01	41.44	0	3.56E+01	35.579
tl_elo_b2609_2_rib2	Translation elongation 2 b2609 2 ribosome(s)	160 h2o + 1 rib_70_elo1_b2609_2_cplx --> 160 EF-G.GDP + 160 EF-Tu.GDP + 20 ala1_tRNA + 20 arg1_tRNA + 8 asn1_tRNA + 8 asp1_tRNA + 2 fmet_tRNA + 4 gln1_tRNA + 10 glu1_tRNA + 12 gly1_tRNA + 320 h + 4 hisR_tRNA + 12 ile1_tRNA + 6 leu1_tRNA + 2 leuZ_tRNA + 10 lys1_tRNA + 810 mg2 + 8 phe1_tRNA + 320 pi + 2 pro1_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b2609_2_cplx + 2 ser2_tRNA + 4 serV_tRNA + 6 thr2_tRNA + 2 trpT_tRNA + 2 tyr1_tRNA + 4 val1_tRNA + 2 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.28E+01	5.28E+01	0	4.14E+01	41.44	0	3.56E+01	35.579
tl_elo_b2609_4_rib1	Translation elongation 1 b2609 4 ribosome(s)	324 EF-G.GTP + 44 EF-Tu.GTP.ala1-tRNA + 40 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.asn1-tRNA + 16 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 24 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 24 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 20 EF-Tu.GTP.val3-tRNA + 1620 mg2 + 1 rib_ini_b2609_4 --> 1 rib_70_elo1_b2609_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b2609_4_rib2	Translation elongation 2 b2609 4 ribosome(s)	320 h2o + 1 rib_70_elo1_b2609_4_cplx --> 320 EF-G.GDP + 320 EF-Tu.GDP + 40 ala1_tRNA + 40 arg1_tRNA + 16 asn1_tRNA + 16 asp1_tRNA + 4 fmet_tRNA + 8 gln1_tRNA + 20 glu1_tRNA + 24 gly1_tRNA + 640 h + 8 hisR_tRNA + 24 ile1_tRNA + 12 leu1_tRNA + 4 leuZ_tRNA + 20 lys1_tRNA + 1620 mg2 + 16 phe1_tRNA + 640 pi + 4 pro1_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b2609_4_cplx + 4 ser2_tRNA + 8 serV_tRNA + 12 thr2_tRNA + 4 trpT_tRNA + 4 tyr1_tRNA + 8 val1_tRNA + 4 val2_tRNA + 20 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b2614_11_rib1	Translation elongation 1 b2614 11 ribosome(s)	2156 EF-G.GTP + 198 EF-Tu.GTP.ala1-tRNA + 66 EF-Tu.GTP.ala2-tRNA + 121 EF-Tu.GTP.arg1-tRNA + 88 EF-Tu.GTP.asn1-tRNA + 143 EF-Tu.GTP.asp1-tRNA + 77 EF-Tu.GTP.gln1-tRNA + 11 EF-Tu.GTP.gln2-tRNA + 286 EF-Tu.GTP.glu1-tRNA + 77 EF-Tu.GTP.gly1-tRNA + 11 EF-Tu.GTP.glyU-tRNA + 33 EF-Tu.GTP.hisR-tRNA + 132 EF-Tu.GTP.ile1-tRNA + 143 EF-Tu.GTP.leu1-tRNA + 22 EF-Tu.GTP.leu2-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 143 EF-Tu.GTP.lys1-tRNA + 88 EF-Tu.GTP.met1-tRNA + 33 EF-Tu.GTP.phe1-tRNA + 55 EF-Tu.GTP.pro1-tRNA + 11 EF-Tu.GTP.pro2-tRNA + 33 EF-Tu.GTP.proM-tRNA + 33 EF-Tu.GTP.ser2-tRNA + 11 EF-Tu.GTP.ser3-tRNA + 33 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 33 EF-Tu.GTP.thr2-tRNA + 44 EF-Tu.GTP.thr3-tRNA + 11 EF-Tu.GTP.tyr1-tRNA + 110 EF-Tu.GTP.val1-tRNA + 11 EF-Tu.GTP.val2-tRNA + 77 EF-Tu.GTP.val3-tRNA + 10780 mg2 + 1 rib_ini_b2614_11 --> 1 rib_70_elo1_b2614_11_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_elo_b2614_11_rib2	Translation elongation 2 b2614 11 ribosome(s)	2145 h2o + 1 rib_70_elo1_b2614_11_cplx --> 2145 EF-G.GDP + 2145 EF-Tu.GDP + 187 ala1_tRNA + 66 ala2_tRNA + 121 arg1_tRNA + 88 asn1_tRNA + 143 asp1_tRNA + 11 fmet_tRNA + 77 gln1_tRNA + 11 gln2_tRNA + 286 glu1_tRNA + 77 gly1_tRNA + 11 glyU_tRNA + 4290 h + 33 hisR_tRNA + 132 ile1_tRNA + 143 leu1_tRNA + 22 leu2_tRNA + 11 leuU_tRNA + 143 lys1_tRNA + 88 met1_tRNA + 10780 mg2 + 33 phe1_tRNA + 4290 pi + 55 pro1_tRNA + 11 pro2_tRNA + 33 proM_tRNA + 1 rib_70_elo2_b2614_11_cplx + 33 ser2_tRNA + 11 ser3_tRNA + 33 serV_tRNA + 11 thr1_tRNA + 33 thr2_tRNA + 44 thr3_tRNA + 11 tyr1_tRNA + 110 val1_tRNA + 11 val2_tRNA + 77 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_elo_b2614_1_rib1	Translation elongation 1 b2614 1 ribosome(s)	196 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 13 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 26 EF-Tu.GTP.glu1-tRNA + 7 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 980 mg2 + 1 rib_ini_b2614_1 --> 1 rib_70_elo1_b2614_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_elo_b2614_1_rib2	Translation elongation 2 b2614 1 ribosome(s)	195 h2o + 1 rib_70_elo1_b2614_1_cplx --> 195 EF-G.GDP + 195 EF-Tu.GDP + 17 ala1_tRNA + 6 ala2_tRNA + 11 arg1_tRNA + 8 asn1_tRNA + 13 asp1_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 1 gln2_tRNA + 26 glu1_tRNA + 7 gly1_tRNA + 1 glyU_tRNA + 390 h + 3 hisR_tRNA + 12 ile1_tRNA + 13 leu1_tRNA + 2 leu2_tRNA + 1 leuU_tRNA + 13 lys1_tRNA + 8 met1_tRNA + 980 mg2 + 3 phe1_tRNA + 390 pi + 5 pro1_tRNA + 1 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b2614_1_cplx + 3 ser2_tRNA + 1 ser3_tRNA + 3 serV_tRNA + 1 thr1_tRNA + 3 thr2_tRNA + 4 thr3_tRNA + 1 tyr1_tRNA + 10 val1_tRNA + 1 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787

tl_elo_b2614_5_rib1	Translation elongation 1 b2614 5 ribosome(s)	980 EF-G.GTP + 90 EF-Tu.GTP.ala1-tRNA + 30 EF-Tu.GTP.ala2-tRNA + 55 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 65 EF-Tu.GTP.asp1-tRNA + 35 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 130 EF-Tu.GTP.glu1-tRNA + 35 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 60 EF-Tu.GTP.ile1-tRNA + 65 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 65 EF-Tu.GTP.lys1-tRNA + 40 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 25 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 15 EF-Tu.GTP.proM-tRNA + 15 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 15 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 15 EF-Tu.GTP.thr2-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 50 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 35 EF-Tu.GTP.val3-tRNA + 4900 mg2 + 1 rib_ini_b2614_5 --> 1 rib_70_elo1_b2614_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_elo_b2614_5_rib2	Translation elongation 2 b2614 5 ribosome(s)	975 h2o + 1 rib_70_elo1_b2614_5_cplx --> 975 EF-G.GDP + 975 EF-Tu.GDP + 85 ala1_tRNA + 30 ala2_tRNA + 55 arg1_tRNA + 40 asn1_tRNA + 65 asp1_tRNA + 5 fmet_tRNA + 35 gln1_tRNA + 5 gln2_tRNA + 130 glu1_tRNA + 35 gly1_tRNA + 5 glyU_tRNA + 1950 h + 15 hisR_tRNA + 60 ile1_tRNA + 65 leu1_tRNA + 10 leu2_tRNA + 5 leuU_tRNA + 65 lys1_tRNA + 40 met1_tRNA + 4900 mg2 + 15 phe1_tRNA + 1950 pi + 25 pro1_tRNA + 5 pro2_tRNA + 15 proM_tRNA + 1 rib_70_elo2_b2614_5_cplx + 15 ser2_tRNA + 5 ser3_tRNA + 15 serV_tRNA + 5 thr1_tRNA + 15 thr2_tRNA + 20 thr3_tRNA + 5 tyr1_tRNA + 50 val1_tRNA + 5 val2_tRNA + 35 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_elo_b2697_1_rib1	Translation elongation 1 b2697 1 ribosome(s)	875 EF-G.GTP + 75 EF-Tu.GTP.ala1-tRNA + 16 EF-Tu.GTP.ala2-tRNA + 55 EF-Tu.GTP.arg1-tRNA + 33 EF-Tu.GTP.asn1-tRNA + 61 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 28 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 64 EF-Tu.GTP.glu1-tRNA + 70 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 22 EF-Tu.GTP.hisR-tRNA + 41 EF-Tu.GTP.ile1-tRNA + 53 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 47 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 36 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 23 EF-Tu.GTP.serV-tRNA + 17 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 33 EF-Tu.GTP.val1-tRNA + 11 EF-Tu.GTP.val2-tRNA + 24 EF-Tu.GTP.val3-tRNA + 4375 mg2 + 1 rib_ini_b2697_1 --> 1 rib_70_elo1_b2697_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	9.04E+01	90.428	0	2.46E+00	2.459
tl_elo_b2697_1_rib2	Translation elongation 2 b2697 1 ribosome(s)	874 h2o + 1 rib_70_elo1_b2697_1_cplx --> 874 EF-G.GDP + 874 EF-Tu.GDP + 75 ala1_tRNA + 16 ala2_tRNA + 55 arg1_tRNA + 33 asn1_tRNA + 61 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 28 gln1_tRNA + 6 gln2_tRNA + 64 glu1_tRNA + 70 gly1_tRNA + 4 glyT_tRNA + 6 glyU_tRNA + 1748 h + 22 hisR_tRNA + 41 ile1_tRNA + 53 leu1_tRNA + 8 leu2_tRNA + 10 leuU_tRNA + 5 leuZ_tRNA + 47 lys1_tRNA + 20 met1_tRNA + 4375 mg2 + 36 phe1_tRNA + 1748 pi + 14 pro1_tRNA + 3 pro2_tRNA + 1 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b2697_1_cplx + 8 ser1_tRNA + 12 ser2_tRNA + 4 ser3_tRNA + 3 serT_tRNA + 23 serV_tRNA + 17 thr1_tRNA + 12 thr2_tRNA + 10 thr3_tRNA + 3 thrU_tRNA + 8 trpT_tRNA + 18 tyr1_tRNA + 33 val1_tRNA + 11 val2_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	9.04E+01	90.428	0	2.46E+00	2.459
tl_elo_b2697_25_rib1	Translation elongation 1 b2697 25 ribosome(s)	21875 EF-G.GTP + 1875 EF-Tu.GTP.ala1-tRNA + 400 EF-Tu.GTP.ala2-tRNA + 1375 EF-Tu.GTP.arg1-tRNA + 825 EF-Tu.GTP.asn1-tRNA + 1525 EF-Tu.GTP.asp1-tRNA + 150 EF-Tu.GTP.cysT-tRNA + 700 EF-Tu.GTP.gln1-tRNA + 175 EF-Tu.GTP.gln2-tRNA + 1600 EF-Tu.GTP.glu1-tRNA + 1750 EF-Tu.GTP.gly1-tRNA + 100 EF-Tu.GTP.glyT-tRNA + 150 EF-Tu.GTP.glyU-tRNA + 550 EF-Tu.GTP.hisR-tRNA + 1025 EF-Tu.GTP.ile1-tRNA + 1325 EF-Tu.GTP.leu1-tRNA + 200 EF-Tu.GTP.leu2-tRNA + 250 EF-Tu.GTP.leuU-tRNA + 125 EF-Tu.GTP.leuZ-tRNA + 1175 EF-Tu.GTP.lys1-tRNA + 500 EF-Tu.GTP.met1-tRNA + 900 EF-Tu.GTP.phe1-tRNA + 350 EF-Tu.GTP.pro1-tRNA + 75 EF-Tu.GTP.pro2-tRNA + 25 EF-Tu.GTP.proL-tRNA + 100 EF-Tu.GTP.proM-tRNA + 200 EF-Tu.GTP.ser1-tRNA + 300 EF-Tu.GTP.ser2-tRNA + 100 EF-Tu.GTP.ser3-tRNA + 75 EF-Tu.GTP.serT-tRNA + 575 EF-Tu.GTP.serV-tRNA + 425 EF-Tu.GTP.thr1-tRNA + 300 EF-Tu.GTP.thr2-tRNA + 250 EF-Tu.GTP.thr3-tRNA + 75 EF-Tu.GTP.thrU-tRNA + 200 EF-Tu.GTP.trpT-tRNA + 450 EF-Tu.GTP.tyr1-tRNA + 825 EF-Tu.GTP.val1-tRNA + 275 EF-Tu.GTP.val2-tRNA + 600 EF-Tu.GTP.val3-tRNA + 109375 mg2 + 1 rib_ini_b2697_25 --> 1 rib_70_elo1_b2697_25_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	9.04E+01	90.428	0	2.46E+00	2.459
tl_elo_b2697_25_rib2	Translation elongation 2 b2697 25 ribosome(s)	21850 h2o + 1 rib_70_elo1_b2697_25_cplx --> 21850 EF-G.GDP + 21850 EF-Tu.GDP + 1875 ala1_tRNA + 400 ala2_tRNA + 1375 arg1_tRNA + 825 asn1_tRNA + 1525 asp1_tRNA + 150 cysT_tRNA + 25 fmet_tRNA + 700 gln1_tRNA + 150 gln2_tRNA + 1600 glu1_tRNA + 1750 gly1_tRNA + 100 glyT_tRNA + 150 glyU_tRNA + 43700 h + 550 hisR_tRNA + 1025 ile1_tRNA + 1325 leu1_tRNA + 200 leu2_tRNA + 250 leuU_tRNA + 125 leuZ_tRNA + 1175 lys1_tRNA + 500 met1_tRNA + 109375 mg2 + 900 phe1_tRNA + 43700 pi + 350 pro1_tRNA + 75 pro2_tRNA + 25 proL_tRNA + 100 proM_tRNA + 1 rib_70_elo2_b2697_25_cplx + 200 ser1_tRNA + 300 ser2_tRNA + 100 ser3_tRNA + 75 serT_tRNA + 575 serV_tRNA + 425 thr1_tRNA + 300 thr2_tRNA + 250 thr3_tRNA + 75 thrU_tRNA + 200 trpT_tRNA + 450 tyr1_tRNA + 825 val1_tRNA + 275 val2_tRNA + 600 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	9.04E+01	90.428	0	2.46E+00	2.459

tl_elo_b2697_51_rib1	Translation elongation 1 b2697 51 ribosome(s)	44625 EF-G.GTP + 3825 EF-Tu.GTP.ala1-tRNA + 816 EF-Tu.GTP.ala2-tRNA + 2805 EF-Tu.GTP.arg1-tRNA + 1683 EF-Tu.GTP.asn1-tRNA + 3111 EF-Tu.GTP.asp1-tRNA + 306 EF-Tu.GTP.cysT-tRNA + 1428 EF-Tu.GTP.gln1-tRNA + 357 EF-Tu.GTP.gln2-tRNA + 3264 EF-Tu.GTP.glu1-tRNA + 3570 EF-Tu.GTP.gly1-tRNA + 204 EF-Tu.GTP.glyT-tRNA + 306 EF-Tu.GTP.glyU-tRNA + 1122 EF-Tu.GTP.hisR-tRNA + 2091 EF-Tu.GTP.ile1-tRNA + 2703 EF-Tu.GTP.leu1-tRNA + 408 EF-Tu.GTP.leu2-tRNA + 510 EF-Tu.GTP.leuU-tRNA + 255 EF-Tu.GTP.leuZ-tRNA + 2397 EF-Tu.GTP.lys1-tRNA + 1020 EF-Tu.GTP.met1-tRNA + 1836 EF-Tu.GTP.phe1-tRNA + 714 EF-Tu.GTP.pro1-tRNA + 153 EF-Tu.GTP.pro2-tRNA + 51 EF-Tu.GTP.proL-tRNA + 204 EF-Tu.GTP.proM-tRNA + 408 EF-Tu.GTP.ser1-tRNA + 612 EF-Tu.GTP.ser2-tRNA + 204 EF-Tu.GTP.ser3-tRNA + 153 EF-Tu.GTP.serT-tRNA + 1173 EF-Tu.GTP.serV-tRNA + 867 EF-Tu.GTP.thr1-tRNA + 612 EF-Tu.GTP.thr2-tRNA + 510 EF-Tu.GTP.thr3-tRNA + 153 EF-Tu.GTP.thrU-tRNA + 408 EF-Tu.GTP.trpT-tRNA + 918 EF-Tu.GTP.tyr1-tRNA + 1683 EF-Tu.GTP.val1-tRNA + 561 EF-Tu.GTP.val2-tRNA + 1224 EF-Tu.GTP.val3-tRNA + 223125 mg2 + 1 rib_ini_b2697_51 --> 1 rib_70_elo1_b2697_51_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	6.04E+01	60.39927	0	2.46E+00	2.459
tl_elo_b2697_51_rib2	Translation elongation 2 b2697 51 ribosome(s)	44574 h2o + 1 rib_70_elo1_b2697_51_cplx --> 44574 EF-G.GDP + 44574 EF-Tu.GDP + 3825 ala1_tRNA + 816 ala2_tRNA + 2805 arg1_tRNA + 1683 asn1_tRNA + 3111 asp1_tRNA + 306 cysT_tRNA + 51 fmet_tRNA + 1428 gln1_tRNA + 306 gln2_tRNA + 3264 glu1_tRNA + 3570 gly1_tRNA + 204 glyT_tRNA + 306 glyU_tRNA + 89148 h + 1122 hisR_tRNA + 2091 ile1_tRNA + 2703 leu1_tRNA + 408 leu2_tRNA + 510 leuU_tRNA + 255 leuZ_tRNA + 2397 lys1_tRNA + 1020 met1_tRNA + 223125 mg2 + 1836 phe1_tRNA + 89148 pi + 714 pro1_tRNA + 153 pro2_tRNA + 51 proL_tRNA + 204 proM_tRNA + 1 rib_70_elo2_b2697_51_cplx + 408 ser1_tRNA + 612 ser2_tRNA + 204 ser3_tRNA + 153 serT_tRNA + 1173 serV_tRNA + 867 thr1_tRNA + 612 thr2_tRNA + 510 thr3_tRNA + 153 thrU_tRNA + 408 trpT_tRNA + 918 tyr1_tRNA + 1683 val1_tRNA + 561 val2_tRNA + 1224 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	6.04E+01	60.39927	0	2.46E+00	2.459
tl_elo_b2741_19_rib1	Translation elongation 1 b2741 19 ribosome(s)	6251 EF-G.GTP + 304 EF-Tu.GTP.ala1-tRNA + 152 EF-Tu.GTP.ala2-tRNA + 608 EF-Tu.GTP.arg1-tRNA + 38 EF-Tu.GTP.argX-tRNA + 247 EF-Tu.GTP.asn1-tRNA + 437 EF-Tu.GTP.asp1-tRNA + 209 EF-Tu.GTP.gln1-tRNA + 76 EF-Tu.GTP.gln2-tRNA + 779 EF-Tu.GTP.glu1-tRNA + 247 EF-Tu.GTP.gly1-tRNA + 57 EF-Tu.GTP.glyT-tRNA + 57 EF-Tu.GTP.glyU-tRNA + 76 EF-Tu.GTP.hisR-tRNA + 361 EF-Tu.GTP.ile1-tRNA + 475 EF-Tu.GTP.leu1-tRNA + 171 EF-Tu.GTP.leu2-tRNA + 114 EF-Tu.GTP.leuU-tRNA + 76 EF-Tu.GTP.leuZ-tRNA + 228 EF-Tu.GTP.lys1-tRNA + 76 EF-Tu.GTP.met1-tRNA + 171 EF-Tu.GTP.phe1-tRNA + 76 EF-Tu.GTP.pro1-tRNA + 19 EF-Tu.GTP.proL-tRNA + 57 EF-Tu.GTP.proM-tRNA + 38 EF-Tu.GTP.ser1-tRNA + 19 EF-Tu.GTP.ser2-tRNA + 38 EF-Tu.GTP.ser3-tRNA + 38 EF-Tu.GTP.serT-tRNA + 114 EF-Tu.GTP.serV-tRNA + 133 EF-Tu.GTP.thr1-tRNA + 38 EF-Tu.GTP.thr2-tRNA + 95 EF-Tu.GTP.thr3-tRNA + 57 EF-Tu.GTP.thrU-tRNA + 57 EF-Tu.GTP.trpT-tRNA + 133 EF-Tu.GTP.tyr1-tRNA + 171 EF-Tu.GTP.val1-tRNA + 57 EF-Tu.GTP.val2-tRNA + 152 EF-Tu.GTP.val3-tRNA + 31255 mg2 + 1 rib_ini_b2741_19 --> 1 rib_70_elo1_b2741_19_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.53E+02	253.0722	0	7.30E+00	7.301
tl_elo_b2741_19_rib2	Translation elongation 2 b2741 19 ribosome(s)	6232 h2o + 1 rib_70_elo1_b2741_19_cplx --> 6232 EF-G.GDP + 6232 EF-Tu.GDP + 304 ala1_tRNA + 152 ala2_tRNA + 608 arg1_tRNA + 38 argX_tRNA + 247 asn1_tRNA + 437 asp1_tRNA + 19 fmet_tRNA + 209 gln1_tRNA + 76 gln2_tRNA + 760 glu1_tRNA + 247 gly1_tRNA + 57 glyT_tRNA + 57 glyU_tRNA + 12464 h + 76 hisR_tRNA + 361 ile1_tRNA + 475 leu1_tRNA + 171 leu2_tRNA + 114 leuU_tRNA + 76 leuZ_tRNA + 228 lys1_tRNA + 76 met1_tRNA + 31255 mg2 + 171 phe1_tRNA + 12464 pi + 76 pro1_tRNA + 19 proL_tRNA + 57 proM_tRNA + 1 rib_70_elo2_b2741_19_cplx + 38 ser1_tRNA + 19 ser2_tRNA + 38 ser3_tRNA + 38 serT_tRNA + 114 serV_tRNA + 133 thr1_tRNA + 38 thr2_tRNA + 95 thr3_tRNA + 57 thrU_tRNA + 57 trpT_tRNA + 133 tyr1_tRNA + 171 val1_tRNA + 57 val2_tRNA + 152 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.53E+02	253.0722	0	7.30E+00	7.301
tl_elo_b2741_1_rib1	Translation elongation 1 b2741 1 ribosome(s)	329 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 32 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 13 EF-Tu.GTP.asn1-tRNA + 23 EF-Tu.GTP.asp1-tRNA + 11 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 41 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 19 EF-Tu.GTP.ile1-tRNA + 25 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 1645 mg2 + 1 rib_ini_b2741_1 --> 1 rib_70_elo1_b2741_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.58E+02	257.646	0	7.30E+00	7.301
tl_elo_b2741_1_rib2	Translation elongation 2 b2741 1 ribosome(s)	328 h2o + 1 rib_70_elo1_b2741_1_cplx --> 328 EF-G.GDP + 328 EF-Tu.GDP + 16 ala1_tRNA + 8 ala2_tRNA + 32 arg1_tRNA + 2 argX_tRNA + 13 asn1_tRNA + 23 asp1_tRNA + 1 fmet_tRNA + 11 gln1_tRNA + 4 gln2_tRNA + 40 glu1_tRNA + 13 gly1_tRNA + 3 glyT_tRNA + 3 glyU_tRNA + 656 h + 4 hisR_tRNA + 19 ile1_tRNA + 25 leu1_tRNA + 9 leu2_tRNA + 6 leuU_tRNA + 4 leuZ_tRNA + 12 lys1_tRNA + 4 met1_tRNA + 1645 mg2 + 9 phe1_tRNA + 656 pi + 4 pro1_tRNA + 1 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b2741_1_cplx + 2 ser1_tRNA + 1 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 6 serV_tRNA + 7 thr1_tRNA + 2 thr2_tRNA + 5 thr3_tRNA + 3 thrU_tRNA + 3 trpT_tRNA + 7 tyr1_tRNA + 9 val1_tRNA + 3 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.58E+02	257.646	0	7.30E+00	7.301

tl_elo_b2741_9_rib1	Translation elongation 1 b2741 9 ribosome(s)	2961 EF-G.GTP + 144 EF-Tu.GTP.ala1-tRNA + 72 EF-Tu.GTP.ala2-tRNA + 288 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argX-tRNA + 117 EF-Tu.GTP.asn1-tRNA + 207 EF-Tu.GTP.asp1-tRNA + 99 EF-Tu.GTP.gln1-tRNA + 36 EF-Tu.GTP.gln2-tRNA + 369 EF-Tu.GTP.glu1-tRNA + 117 EF-Tu.GTP.gly1-tRNA + 27 EF-Tu.GTP.glyT-tRNA + 27 EF-Tu.GTP.glyU-tRNA + 36 EF-Tu.GTP.hisR-tRNA + 171 EF-Tu.GTP.ile1-tRNA + 225 EF-Tu.GTP.leu1-tRNA + 81 EF-Tu.GTP.leu2-tRNA + 54 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 108 EF-Tu.GTP.lys1-tRNA + 36 EF-Tu.GTP.met1-tRNA + 81 EF-Tu.GTP.phe1-tRNA + 36 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.proL-tRNA + 27 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serT-tRNA + 54 EF-Tu.GTP.serV-tRNA + 63 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 45 EF-Tu.GTP.thr3-tRNA + 27 EF-Tu.GTP.thrU-tRNA + 27 EF-Tu.GTP.trpT-tRNA + 63 EF-Tu.GTP.tyr1-tRNA + 81 EF-Tu.GTP.val1-tRNA + 27 EF-Tu.GTP.val2-tRNA + 72 EF-Tu.GTP.val3-tRNA + 14805 mg2 + 1 rib_ini_b2741_9 --> 1 rib_70_elo1_b2741_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.58E+02	257.646	0	7.30E+00	7.301
tl_elo_b2741_9_rib2	Translation elongation 2 b2741 9 ribosome(s)	2952 h2o + 1 rib_70_elo1_b2741_9_cplx --> 2952 EF-G.GDP + 2952 EF-Tu.GDP + 144 ala1_tRNA + 72 ala2_tRNA + 288 arg1_tRNA + 18 argX_tRNA + 117 asn1_tRNA + 207 asp1_tRNA + 9 fmet_tRNA + 99 gln1_tRNA + 36 gln2_tRNA + 360 glu1_tRNA + 117 gly1_tRNA + 27 glyT_tRNA + 27 glyU_tRNA + 5904 h + 36 hisR_tRNA + 171 ile1_tRNA + 225 leu1_tRNA + 81 leu2_tRNA + 54 leuU_tRNA + 36 leuZ_tRNA + 108 lys1_tRNA + 36 met1_tRNA + 14805 mg2 + 81 phe1_tRNA + 5904 pi + 36 pro1_tRNA + 9 proL_tRNA + 27 proM_tRNA + 1 rib_70_elo2_b2741_9_cplx + 18 ser1_tRNA + 9 ser2_tRNA + 18 ser3_tRNA + 18 serT_tRNA + 54 serV_tRNA + 63 thr1_tRNA + 18 thr2_tRNA + 45 thr3_tRNA + 27 thrU_tRNA + 27 trpT_tRNA + 63 tyr1_tRNA + 81 val1_tRNA + 27 val2_tRNA + 72 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.58E+02	257.646	0	7.30E+00	7.301
tl_elo_b2742_11_rib1	Translation elongation 1 b2742 11 ribosome(s)	4158 EF-G.GTP + 352 EF-Tu.GTP.ala1-tRNA + 55 EF-Tu.GTP.ala2-tRNA + 143 EF-Tu.GTP.arg1-tRNA + 11 EF-Tu.GTP.argX-tRNA + 264 EF-Tu.GTP.asn1-tRNA + 110 EF-Tu.GTP.asp1-tRNA + 11 EF-Tu.GTP.cysT-tRNA + 209 EF-Tu.GTP.gln1-tRNA + 132 EF-Tu.GTP.gln2-tRNA + 121 EF-Tu.GTP.glu1-tRNA + 231 EF-Tu.GTP.gly1-tRNA + 66 EF-Tu.GTP.glyT-tRNA + 66 EF-Tu.GTP.glyU-tRNA + 33 EF-Tu.GTP.hisR-tRNA + 264 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.ile2-tRNA + 88 EF-Tu.GTP.leu1-tRNA + 66 EF-Tu.GTP.leu2-tRNA + 22 EF-Tu.GTP.leuU-tRNA + 11 EF-Tu.GTP.leuW-tRNA + 176 EF-Tu.GTP.lys1-tRNA + 66 EF-Tu.GTP.met1-tRNA + 55 EF-Tu.GTP.phe1-tRNA + 176 EF-Tu.GTP.pro1-tRNA + 44 EF-Tu.GTP.pro2-tRNA + 99 EF-Tu.GTP.proM-tRNA + 55 EF-Tu.GTP.ser1-tRNA + 66 EF-Tu.GTP.ser2-tRNA + 33 EF-Tu.GTP.ser3-tRNA + 44 EF-Tu.GTP.serT-tRNA + 165 EF-Tu.GTP.serV-tRNA + 165 EF-Tu.GTP.thr1-tRNA + 88 EF-Tu.GTP.thr2-tRNA + 88 EF-Tu.GTP.thr3-tRNA + 99 EF-Tu.GTP.thrU-tRNA + 44 EF-Tu.GTP.trpT-tRNA + 143 EF-Tu.GTP.tyr1-tRNA + 121 EF-Tu.GTP.val1-tRNA + 55 EF-Tu.GTP.val2-tRNA + 110 EF-Tu.GTP.val3-tRNA + 20790 mg2 + 1 rib_ini_b2742_11 --> 1 rib_70_elo1_b2742_11_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_elo_b2742_11_rib2	Translation elongation 2 b2742 11 ribosome(s)	4147 h2o + 1 rib_70_elo1_b2742_11_cplx --> 4147 EF-G.GDP + 4147 EF-Tu.GDP + 352 ala1_tRNA + 55 ala2_tRNA + 132 arg1_tRNA + 11 argX_tRNA + 264 asn1_tRNA + 110 asp1_tRNA + 11 cysT_tRNA + 11 fmet_tRNA + 209 gln1_tRNA + 132 gln2_tRNA + 121 glu1_tRNA + 231 gly1_tRNA + 66 glyT_tRNA + 66 glyU_tRNA + 8294 h + 33 hisR_tRNA + 264 ile1_tRNA + 11 ile2_tRNA + 88 leu1_tRNA + 66 leu2_tRNA + 22 leuU_tRNA + 11 leuW_tRNA + 176 lys1_tRNA + 66 met1_tRNA + 20790 mg2 + 55 phe1_tRNA + 8294 pi + 176 pro1_tRNA + 44 pro2_tRNA + 99 proM_tRNA + 1 rib_70_elo2_b2742_11_cplx + 55 ser1_tRNA + 66 ser2_tRNA + 33 ser3_tRNA + 44 serT_tRNA + 165 serV_tRNA + 165 thr1_tRNA + 88 thr2_tRNA + 88 thr3_tRNA + 99 thrU_tRNA + 44 trpT_tRNA + 143 tyr1_tRNA + 121 val1_tRNA + 55 val2_tRNA + 110 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_elo_b2742_1_rib1	Translation elongation 1 b2742 1 ribosome(s)	378 EF-G.GTP + 32 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 24 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 19 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 11 EF-Tu.GTP.glu1-tRNA + 21 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 24 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 16 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 15 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 13 EF-Tu.GTP.tyr1-tRNA + 11 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 1890 mg2 + 1 rib_ini_b2742_1 --> 1 rib_70_elo1_b2742_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_elo_b2742_1_rib2	Translation elongation 2 b2742 1 ribosome(s)	377 h2o + 1 rib_70_elo1_b2742_1_cplx --> 377 EF-G.GDP + 377 EF-Tu.GDP + 32 ala1_tRNA + 5 ala2_tRNA + 12 arg1_tRNA + 1 argX_tRNA + 24 asn1_tRNA + 10 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 19 gln1_tRNA + 12 gln2_tRNA + 11 glu1_tRNA + 21 gly1_tRNA + 6 glyT_tRNA + 6 glyU_tRNA + 754 h + 3 hisR_tRNA + 24 ile1_tRNA + 1 ile2_tRNA + 8 leu1_tRNA + 6 leu2_tRNA + 2 leuU_tRNA + 1 leuW_tRNA + 16 lys1_tRNA + 6 met1_tRNA + 1890 mg2 + 5 phe1_tRNA + 754 pi + 16 pro1_tRNA + 4 pro2_tRNA + 9 proM_tRNA + 1 rib_70_elo2_b2742_1_cplx + 5 ser1_tRNA + 6 ser2_tRNA + 3 ser3_tRNA + 4 serT_tRNA + 15 serV_tRNA + 15 thr1_tRNA + 8 thr2_tRNA + 8 thr3_tRNA + 9 thrU_tRNA + 4 trpT_tRNA + 13 tyr1_tRNA + 11 val1_tRNA + 5 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331

tl_elo_b2742_22_rib1	Translation elongation 1 b2742 22 ribosome(s)	8316 EF-G.GTP + 704 EF-Tu.GTP.ala1-tRNA + 110 EF-Tu.GTP.ala2-tRNA + 286 EF-Tu.GTP.arg1-tRNA + 22 EF-Tu.GTP.argX-tRNA + 528 EF-Tu.GTP.asn1-tRNA + 220 EF-Tu.GTP.asp1-tRNA + 22 EF-Tu.GTP.cysT-tRNA + 418 EF-Tu.GTP.gln1-tRNA + 264 EF-Tu.GTP.gln2-tRNA + 242 EF-Tu.GTP.glu1-tRNA + 462 EF-Tu.GTP.gly1-tRNA + 132 EF-Tu.GTP.glyT-tRNA + 132 EF-Tu.GTP.glyU-tRNA + 66 EF-Tu.GTP.hisR-tRNA + 528 EF-Tu.GTP.ile1-tRNA + 22 EF-Tu.GTP.ile2-tRNA + 176 EF-Tu.GTP.leu1-tRNA + 132 EF-Tu.GTP.leu2-tRNA + 44 EF-Tu.GTP.leuU-tRNA + 22 EF-Tu.GTP.leuW-tRNA + 352 EF-Tu.GTP.lys1-tRNA + 132 EF-Tu.GTP.met1-tRNA + 110 EF-Tu.GTP.phe1-tRNA + 352 EF-Tu.GTP.pro1-tRNA + 88 EF-Tu.GTP.pro2-tRNA + 198 EF-Tu.GTP.proM-tRNA + 110 EF-Tu.GTP.ser1-tRNA + 132 EF-Tu.GTP.ser2-tRNA + 66 EF-Tu.GTP.ser3-tRNA + 88 EF-Tu.GTP.serT-tRNA + 330 EF-Tu.GTP.serV-tRNA + 330 EF-Tu.GTP.thr1-tRNA + 176 EF-Tu.GTP.thr2-tRNA + 176 EF-Tu.GTP.thr3-tRNA + 198 EF-Tu.GTP.thrU-tRNA + 88 EF-Tu.GTP.trpT-tRNA + 286 EF-Tu.GTP.tyr1-tRNA + 242 EF-Tu.GTP.val1-tRNA + 110 EF-Tu.GTP.val2-tRNA + 220 EF-Tu.GTP.val3-tRNA + 41580 mg2 + 1 rib_ini_b2742_22 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_elo_b2742_22_rib2	Translation elongation 2 b2742 22 ribosome(s)	8294 h2o + 1 rib_70_elo1_b2742_22_cplx --> 8294 EF-G.GDP + 8294 EF-Tu.GDP + 704 ala1_tRNA + 110 ala2_tRNA + 264 arg1_tRNA + 22 argX_tRNA + 528 asn1_tRNA + 220 asp1_tRNA + 22 cysT_tRNA + 22 fmet_tRNA + 418 gln1_tRNA + 264 gln2_tRNA + 242 glu1_tRNA + 462 gly1_tRNA + 132 glyT_tRNA + 132 glyU_tRNA + 16588 h + 66 hisR_tRNA + 528 ile1_tRNA + 22 ile2_tRNA + 176 leu1_tRNA + 132 leu2_tRNA + 44 leuU_tRNA + 22 leuW_tRNA + 352 lys1_tRNA + 132 met1_tRNA + 41580 mg2 + 110 phe1_tRNA + 16588 pi + 352 pro1_tRNA + 88 pro2_tRNA + 198 proM_tRNA + 1 rib_70_elo2_b2742_22_cplx + 110 ser1_tRNA + 132 ser2_tRNA + 66 ser3_tRNA + 88 serT_tRNA + 330 serV_tRNA + 330 thr1_tRNA + 176 thr2_tRNA + 176 thr3_tRNA + 198 thrU_tRNA + 88 trpT_tRNA + 286 tyr1_tRNA + 242 val1_tRNA + 110 val2_tRNA + 220 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_elo_b2745_10_rib1	Translation elongation 1 b2745 10 ribosome(s)	3480 EF-G.GTP + 300 EF-Tu.GTP.ala1-tRNA + 100 EF-Tu.GTP.ala2-tRNA + 210 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.argU-tRNA + 10 EF-Tu.GTP.argW-tRNA + 20 EF-Tu.GTP.argX-tRNA + 150 EF-Tu.GTP.asn1-tRNA + 180 EF-Tu.GTP.asp1-tRNA + 40 EF-Tu.GTP.cysT-tRNA + 70 EF-Tu.GTP.gln1-tRNA + 120 EF-Tu.GTP.gln2-tRNA + 280 EF-Tu.GTP.glu1-tRNA + 200 EF-Tu.GTP.gly1-tRNA + 20 EF-Tu.GTP.glyT-tRNA + 40 EF-Tu.GTP.glyU-tRNA + 60 EF-Tu.GTP.hisR-tRNA + 110 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.ile2-tRNA + 180 EF-Tu.GTP.leu1-tRNA + 60 EF-Tu.GTP.leu2-tRNA + 60 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuW-tRNA + 70 EF-Tu.GTP.leuZ-tRNA + 170 EF-Tu.GTP.lys1-tRNA + 30 EF-Tu.GTP.met1-tRNA + 160 EF-Tu.GTP.phe1-tRNA + 70 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.proM-tRNA + 10 EF-Tu.GTP.ser3-tRNA + 110 EF-Tu.GTP.serV-tRNA + 90 EF-Tu.GTP.thr1-tRNA + 40 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.thrU-tRNA + 90 EF-Tu.GTP.trpT-tRNA + 50 EF-Tu.GTP.tyr1-tRNA + 120 EF-Tu.GTP.val1-tRNA + 60 EF-Tu.GTP.val2-tRNA + 100 EF-Tu.GTP.val3-tRNA + 17400 mg2 + 1 rib_ini_b2745_10 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_elo_b2745_10_rib2	Translation elongation 2 b2745 10 ribosome(s)	3470 h2o + 1 rib_70_elo1_b2745_10_cplx --> 3470 EF-G.GDP + 3470 EF-Tu.GDP + 300 ala1_tRNA + 100 ala2_tRNA + 210 arg1_tRNA + 20 argU_tRNA + 10 argW_tRNA + 20 argX_tRNA + 150 asn1_tRNA + 180 asp1_tRNA + 40 cysT_tRNA + 10 fmet_tRNA + 70 gln1_tRNA + 120 gln2_tRNA + 270 glu1_tRNA + 200 gly1_tRNA + 20 glyT_tRNA + 40 glyU_tRNA + 6940 h + 60 hisR_tRNA + 110 ile1_tRNA + 10 ile2_tRNA + 180 leu1_tRNA + 60 leu2_tRNA + 60 leuU_tRNA + 10 leuW_tRNA + 70 leuZ_tRNA + 170 lys1_tRNA + 30 met1_tRNA + 17400 mg2 + 160 phe1_tRNA + 6940 pi + 70 pro1_tRNA + 10 pro2_tRNA + 10 proL_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b2745_10_cplx + 10 ser3_tRNA + 110 serV_tRNA + 90 thr1_tRNA + 40 thr2_tRNA + 10 thr3_tRNA + 20 thrU_tRNA + 90 trpT_tRNA + 50 tyr1_tRNA + 120 val1_tRNA + 60 val2_tRNA + 100 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_elo_b2745_1_rib1	Translation elongation 1 b2745 1 ribosome(s)	348 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 21 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argW-tRNA + 2 EF-Tu.GTP.argX-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 28 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 7 EF-Tu.GTP.leuZ-tRNA + 17 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 11 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 9 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 1740 mg2 + 1 rib_ini_b2745_1 --> 1 rib_70_elo1_b2745_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_elo_b2745_1_rib2	Translation elongation 2 b2745 1 ribosome(s)	347 h2o + 1 rib_70_elo1_b2745_1_cplx --> 347 EF-G.GDP + 347 EF-Tu.GDP + 30 ala1_tRNA + 10 ala2_tRNA + 21 arg1_tRNA + 2 argU_tRNA + 1 argW_tRNA + 2 argX_tRNA + 15 asn1_tRNA + 18 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 12 gln2_tRNA + 27 glu1_tRNA + 20 gly1_tRNA + 2 glyT_tRNA + 4 glyU_tRNA + 694 h + 6 hisR_tRNA + 11 ile1_tRNA + 1 ile2_tRNA + 18 leu1_tRNA + 6 leu2_tRNA + 6 leuU_tRNA + 1 leuW_tRNA + 7 leuZ_tRNA + 17 lys1_tRNA + 3 met1_tRNA + 1740 mg2 + 16 phe1_tRNA + 694 pi + 7 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b2745_1_cplx + 1 ser3_tRNA + 11 serV_tRNA + 9 thr1_tRNA + 4 thr2_tRNA + 1 thr3_tRNA + 2 thrU_tRNA + 9 trpT_tRNA + 5 tyr1_tRNA + 12 val1_tRNA + 6 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509

tl_elo_b2745_20_rib1	Translation elongation 1 b2745 20 ribosome(s)	6960 EF-G.GTP + 600 EF-Tu.GTP.ala1-tRNA + 200 EF-Tu.GTP.ala2-tRNA + 420 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.argU-tRNA + 20 EF-Tu.GTP.argW-tRNA + 40 EF-Tu.GTP.argX-tRNA + 300 EF-Tu.GTP.asn1-tRNA + 360 EF-Tu.GTP.asp1-tRNA + 80 EF-Tu.GTP.cysT-tRNA + 140 EF-Tu.GTP.gln1-tRNA + 240 EF-Tu.GTP.gln2-tRNA + 560 EF-Tu.GTP.glu1-tRNA + 400 EF-Tu.GTP.gly1-tRNA + 40 EF-Tu.GTP.glyT-tRNA + 80 EF-Tu.GTP.glyU-tRNA + 120 EF-Tu.GTP.hisR-tRNA + 220 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.ile2-tRNA + 360 EF-Tu.GTP.leu1-tRNA + 120 EF-Tu.GTP.leu2-tRNA + 120 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuW-tRNA + 140 EF-Tu.GTP.leuZ-tRNA + 340 EF-Tu.GTP.lys1-tRNA + 60 EF-Tu.GTP.met1-tRNA + 320 EF-Tu.GTP.phe1-tRNA + 140 EF-Tu.GTP.pro1-tRNA + 20 EF-Tu.GTP.pro2-tRNA + 20 EF-Tu.GTP.proL-tRNA + 20 EF-Tu.GTP.proM-tRNA + 20 EF-Tu.GTP.ser3-tRNA + 220 EF-Tu.GTP.serV-tRNA + 180 EF-Tu.GTP.thr1-tRNA + 80 EF-Tu.GTP.thr2-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 40 EF-Tu.GTP.thrU-tRNA + 180 EF-Tu.GTP.trpT-tRNA + 100 EF-Tu.GTP.tyr1-tRNA + 240 EF-Tu.GTP.val1-tRNA + 120 EF-Tu.GTP.val2-tRNA + 200 EF-Tu.GTP.val3-tRNA + 34800 mg2 + 1 rib_ini_b2745_20 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_elo_b2745_20_rib2	Translation elongation 2 b2745 20 ribosome(s)	6940 h2o + 1 rib_70_elo1_b2745_20_cplx --> 6940 EF-G.GDP + 6940 EF-Tu.GDP + 600 ala1_tRNA + 200 ala2_tRNA + 420 arg1_tRNA + 40 argU_tRNA + 20 argW_tRNA + 40 argX_tRNA + 300 asn1_tRNA + 360 asp1_tRNA + 80 cysT_tRNA + 20 fmet_tRNA + 140 gln1_tRNA + 240 gln2_tRNA + 540 glu1_tRNA + 400 gly1_tRNA + 40 glyT_tRNA + 80 glyU_tRNA + 13880 h + 120 hisR_tRNA + 220 ile1_tRNA + 20 ile2_tRNA + 360 leu1_tRNA + 120 leu2_tRNA + 120 leuU_tRNA + 20 leuW_tRNA + 140 leuZ_tRNA + 340 lys1_tRNA + 60 met1_tRNA + 34800 mg2 + 320 phe1_tRNA + 13880 pi + 140 pro1_tRNA + 20 pro2_tRNA + 20 proL_tRNA + 20 proM_tRNA + 1 rib_70_elo2_b2745_20_cplx + 20 ser3_tRNA + 220 serV_tRNA + 180 thr1_tRNA + 80 thr2_tRNA + 20 thr3_tRNA + 40 thrU_tRNA + 180 trpT_tRNA + 100 tyr1_tRNA + 240 val1_tRNA + 120 val2_tRNA + 200 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_elo_b2779_12_rib1	Translation elongation 1 b2779 12 ribosome(s)	5172 EF-G.GTP + 672 EF-Tu.GTP.ala1-tRNA + 36 EF-Tu.GTP.ala2-tRNA + 132 EF-Tu.GTP.arg1-tRNA + 228 EF-Tu.GTP.asn1-tRNA + 300 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 132 EF-Tu.GTP.gln1-tRNA + 408 EF-Tu.GTP.glu1-tRNA + 564 EF-Tu.GTP.gly1-tRNA + 84 EF-Tu.GTP.hisR-tRNA + 420 EF-Tu.GTP.ile1-tRNA + 348 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 444 EF-Tu.GTP.lys1-tRNA + 144 EF-Tu.GTP.met1-tRNA + 144 EF-Tu.GTP.phe1-tRNA + 132 EF-Tu.GTP.pro1-tRNA + 84 EF-Tu.GTP.ser1-tRNA + 156 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.serT-tRNA + 12 EF-Tu.GTP.serV-tRNA + 108 EF-Tu.GTP.thr1-tRNA + 144 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 132 EF-Tu.GTP.tyr1-tRNA + 84 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 204 EF-Tu.GTP.val3-tRNA + 25860 mg2 + 1 rib_ini_b2779_12 --> 1 rib_70_elo1_b2779_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.91E+01	2.91E+01	0	3.96E+01	39.60592	0	4.80E+00	4.802417
tl_elo_b2779_12_rib2	Translation elongation 2 b2779 12 ribosome(s)	5160 h2o + 1 rib_70_elo1_b2779_12_cplx --> 5160 EF-G.GDP + 5160 EF-Tu.GDP + 660 ala1_tRNA + 36 ala2_tRNA + 132 arg1_tRNA + 228 asn1_tRNA + 300 asp1_tRNA + 12 cysT_tRNA + 12 fmet_tRNA + 132 gln1_tRNA + 408 glu1_tRNA + 564 gly1_tRNA + 10320 h + 84 hisR_tRNA + 420 ile1_tRNA + 348 leu1_tRNA + 12 leu2_tRNA + 444 lys1_tRNA + 144 met1_tRNA + 25860 mg2 + 144 phe1_tRNA + 10320 pi + 132 pro1_tRNA + 1 rib_70_elo2_b2779_12_cplx + 84 ser1_tRNA + 156 ser2_tRNA + 12 serT_tRNA + 12 serV_tRNA + 108 thr1_tRNA + 144 thr2_tRNA + 12 trpT_tRNA + 132 tyr1_tRNA + 84 val1_tRNA + 12 val2_tRNA + 204 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.91E+01	2.91E+01	0	3.96E+01	39.60592	0	4.80E+00	4.802417
tl_elo_b2779_1_rib1	Translation elongation 1 b2779 1 ribosome(s)	431 EF-G.GTP + 56 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 19 EF-Tu.GTP.asn1-tRNA + 25 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 11 EF-Tu.GTP.gln1-tRNA + 34 EF-Tu.GTP.glu1-tRNA + 47 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 35 EF-Tu.GTP.ile1-tRNA + 29 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 37 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 13 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 1 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 11 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 17 EF-Tu.GTP.val3-tRNA + 2155 mg2 + 1 rib_ini_b2779_1 --> 1 rib_70_elo1_b2779_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.17E+01	5.17E+01	0	8.35E+01	83.50058	0	9.05E+00	9.054
tl_elo_b2779_1_rib2	Translation elongation 2 b2779 1 ribosome(s)	430 h2o + 1 rib_70_elo1_b2779_1_cplx --> 430 EF-G.GDP + 430 EF-Tu.GDP + 55 ala1_tRNA + 3 ala2_tRNA + 11 arg1_tRNA + 19 asn1_tRNA + 25 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 11 gln1_tRNA + 34 glu1_tRNA + 47 gly1_tRNA + 860 h + 7 hisR_tRNA + 35 ile1_tRNA + 29 leu1_tRNA + 1 leu2_tRNA + 37 lys1_tRNA + 12 met1_tRNA + 2155 mg2 + 12 phe1_tRNA + 860 pi + 11 pro1_tRNA + 1 rib_70_elo2_b2779_1_cplx + 7 ser1_tRNA + 13 ser2_tRNA + 1 serT_tRNA + 1 serV_tRNA + 9 thr1_tRNA + 12 thr2_tRNA + 1 trpT_tRNA + 11 tyr1_tRNA + 7 val1_tRNA + 1 val2_tRNA + 17 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.17E+01	5.17E+01	0	8.35E+01	83.50058	0	9.05E+00	9.054
tl_elo_b2779_25_rib1	Translation elongation 1 b2779 25 ribosome(s)	10775 EF-G.GTP + 1400 EF-Tu.GTP.ala1-tRNA + 75 EF-Tu.GTP.ala2-tRNA + 275 EF-Tu.GTP.arg1-tRNA + 475 EF-Tu.GTP.asn1-tRNA + 625 EF-Tu.GTP.asp1-tRNA + 25 EF-Tu.GTP.cysT-tRNA + 275 EF-Tu.GTP.gln1-tRNA + 850 EF-Tu.GTP.glu1-tRNA + 1175 EF-Tu.GTP.gly1-tRNA + 175 EF-Tu.GTP.hisR-tRNA + 875 EF-Tu.GTP.ile1-tRNA + 725 EF-Tu.GTP.leu1-tRNA + 25 EF-Tu.GTP.leu2-tRNA + 925 EF-Tu.GTP.lys1-tRNA + 300 EF-Tu.GTP.met1-tRNA + 300 EF-Tu.GTP.phe1-tRNA + 275 EF-Tu.GTP.pro1-tRNA + 175 EF-Tu.GTP.ser1-tRNA + 325 EF-Tu.GTP.ser2-tRNA + 25 EF-Tu.GTP.serT-tRNA + 25 EF-Tu.GTP.serV-tRNA + 225 EF-Tu.GTP.thr1-tRNA + 300 EF-Tu.GTP.thr2-tRNA + 25 EF-Tu.GTP.trpT-tRNA + 275 EF-Tu.GTP.tyr1-tRNA + 175 EF-Tu.GTP.val1-tRNA + 25 EF-Tu.GTP.val2-tRNA + 425 EF-Tu.GTP.val3-tRNA + 53875 mg2 + 1 rib_ini_b2779_25 --> 1 rib_70_elo1_b2779_25_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.76E+01	1.76E+01	0	1.91E+01	19.09647	0	2.31E+00	2.30516

tl_elo_b2779_25_rib2	Translation elongation 2 b2779 25 ribosome(s)	10750 h2o + 1 rib_70_elo1_b2779_25_cplx --> 10750 EF-G.GDP + 10750 EF-Tu.GDP + 1375 ala1_tRNA + 75 ala2_tRNA + 275 arg1_tRNA + 475 asn1_tRNA + 625 asp1_tRNA + 25 cysT_tRNA + 25 fmet_tRNA + 275 gln1_tRNA + 850 glu1_tRNA + 1175 gly1_tRNA + 21500 h + 175 hisR_tRNA + 875 ile1_tRNA + 725 leu1_tRNA + 25 leu2_tRNA + 925 lys1_tRNA + 300 met1_tRNA + 53875 mg2 + 300 phe1_tRNA + 21500 pi + 275 pro1_tRNA + 1 rib_70_elo2_b2779_25_cplx + 175 ser1_tRNA + 325 ser2_tRNA + 25 serT_tRNA + 25 serV_tRNA + 225 thr1_tRNA + 300 thr2_tRNA + 25 trpT_tRNA + 275 tyr1_tRNA + 175 val1_tRNA + 25 val2_tRNA + 425 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.76E+01	1.76E+01	0	1.91E+01	19.09647	0	2.31E+00	2.30516
tl_elo_b2780_16_rib1	Translation elongation 1 b2780 16 ribosome(s)	8704 EF-G.GTP + 496 EF-Tu.GTP.ala1-tRNA + 128 EF-Tu.GTP.ala2-tRNA + 528 EF-Tu.GTP.arg1-tRNA + 384 EF-Tu.GTP.asn1-tRNA + 464 EF-Tu.GTP.asp1-tRNA + 128 EF-Tu.GTP.cysT-tRNA + 256 EF-Tu.GTP.gln1-tRNA + 32 EF-Tu.GTP.gln2-tRNA + 688 EF-Tu.GTP.glu1-tRNA + 624 EF-Tu.GTP.gly1-tRNA + 96 EF-Tu.GTP.glyU-tRNA + 224 EF-Tu.GTP.hisR-tRNA + 656 EF-Tu.GTP.ile1-tRNA + 464 EF-Tu.GTP.leu1-tRNA + 96 EF-Tu.GTP.leu2-tRNA + 160 EF-Tu.GTP.leuU-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 416 EF-Tu.GTP.lys1-tRNA + 192 EF-Tu.GTP.met1-tRNA + 288 EF-Tu.GTP.phe1-tRNA + 272 EF-Tu.GTP.pro1-tRNA + 48 EF-Tu.GTP.pro2-tRNA + 64 EF-Tu.GTP.proM-tRNA + 112 EF-Tu.GTP.ser1-tRNA + 128 EF-Tu.GTP.ser2-tRNA + 48 EF-Tu.GTP.serT-tRNA + 144 EF-Tu.GTP.serV-tRNA + 176 EF-Tu.GTP.thr1-tRNA + 112 EF-Tu.GTP.thr2-tRNA + 96 EF-Tu.GTP.thr3-tRNA + 48 EF-Tu.GTP.thrU-tRNA + 48 EF-Tu.GTP.trpT-tRNA + 256 EF-Tu.GTP.tyr1-tRNA + 336 EF-Tu.GTP.val1-tRNA + 160 EF-Tu.GTP.val2-tRNA + 304 EF-Tu.GTP.val3-tRNA + 43520 mg2 + 1 rib_ini_b2780_16 --> 1 rib_70_elo1_b2780_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_elo_b2780_16_rib2	Translation elongation 2 b2780 16 ribosome(s)	8688 h2o + 1 rib_70_elo1_b2780_16_cplx --> 8688 EF-G.GDP + 8688 EF-Tu.GDP + 496 ala1_tRNA + 128 ala2_tRNA + 528 arg1_tRNA + 384 asn1_tRNA + 464 asp1_tRNA + 128 cysT_tRNA + 16 fmet_tRNA + 256 gln1_tRNA + 32 gln2_tRNA + 688 glu1_tRNA + 624 gly1_tRNA + 96 glyU_tRNA + 17376 h + 224 hisR_tRNA + 656 ile1_tRNA + 464 leu1_tRNA + 96 leu2_tRNA + 160 leuU_tRNA + 32 leuZ_tRNA + 400 lys1_tRNA + 192 met1_tRNA + 43520 mg2 + 288 phe1_tRNA + 17376 pi + 272 pro1_tRNA + 48 pro2_tRNA + 64 proM_tRNA + 1 rib_70_elo2_b2780_16_cplx + 112 ser1_tRNA + 128 ser2_tRNA + 48 serT_tRNA + 144 serV_tRNA + 176 thr1_tRNA + 112 thr2_tRNA + 96 thr3_tRNA + 48 thrU_tRNA + 48 trpT_tRNA + 256 tyr1_tRNA + 336 val1_tRNA + 160 val2_tRNA + 304 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_elo_b2780_1_rib1	Translation elongation 1 b2780 1 ribosome(s)	544 EF-G.GTP + 31 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 33 EF-Tu.GTP.arg1-tRNA + 24 EF-Tu.GTP.asn1-tRNA + 29 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 43 EF-Tu.GTP.glu1-tRNA + 39 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 14 EF-Tu.GTP.hisR-tRNA + 41 EF-Tu.GTP.ile1-tRNA + 29 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 26 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 18 EF-Tu.GTP.phe1-tRNA + 17 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serT-tRNA + 9 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 16 EF-Tu.GTP.tyr1-tRNA + 21 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 19 EF-Tu.GTP.val3-tRNA + 2720 mg2 + 1 rib_ini_b2780_1 --> 1 rib_70_elo1_b2780_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_elo_b2780_1_rib2	Translation elongation 2 b2780 1 ribosome(s)	543 h2o + 1 rib_70_elo1_b2780_1_cplx --> 543 EF-G.GDP + 543 EF-Tu.GDP + 31 ala1_tRNA + 8 ala2_tRNA + 33 arg1_tRNA + 24 asn1_tRNA + 29 asp1_tRNA + 8 cysT_tRNA + 1 fmet_tRNA + 16 gln1_tRNA + 2 gln2_tRNA + 43 glu1_tRNA + 39 gly1_tRNA + 6 glyU_tRNA + 1086 h + 14 hisR_tRNA + 41 ile1_tRNA + 29 leu1_tRNA + 6 leu2_tRNA + 10 leuU_tRNA + 2 leuZ_tRNA + 25 lys1_tRNA + 12 met1_tRNA + 2720 mg2 + 18 phe1_tRNA + 1086 pi + 17 pro1_tRNA + 3 pro2_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b2780_1_cplx + 7 ser1_tRNA + 8 ser2_tRNA + 3 serT_tRNA + 9 serV_tRNA + 11 thr1_tRNA + 7 thr2_tRNA + 6 thr3_tRNA + 3 thrU_tRNA + 3 trpT_tRNA + 16 tyr1_tRNA + 21 val1_tRNA + 10 val2_tRNA + 19 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_elo_b2780_32_rib1	Translation elongation 1 b2780 32 ribosome(s)	17408 EF-G.GTP + 992 EF-Tu.GTP.ala1-tRNA + 256 EF-Tu.GTP.ala2-tRNA + 1056 EF-Tu.GTP.arg1-tRNA + 768 EF-Tu.GTP.asn1-tRNA + 928 EF-Tu.GTP.asp1-tRNA + 256 EF-Tu.GTP.cysT-tRNA + 512 EF-Tu.GTP.gln1-tRNA + 64 EF-Tu.GTP.gln2-tRNA + 1376 EF-Tu.GTP.glu1-tRNA + 1248 EF-Tu.GTP.gly1-tRNA + 192 EF-Tu.GTP.glyU-tRNA + 448 EF-Tu.GTP.hisR-tRNA + 1312 EF-Tu.GTP.ile1-tRNA + 928 EF-Tu.GTP.leu1-tRNA + 192 EF-Tu.GTP.leu2-tRNA + 320 EF-Tu.GTP.leuU-tRNA + 64 EF-Tu.GTP.leuZ-tRNA + 832 EF-Tu.GTP.lys1-tRNA + 384 EF-Tu.GTP.met1-tRNA + 576 EF-Tu.GTP.phe1-tRNA + 544 EF-Tu.GTP.pro1-tRNA + 96 EF-Tu.GTP.pro2-tRNA + 128 EF-Tu.GTP.proM-tRNA + 224 EF-Tu.GTP.ser1-tRNA + 256 EF-Tu.GTP.ser2-tRNA + 96 EF-Tu.GTP.serT-tRNA + 288 EF-Tu.GTP.serV-tRNA + 352 EF-Tu.GTP.thr1-tRNA + 224 EF-Tu.GTP.thr2-tRNA + 192 EF-Tu.GTP.thr3-tRNA + 96 EF-Tu.GTP.thrU-tRNA + 96 EF-Tu.GTP.trpT-tRNA + 512 EF-Tu.GTP.tyr1-tRNA + 672 EF-Tu.GTP.val1-tRNA + 320 EF-Tu.GTP.val2-tRNA + 608 EF-Tu.GTP.val3-tRNA + 87040 mg2 + 1 rib_ini_b2780_32 --> 1 rib_70_elo1_b2780_32_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_elo_b2780_32_rib2	Translation elongation 2 b2780 32 ribosome(s)	17376 h2o + 1 rib_70_elo1_b2780_32_cplx --> 17376 EF-G.GDP + 17376 EF-Tu.GDP + 992 ala1_tRNA + 256 ala2_tRNA + 1056 arg1_tRNA + 768 asn1_tRNA + 928 asp1_tRNA + 256 cysT_tRNA + 32 fmet_tRNA + 512 gln1_tRNA + 64 gln2_tRNA + 1376 glu1_tRNA + 1248 gly1_tRNA + 192 glyU_tRNA + 34752 h + 448 hisR_tRNA + 1312 ile1_tRNA + 928 leu1_tRNA + 192 leu2_tRNA + 320 leuU_tRNA + 64 leuZ_tRNA + 800 lys1_tRNA + 384 met1_tRNA + 87040 mg2 + 576 phe1_tRNA + 34752 pi + 544 pro1_tRNA + 96 pro2_tRNA + 128 proM_tRNA + 1 rib_70_elo2_b2780_32_cplx + 224 ser1_tRNA + 256 ser2_tRNA + 96 serT_tRNA + 288 serV_tRNA + 352 thr1_tRNA + 224 thr2_tRNA + 192 thr3_tRNA + 96 thrU_tRNA + 96 trpT_tRNA + 512 tyr1_tRNA + 672 val1_tRNA + 320 val2_tRNA + 608 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404

tl_elo_b2785_12_rib1	Translation elongation 1 b2785 12 ribosome(s)	5184 EF-G.GTP + 396 EF-Tu.GTP.ala1-tRNA + 84 EF-Tu.GTP.ala2-tRNA + 336 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argW-tRNA + 24 EF-Tu.GTP.argX-tRNA + 168 EF-Tu.GTP.asn1-tRNA + 264 EF-Tu.GTP.asp1-tRNA + 84 EF-Tu.GTP.cysT-tRNA + 192 EF-Tu.GTP.gln1-tRNA + 132 EF-Tu.GTP.gln2-tRNA + 288 EF-Tu.GTP.glu1-tRNA + 276 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.glyT-tRNA + 24 EF-Tu.GTP.glyU-tRNA + 132 EF-Tu.GTP.hisR-tRNA + 120 EF-Tu.GTP.ile1-tRNA + 48 EF-Tu.GTP.ile2-tRNA + 228 EF-Tu.GTP.leu1-tRNA + 84 EF-Tu.GTP.leu2-tRNA + 120 EF-Tu.GTP.leuU-tRNA + 24 EF-Tu.GTP.leuW-tRNA + 144 EF-Tu.GTP.leuZ-tRNA + 240 EF-Tu.GTP.lys1-tRNA + 132 EF-Tu.GTP.met1-tRNA + 168 EF-Tu.GTP.phe1-tRNA + 96 EF-Tu.GTP.pro1-tRNA + 48 EF-Tu.GTP.pro2-tRNA + 84 EF-Tu.GTP.proL-tRNA + 36 EF-Tu.GTP.proM-tRNA + 24 EF-Tu.GTP.ser1-tRNA + 60 EF-Tu.GTP.ser2-tRNA + 48 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serT-tRNA + 168 EF-Tu.GTP.serV-tRNA + 60 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 108 EF-Tu.GTP.thr3-tRNA + 48 EF-Tu.GTP.thrU-tRNA + 48 EF-Tu.GTP.trpT-tRNA + 108 EF-Tu.GTP.tyr1-tRNA + 204 EF-Tu.GTP.val1-tRNA + 120 EF-Tu.GTP.val2-tRNA + 108 EF-Tu.GTP.val3-tRNA + 25920 mg	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145
tl_elo_b2785_12_rib2	Translation elongation 2 b2785 12 ribosome(s)	5172 h2o + 1 rib_70_elo1_b2785_12_cplx --> 5172 EF-G.GDP + 5172 EF-Tu.GDP + 396 ala1_tRNA + 84 ala2_tRNA + 336 arg1_tRNA + 12 argW_tRNA + 24 argX_tRNA + 168 asn1_tRNA + 264 asp1_tRNA + 84 cysT_tRNA + 12 fmet_tRNA + 192 gln1_tRNA + 132 gln2_tRNA + 288 glu1_tRNA + 276 gly1_tRNA + 36 glyT_tRNA + 24 glyU_tRNA + 10344 h + 132 hisR_tRNA + 120 ile1_tRNA + 48 ile2_tRNA + 228 leu1_tRNA + 84 leu2_tRNA + 120 leuU_tRNA + 24 leuW_tRNA + 144 leuZ_tRNA + 228 lys1_tRNA + 132 met1_tRNA + 25920 mg2 + 168 phe1_tRNA + 10344 pi + 96 pro1_tRNA + 48 pro2_tRNA + 84 proL_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b2785_12_cplx + 24 ser1_tRNA + 60 ser2_tRNA + 48 ser3_tRNA + 24 serT_tRNA + 168 serV_tRNA + 60 thr1_tRNA + 36 thr2_tRNA + 108 thr3_tRNA + 48 thrU_tRNA + 48 trpT_tRNA + 108 tyr1_tRNA + 204 val1_tRNA + 120 val2_tRNA + 108 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145
tl_elo_b2785_1_rib1	Translation elongation 1 b2785 1 ribosome(s)	432 EF-G.GTP + 33 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 28 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 2 EF-Tu.GTP.argX-tRNA + 14 EF-Tu.GTP.asn1-tRNA + 22 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 11 EF-Tu.GTP.gln2-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 23 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.ile2-tRNA + 19 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 11 EF-Tu.GTP.met1-tRNA + 14 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 14 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 17 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 2160 mg2 + 1 rib_ini_b2785_1 -->	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145
tl_elo_b2785_1_rib2	Translation elongation 2 b2785 1 ribosome(s)	431 h2o + 1 rib_70_elo1_b2785_1_cplx --> 431 EF-G.GDP + 431 EF-Tu.GDP + 33 ala1_tRNA + 7 ala2_tRNA + 28 arg1_tRNA + 1 argW_tRNA + 2 argX_tRNA + 14 asn1_tRNA + 22 asp1_tRNA + 7 cysT_tRNA + 1 fmet_tRNA + 16 gln1_tRNA + 11 gln2_tRNA + 24 glu1_tRNA + 23 gly1_tRNA + 3 glyT_tRNA + 2 glyU_tRNA + 862 h + 11 hisR_tRNA + 10 ile1_tRNA + 4 ile2_tRNA + 19 leu1_tRNA + 7 leu2_tRNA + 10 leuU_tRNA + 2 leuW_tRNA + 12 leuZ_tRNA + 19 lys1_tRNA + 11 met1_tRNA + 2160 mg2 + 14 phe1_tRNA + 862 pi + 8 pro1_tRNA + 4 pro2_tRNA + 7 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b2785_1_cplx + 2 ser1_tRNA + 5 ser2_tRNA + 4 ser3_tRNA + 2 serT_tRNA + 14 serV_tRNA + 5 thr1_tRNA + 3 thr2_tRNA + 9 thr3_tRNA + 4 thrU_tRNA + 4 trpT_tRNA + 9 tyr1_tRNA + 17 val1_tRNA + 10 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145
tl_elo_b2785_25_rib1	Translation elongation 1 b2785 25 ribosome(s)	10800 EF-G.GTP + 825 EF-Tu.GTP.ala1-tRNA + 175 EF-Tu.GTP.ala2-tRNA + 700 EF-Tu.GTP.arg1-tRNA + 25 EF-Tu.GTP.argW-tRNA + 50 EF-Tu.GTP.argX-tRNA + 350 EF-Tu.GTP.asn1-tRNA + 550 EF-Tu.GTP.asp1-tRNA + 175 EF-Tu.GTP.cysT-tRNA + 400 EF-Tu.GTP.gln1-tRNA + 275 EF-Tu.GTP.gln2-tRNA + 600 EF-Tu.GTP.glu1-tRNA + 575 EF-Tu.GTP.gly1-tRNA + 75 EF-Tu.GTP.glyT-tRNA + 50 EF-Tu.GTP.glyU-tRNA + 275 EF-Tu.GTP.hisR-tRNA + 250 EF-Tu.GTP.ile1-tRNA + 100 EF-Tu.GTP.ile2-tRNA + 475 EF-Tu.GTP.leu1-tRNA + 175 EF-Tu.GTP.leu2-tRNA + 250 EF-Tu.GTP.leuU-tRNA + 50 EF-Tu.GTP.leuW-tRNA + 300 EF-Tu.GTP.leuZ-tRNA + 500 EF-Tu.GTP.lys1-tRNA + 275 EF-Tu.GTP.met1-tRNA + 350 EF-Tu.GTP.phe1-tRNA + 200 EF-Tu.GTP.pro1-tRNA + 100 EF-Tu.GTP.pro2-tRNA + 175 EF-Tu.GTP.proL-tRNA + 75 EF-Tu.GTP.proM-tRNA + 50 EF-Tu.GTP.ser1-tRNA + 125 EF-Tu.GTP.ser2-tRNA + 100 EF-Tu.GTP.ser3-tRNA + 50 EF-Tu.GTP.serT-tRNA + 350 EF-Tu.GTP.serV-tRNA + 125 EF-Tu.GTP.thr1-tRNA + 75 EF-Tu.GTP.thr2-tRNA + 225 EF-Tu.GTP.thr3-tRNA + 100 EF-Tu.GTP.thrU-tRNA + 100 EF-Tu.GTP.trpT-tRNA + 225 EF-Tu.GTP.tyr1-tRNA + 425 EF-Tu.GTP.val1-tRNA + 250 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145
tl_elo_b2785_25_rib2	Translation elongation 2 b2785 25 ribosome(s)	10775 h2o + 1 rib_70_elo1_b2785_25_cplx --> 10775 EF-G.GDP + 10775 EF-Tu.GDP + 825 ala1_tRNA + 175 ala2_tRNA + 700 arg1_tRNA + 25 argW_tRNA + 50 argX_tRNA + 350 asn1_tRNA + 550 asp1_tRNA + 175 cysT_tRNA + 25 fmet_tRNA + 400 gln1_tRNA + 275 gln2_tRNA + 600 glu1_tRNA + 575 gly1_tRNA + 75 glyT_tRNA + 50 glyU_tRNA + 21550 h + 275 hisR_tRNA + 250 ile1_tRNA + 100 ile2_tRNA + 475 leu1_tRNA + 175 leu2_tRNA + 250 leuU_tRNA + 50 leuW_tRNA + 300 leuZ_tRNA + 475 lys1_tRNA + 275 met1_tRNA + 54000 mg2 + 350 phe1_tRNA + 21550 pi + 200 pro1_tRNA + 100 pro2_tRNA + 175 proL_tRNA + 75 proM_tRNA + 1 rib_70_elo2_b2785_25_cplx + 50 ser1_tRNA + 125 ser2_tRNA + 100 ser3_tRNA + 50 serT_tRNA + 350 serV_tRNA + 125 thr1_tRNA + 75 thr2_tRNA + 225 thr3_tRNA + 100 thrU_tRNA + 100 trpT_tRNA + 225 tyr1_tRNA + 425 val1_tRNA + 250 val2_tRNA + 225 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145

tl_elo_b2790_1_rib1	Translation elongation 1 b2790 1 ribosome(s)	148 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 1 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 13 EF-Tu.GTP.glu1-tRNA + 11 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 740 mg2 + 1 rib_ini_b2790_1 --> 1 rib_70_elo1_b2790_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789
tl_elo_b2790_1_rib2	Translation elongation 2 b2790 1 ribosome(s)	147 h2o + 1 rib_70_elo1_b2790_1_cplx --> 147 EF-G.GDP + 147 EF-Tu.GDP + 7 ala1_tRNA + 3 ala2_tRNA + 1 arg1_tRNA + 1 argX_tRNA + 6 asn1_tRNA + 9 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 10 gln1_tRNA + 13 glu1_tRNA + 11 gly1_tRNA + 1 glyT_tRNA + 2 glyU_tRNA + 294 h + 1 hisR_tRNA + 7 ile1_tRNA + 8 leu1_tRNA + 4 leu2_tRNA + 3 leuU_tRNA + 2 leuZ_tRNA + 4 lys1_tRNA + 2 met1_tRNA + 740 mg2 + 6 phe1_tRNA + 294 pi + 4 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b2790_1_cplx + 1 ser1_tRNA + 2 serT_tRNA + 7 serV_tRNA + 3 thr1_tRNA + 5 thr3_tRNA + 3 trpT_tRNA + 5 tyr1_tRNA + 6 val1_tRNA + 2 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789
tl_elo_b2790_4_rib1	Translation elongation 1 b2790 4 ribosome(s)	592 EF-G.GTP + 28 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 4 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argX-tRNA + 24 EF-Tu.GTP.asn1-tRNA + 36 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 40 EF-Tu.GTP.gln1-tRNA + 52 EF-Tu.GTP.glu1-tRNA + 44 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 28 EF-Tu.GTP.ile1-tRNA + 32 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 16 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.serT-tRNA + 28 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 20 EF-Tu.GTP.tyr1-tRNA + 24 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 2960 mg2 + 1 rib_ini_b2790_4 --> 1 rib_70_elo1_b2790_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789
tl_elo_b2790_4_rib2	Translation elongation 2 b2790 4 ribosome(s)	588 h2o + 1 rib_70_elo1_b2790_4_cplx --> 588 EF-G.GDP + 588 EF-Tu.GDP + 28 ala1_tRNA + 12 ala2_tRNA + 4 arg1_tRNA + 4 argX_tRNA + 24 asn1_tRNA + 36 asp1_tRNA + 4 cysT_tRNA + 4 fmet_tRNA + 40 gln1_tRNA + 52 glu1_tRNA + 44 gly1_tRNA + 4 glyT_tRNA + 8 glyU_tRNA + 1176 h + 4 hisR_tRNA + 28 ile1_tRNA + 32 leu1_tRNA + 16 leu2_tRNA + 12 leuU_tRNA + 8 leuZ_tRNA + 16 lys1_tRNA + 8 met1_tRNA + 2960 mg2 + 24 phe1_tRNA + 1176 pi + 16 pro1_tRNA + 8 pro2_tRNA + 4 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b2790_4_cplx + 4 ser1_tRNA + 8 serT_tRNA + 28 serV_tRNA + 12 thr1_tRNA + 20 thr3_tRNA + 12 trpT_tRNA + 20 tyr1_tRNA + 24 val1_tRNA + 8 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789
tl_elo_b2790_8_rib1	Translation elongation 1 b2790 8 ribosome(s)	1184 EF-G.GTP + 56 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.argX-tRNA + 48 EF-Tu.GTP.asn1-tRNA + 72 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 80 EF-Tu.GTP.gln1-tRNA + 104 EF-Tu.GTP.glu1-tRNA + 88 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 16 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 56 EF-Tu.GTP.ile1-tRNA + 64 EF-Tu.GTP.leu1-tRNA + 32 EF-Tu.GTP.leu2-tRNA + 24 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuZ-tRNA + 32 EF-Tu.GTP.lys1-tRNA + 16 EF-Tu.GTP.met1-tRNA + 48 EF-Tu.GTP.phe1-tRNA + 32 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proL-tRNA + 8 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser1-tRNA + 16 EF-Tu.GTP.serT-tRNA + 56 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 40 EF-Tu.GTP.thr3-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 40 EF-Tu.GTP.tyr1-tRNA + 48 EF-Tu.GTP.val1-tRNA + 16 EF-Tu.GTP.val2-tRNA + 24 EF-Tu.GTP.val3-tRNA + 5920 mg2 + 1 rib_ini_b2790_8 --> 1 rib_70_elo1_b2790_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789
tl_elo_b2790_8_rib2	Translation elongation 2 b2790 8 ribosome(s)	1176 h2o + 1 rib_70_elo1_b2790_8_cplx --> 1176 EF-G.GDP + 1176 EF-Tu.GDP + 56 ala1_tRNA + 24 ala2_tRNA + 8 arg1_tRNA + 8 argX_tRNA + 48 asn1_tRNA + 72 asp1_tRNA + 8 cysT_tRNA + 8 fmet_tRNA + 80 gln1_tRNA + 104 glu1_tRNA + 88 gly1_tRNA + 8 glyT_tRNA + 16 glyU_tRNA + 2352 h + 8 hisR_tRNA + 56 ile1_tRNA + 64 leu1_tRNA + 32 leu2_tRNA + 24 leuU_tRNA + 16 leuZ_tRNA + 32 lys1_tRNA + 16 met1_tRNA + 5920 mg2 + 48 phe1_tRNA + 2352 pi + 32 pro1_tRNA + 16 pro2_tRNA + 8 proL_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b2790_8_cplx + 8 ser1_tRNA + 16 serT_tRNA + 56 serV_tRNA + 24 thr1_tRNA + 40 thr3_tRNA + 24 trpT_tRNA + 40 tyr1_tRNA + 48 val1_tRNA + 16 val2_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789

tl_elo_b2791_15_rib1	Translation elongation 1 b2791 15 ribosome(s)	3885 EF-G.GTP + 195 EF-Tu.GTP.ala1-tRNA + 60 EF-Tu.GTP.ala2-tRNA + 270 EF-Tu.GTP.arg1-tRNA + 15 EF-Tu.GTP.argW-tRNA + 30 EF-Tu.GTP.argX-tRNA + 45 EF-Tu.GTP.asn1-tRNA + 210 EF-Tu.GTP.asp1-tRNA + 195 EF-Tu.GTP.gln1-tRNA + 60 EF-Tu.GTP.gln2-tRNA + 285 EF-Tu.GTP.glu1-tRNA + 240 EF-Tu.GTP.gly1-tRNA + 75 EF-Tu.GTP.glyT-tRNA + 225 EF-Tu.GTP.hisR-tRNA + 90 EF-Tu.GTP.ile1-tRNA + 45 EF-Tu.GTP.ile2-tRNA + 240 EF-Tu.GTP.leu1-tRNA + 90 EF-Tu.GTP.leu2-tRNA + 75 EF-Tu.GTP.leuU-tRNA + 15 EF-Tu.GTP.leuW-tRNA + 60 EF-Tu.GTP.leuZ-tRNA + 135 EF-Tu.GTP.lys1-tRNA + 90 EF-Tu.GTP.met1-tRNA + 105 EF-Tu.GTP.phe1-tRNA + 90 EF-Tu.GTP.pro1-tRNA + 30 EF-Tu.GTP.pro2-tRNA + 30 EF-Tu.GTP.proL-tRNA + 45 EF-Tu.GTP.proM-tRNA + 45 EF-Tu.GTP.ser1-tRNA + 15 EF-Tu.GTP.ser2-tRNA + 15 EF-Tu.GTP.ser3-tRNA + 30 EF-Tu.GTP.serT-tRNA + 105 EF-Tu.GTP.serV-tRNA + 90 EF-Tu.GTP.thr1-tRNA + 60 EF-Tu.GTP.thr2-tRNA + 45 EF-Tu.GTP.thr3-tRNA + 90 EF-Tu.GTP.trpT-tRNA + 90 EF-Tu.GTP.tyr1-tRNA + 180 EF-Tu.GTP.val1-tRNA + 15 EF-Tu.GTP.val2-tRNA + 60 EF-Tu.GTP.val3-tRNA + 19425 mg2 + 1 rib_ini_b2791_15 --> 1 rib_70_elo1_b2791_15_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_elo_b2791_15_rib2	Translation elongation 2 b2791 15 ribosome(s)	3870 h2o + 1 rib_70_elo1_b2791_15_cplx --> 3870 EF-G.GDP + 3870 EF-Tu.GDP + 195 ala1_tRNA + 60 ala2_tRNA + 270 arg1_tRNA + 15 argW_tRNA + 30 argX_tRNA + 45 asn1_tRNA + 210 asp1_tRNA + 15 fmet_tRNA + 195 gln1_tRNA + 60 gln2_tRNA + 285 glu1_tRNA + 240 gly1_tRNA + 75 glyT_tRNA + 7740 h + 225 hisR_tRNA + 90 ile1_tRNA + 45 ile2_tRNA + 240 leu1_tRNA + 90 leu2_tRNA + 75 leuU_tRNA + 15 leuW_tRNA + 60 leuZ_tRNA + 135 lys1_tRNA + 90 met1_tRNA + 19425 mg2 + 105 phe1_tRNA + 7740 pi + 90 pro1_tRNA + 30 pro2_tRNA + 30 proL_tRNA + 45 proM_tRNA + 1 rib_70_elo2_b2791_15_cplx + 30 ser1_tRNA + 15 ser2_tRNA + 15 ser3_tRNA + 30 serT_tRNA + 105 serV_tRNA + 90 thr1_tRNA + 60 thr2_tRNA + 45 thr3_tRNA + 90 trpT_tRNA + 90 tyr1_tRNA + 180 val1_tRNA + 15 val2_tRNA + 60 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_elo_b2791_1_rib1	Translation elongation 1 b2791 1 ribosome(s)	259 EF-G.GTP + 13 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 2 EF-Tu.GTP.argX-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 13 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 19 EF-Tu.GTP.glu1-tRNA + 16 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1295 mg2 + 1 rib_ini_b2791_1 --> 1 rib_70_elo1_b2791_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_elo_b2791_1_rib2	Translation elongation 2 b2791 1 ribosome(s)	258 h2o + 1 rib_70_elo1_b2791_1_cplx --> 258 EF-G.GDP + 258 EF-Tu.GDP + 13 ala1_tRNA + 4 ala2_tRNA + 18 arg1_tRNA + 1 argW_tRNA + 2 argX_tRNA + 3 asn1_tRNA + 14 asp1_tRNA + 1 fmet_tRNA + 13 gln1_tRNA + 4 gln2_tRNA + 19 glu1_tRNA + 16 gly1_tRNA + 5 glyT_tRNA + 516 h + 15 hisR_tRNA + 6 ile1_tRNA + 3 ile2_tRNA + 16 leu1_tRNA + 6 leu2_tRNA + 5 leuU_tRNA + 1 leuW_tRNA + 4 leuZ_tRNA + 9 lys1_tRNA + 6 met1_tRNA + 1295 mg2 + 7 phe1_tRNA + 516 pi + 6 pro1_tRNA + 2 pro2_tRNA + 2 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b2791_1_cplx + 2 ser1_tRNA + 1 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 7 serV_tRNA + 6 thr1_tRNA + 4 thr2_tRNA + 3 thr3_tRNA + 6 trpT_tRNA + 6 tyr1_tRNA + 12 val1_tRNA + 1 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_elo_b2791_7_rib1	Translation elongation 1 b2791 7 ribosome(s)	1813 EF-G.GTP + 91 EF-Tu.GTP.ala1-tRNA + 28 EF-Tu.GTP.ala2-tRNA + 126 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argW-tRNA + 14 EF-Tu.GTP.argX-tRNA + 21 EF-Tu.GTP.asn1-tRNA + 98 EF-Tu.GTP.asp1-tRNA + 91 EF-Tu.GTP.gln1-tRNA + 28 EF-Tu.GTP.gln2-tRNA + 133 EF-Tu.GTP.glu1-tRNA + 112 EF-Tu.GTP.gly1-tRNA + 35 EF-Tu.GTP.glyT-tRNA + 105 EF-Tu.GTP.hisR-tRNA + 42 EF-Tu.GTP.ile1-tRNA + 21 EF-Tu.GTP.ile2-tRNA + 112 EF-Tu.GTP.leu1-tRNA + 42 EF-Tu.GTP.leu2-tRNA + 35 EF-Tu.GTP.leuU-tRNA + 7 EF-Tu.GTP.leuW-tRNA + 28 EF-Tu.GTP.leuZ-tRNA + 63 EF-Tu.GTP.lys1-tRNA + 42 EF-Tu.GTP.met1-tRNA + 49 EF-Tu.GTP.phe1-tRNA + 42 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proL-tRNA + 21 EF-Tu.GTP.proM-tRNA + 21 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.ser3-tRNA + 14 EF-Tu.GTP.serT-tRNA + 49 EF-Tu.GTP.serV-tRNA + 42 EF-Tu.GTP.thr1-tRNA + 28 EF-Tu.GTP.thr2-tRNA + 21 EF-Tu.GTP.thr3-tRNA + 42 EF-Tu.GTP.trpT-tRNA + 42 EF-Tu.GTP.tyr1-tRNA + 84 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 28 EF-Tu.GTP.val3-tRNA + 9065 mg2 + 1 rib_ini_b2791_7 --> 1 rib_70_elo1_b2791_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_elo_b2791_7_rib2	Translation elongation 2 b2791 7 ribosome(s)	1806 h2o + 1 rib_70_elo1_b2791_7_cplx --> 1806 EF-G.GDP + 1806 EF-Tu.GDP + 91 ala1_tRNA + 28 ala2_tRNA + 126 arg1_tRNA + 7 argW_tRNA + 14 argX_tRNA + 21 asn1_tRNA + 98 asp1_tRNA + 7 fmet_tRNA + 91 gln1_tRNA + 28 gln2_tRNA + 133 glu1_tRNA + 112 gly1_tRNA + 35 glyT_tRNA + 3612 h + 105 hisR_tRNA + 42 ile1_tRNA + 21 ile2_tRNA + 112 leu1_tRNA + 42 leu2_tRNA + 35 leuU_tRNA + 7 leuW_tRNA + 28 leuZ_tRNA + 63 lys1_tRNA + 42 met1_tRNA + 9065 mg2 + 49 phe1_tRNA + 3612 pi + 42 pro1_tRNA + 14 pro2_tRNA + 14 proL_tRNA + 21 proM_tRNA + 1 rib_70_elo2_b2791_7_cplx + 14 ser1_tRNA + 7 ser2_tRNA + 7 ser3_tRNA + 14 serT_tRNA + 49 serV_tRNA + 42 thr1_tRNA + 28 thr2_tRNA + 21 thr3_tRNA + 42 trpT_tRNA + 42 tyr1_tRNA + 84 val1_tRNA + 7 val2_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289

tl_elo_b2792_1_rib1	Translation elongation 1 b2792 1 ribosome(s)	108 EF-G.GTP + 11 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 1 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 2 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 2 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 1 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val3-tRNA + 540 mg2 + 1 rib_ini_b2792_1 --> 1 rib_70_elo1_b2792_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_elo_b2792_1_rib2	Translation elongation 2 b2792 1 ribosome(s)	107 h2o + 1 rib_70_elo1_b2792_1_cplx --> 107 EF-G.GDP + 107 EF-Tu.GDP + 11 ala1_tRNA + 1 ala2_tRNA + 6 arg1_tRNA + 3 asn1_tRNA + 9 asp1_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 3 gln2_tRNA + 8 glu1_tRNA + 1 gly1_tRNA + 214 h + 6 hisR_tRNA + 2 ile1_tRNA + 7 leu1_tRNA + 3 leu2_tRNA + 4 leuU_tRNA + 3 leuZ_tRNA + 2 lys1_tRNA + 4 met1_tRNA + 540 mg2 + 5 phe1_tRNA + 214 pi + 6 pro1_tRNA + 2 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b2792_1_cplx + 1 serV_tRNA + 3 thr1_tRNA + 1 thr2_tRNA + 1 thr3_tRNA + 3 trpT_tRNA + 2 tyr1_tRNA + 1 val1_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_elo_b2792_3_rib1	Translation elongation 1 b2792 3 ribosome(s)	324 EF-G.GTP + 33 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 27 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.gln1-tRNA + 9 EF-Tu.GTP.gln2-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 3 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 21 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuZ-tRNA + 6 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1620 mg2 + 1 rib_ini_b2792_3 --> 1 rib_70_elo1_b2792_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_elo_b2792_3_rib2	Translation elongation 2 b2792 3 ribosome(s)	321 h2o + 1 rib_70_elo1_b2792_3_cplx --> 321 EF-G.GDP + 321 EF-Tu.GDP + 33 ala1_tRNA + 3 ala2_tRNA + 18 arg1_tRNA + 9 asn1_tRNA + 27 asp1_tRNA + 3 fmet_tRNA + 18 gln1_tRNA + 9 gln2_tRNA + 24 glu1_tRNA + 3 gly1_tRNA + 642 h + 18 hisR_tRNA + 6 ile1_tRNA + 21 leu1_tRNA + 9 leu2_tRNA + 12 leuU_tRNA + 9 leuZ_tRNA + 6 lys1_tRNA + 12 met1_tRNA + 1620 mg2 + 15 phe1_tRNA + 642 pi + 18 pro1_tRNA + 6 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b2792_3_cplx + 3 serV_tRNA + 9 thr1_tRNA + 3 thr2_tRNA + 3 thr3_tRNA + 9 trpT_tRNA + 6 tyr1_tRNA + 3 val1_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_elo_b2792_6_rib1	Translation elongation 1 b2792 6 ribosome(s)	648 EF-G.GTP + 66 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 36 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 54 EF-Tu.GTP.asp1-tRNA + 36 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 48 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 42 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.leu2-tRNA + 24 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 30 EF-Tu.GTP.phe1-tRNA + 36 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.serV-tRNA + 18 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val3-tRNA + 3240 mg2 + 1 rib_ini_b2792_6 --> 1 rib_70_elo1_b2792_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_elo_b2792_6_rib2	Translation elongation 2 b2792 6 ribosome(s)	642 h2o + 1 rib_70_elo1_b2792_6_cplx --> 642 EF-G.GDP + 642 EF-Tu.GDP + 66 ala1_tRNA + 6 ala2_tRNA + 36 arg1_tRNA + 18 asn1_tRNA + 54 asp1_tRNA + 6 fmet_tRNA + 36 gln1_tRNA + 18 gln2_tRNA + 48 glu1_tRNA + 6 gly1_tRNA + 1284 h + 36 hisR_tRNA + 12 ile1_tRNA + 42 leu1_tRNA + 18 leu2_tRNA + 24 leuU_tRNA + 18 leuZ_tRNA + 12 lys1_tRNA + 24 met1_tRNA + 3240 mg2 + 30 phe1_tRNA + 1284 pi + 36 pro1_tRNA + 12 proL_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b2792_6_cplx + 6 serV_tRNA + 18 thr1_tRNA + 6 thr2_tRNA + 6 thr3_tRNA + 18 trpT_tRNA + 12 tyr1_tRNA + 6 val1_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_elo_b2794_16_rib1	Translation elongation 1 b2794 16 ribosome(s)	4496 EF-G.GTP + 144 EF-Tu.GTP.ala1-tRNA + 32 EF-Tu.GTP.ala2-tRNA + 256 EF-Tu.GTP.arg1-tRNA + 32 EF-Tu.GTP.argU-tRNA + 32 EF-Tu.GTP.argX-tRNA + 272 EF-Tu.GTP.asn1-tRNA + 320 EF-Tu.GTP.asp1-tRNA + 96 EF-Tu.GTP.cysT-tRNA + 160 EF-Tu.GTP.gln1-tRNA + 80 EF-Tu.GTP.gln2-tRNA + 272 EF-Tu.GTP.glu1-tRNA + 224 EF-Tu.GTP.gly1-tRNA + 32 EF-Tu.GTP.glyT-tRNA + 144 EF-Tu.GTP.hisR-tRNA + 176 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.ile2-tRNA + 336 EF-Tu.GTP.leu1-tRNA + 32 EF-Tu.GTP.leu2-tRNA + 144 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuW-tRNA + 48 EF-Tu.GTP.leuZ-tRNA + 160 EF-Tu.GTP.lys1-tRNA + 176 EF-Tu.GTP.phe1-tRNA + 64 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.pro2-tRNA + 64 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser1-tRNA + 32 EF-Tu.GTP.ser2-tRNA + 48 EF-Tu.GTP.ser3-tRNA + 48 EF-Tu.GTP.serT-tRNA + 176 EF-Tu.GTP.serV-tRNA + 112 EF-Tu.GTP.thr1-tRNA + 96 EF-Tu.GTP.thr2-tRNA + 80 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 80 EF-Tu.GTP.trpT-tRNA + 208 EF-Tu.GTP.tyr1-tRNA + 96 EF-Tu.GTP.val1-tRNA + 80 EF-Tu.GTP.val2-tRNA + 64 EF-Tu.GTP.val3-tRNA + 22480 mg2 + 1 rib_ini_b2794_16 --> 1 rib_70_elo1_b2794_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074

tl_elo_b2794_16_rib2	Translation elongation 2 b2794 16 ribosome(s)	4480 h2o + 1 rib_70_elo1_b2794_16_cplx --> 4480 EF-G.GDP + 4480 EF-Tu.GDP + 144 ala1_tRNA + 32 ala2_tRNA + 256 arg1_tRNA + 32 argU_tRNA + 32 argX_tRNA + 272 asn1_tRNA + 320 asp1_tRNA + 96 cysT_tRNA + 16 fmet_tRNA + 160 gln1_tRNA + 64 gln2_tRNA + 272 glu1_tRNA + 224 gly1_tRNA + 32 glyT_tRNA + 8960 h + 144 hisR_tRNA + 176 ile1_tRNA + 16 ile2_tRNA + 336 leu1_tRNA + 32 leu2_tRNA + 144 leuU_tRNA + 16 leuW_tRNA + 48 leuZ_tRNA + 160 lys1_tRNA + 22480 mg2 + 176 phe1_tRNA + 8960 pi + 64 pro1_tRNA + 16 pro2_tRNA + 64 proM_tRNA + 1 rib_70_elo2_b2794_16_cplx + 16 ser1_tRNA + 32 ser2_tRNA + 48 ser3_tRNA + 48 serT_tRNA + 176 serV_tRNA + 112 thr1_tRNA + 96 thr2_tRNA + 80 thr3_tRNA + 16 thrU_tRNA + 80 trpT_tRNA + 208 tyr1_tRNA + 96 val1_tRNA + 80 val2_tRNA + 64 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_elo_b2794_1_rib1	Translation elongation 1 b2794 1 ribosome(s)	281 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 16 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argU-tRNA + 2 EF-Tu.GTP.argX-tRNA + 17 EF-Tu.GTP.asn1-tRNA + 20 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 17 EF-Tu.GTP.glu1-tRNA + 14 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 21 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 11 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 11 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 13 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1405 mg2 + 1 rib_ini_b2794_1 --> 1 rib_70_elo1_b2794_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_elo_b2794_1_rib2	Translation elongation 2 b2794 1 ribosome(s)	280 h2o + 1 rib_70_elo1_b2794_1_cplx --> 280 EF-G.GDP + 280 EF-Tu.GDP + 9 ala1_tRNA + 2 ala2_tRNA + 16 arg1_tRNA + 2 argU_tRNA + 2 argX_tRNA + 17 asn1_tRNA + 20 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 10 gln1_tRNA + 4 gln2_tRNA + 17 glu1_tRNA + 14 gly1_tRNA + 2 glyT_tRNA + 560 h + 9 hisR_tRNA + 11 ile1_tRNA + 1 ile2_tRNA + 21 leu1_tRNA + 2 leu2_tRNA + 9 leuU_tRNA + 1 leuW_tRNA + 3 leuZ_tRNA + 10 lys1_tRNA + 1405 mg2 + 11 phe1_tRNA + 560 pi + 4 pro1_tRNA + 1 pro2_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b2794_1_cplx + 1 ser1_tRNA + 2 ser2_tRNA + 3 ser3_tRNA + 3 serT_tRNA + 11 serV_tRNA + 7 thr1_tRNA + 6 thr2_tRNA + 5 thr3_tRNA + 1 thrU_tRNA + 5 trpT_tRNA + 13 tyr1_tRNA + 6 val1_tRNA + 5 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_elo_b2794_8_rib1	Translation elongation 1 b2794 8 ribosome(s)	2248 EF-G.GTP + 72 EF-Tu.GTP.ala1-tRNA + 16 EF-Tu.GTP.ala2-tRNA + 128 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.argU-tRNA + 16 EF-Tu.GTP.argX-tRNA + 136 EF-Tu.GTP.asn1-tRNA + 160 EF-Tu.GTP.asp1-tRNA + 48 EF-Tu.GTP.cysT-tRNA + 80 EF-Tu.GTP.gln1-tRNA + 40 EF-Tu.GTP.gln2-tRNA + 136 EF-Tu.GTP.glu1-tRNA + 112 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 72 EF-Tu.GTP.hisR-tRNA + 88 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.ile2-tRNA + 168 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 72 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuW-tRNA + 24 EF-Tu.GTP.leuZ-tRNA + 80 EF-Tu.GTP.lys1-tRNA + 88 EF-Tu.GTP.phe1-tRNA + 32 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 32 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 16 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serT-tRNA + 88 EF-Tu.GTP.serV-tRNA + 56 EF-Tu.GTP.thr1-tRNA + 48 EF-Tu.GTP.thr2-tRNA + 40 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 40 EF-Tu.GTP.trpT-tRNA + 104 EF-Tu.GTP.tyr1-tRNA + 48 EF-Tu.GTP.val1-tRNA + 40 EF-Tu.GTP.val2-tRNA + 32 EF-Tu.GTP.val3-tRNA + 11240 mg2 + 1 rib_ini_b2794_8 --> 1 rib_70_elo1_b2794_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_elo_b2794_8_rib2	Translation elongation 2 b2794 8 ribosome(s)	2240 h2o + 1 rib_70_elo1_b2794_8_cplx --> 2240 EF-G.GDP + 2240 EF-Tu.GDP + 72 ala1_tRNA + 16 ala2_tRNA + 128 arg1_tRNA + 16 argU_tRNA + 16 argX_tRNA + 136 asn1_tRNA + 160 asp1_tRNA + 48 cysT_tRNA + 8 fmet_tRNA + 80 gln1_tRNA + 32 gln2_tRNA + 136 glu1_tRNA + 112 gly1_tRNA + 16 glyT_tRNA + 4480 h + 72 hisR_tRNA + 88 ile1_tRNA + 8 ile2_tRNA + 168 leu1_tRNA + 16 leu2_tRNA + 72 leuU_tRNA + 8 leuW_tRNA + 24 leuZ_tRNA + 80 lys1_tRNA + 11240 mg2 + 88 phe1_tRNA + 4480 pi + 32 pro1_tRNA + 8 pro2_tRNA + 32 proM_tRNA + 1 rib_70_elo2_b2794_8_cplx + 8 ser1_tRNA + 16 ser2_tRNA + 24 ser3_tRNA + 24 serT_tRNA + 88 serV_tRNA + 56 thr1_tRNA + 48 thr2_tRNA + 40 thr3_tRNA + 8 thrU_tRNA + 40 trpT_tRNA + 104 tyr1_tRNA + 48 val1_tRNA + 40 val2_tRNA + 32 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_elo_b2890_14_rib1	Translation elongation 1 b2890 14 ribosome(s)	7056 EF-G.GTP + 490 EF-Tu.GTP.ala1-tRNA + 70 EF-Tu.GTP.ala2-tRNA + 532 EF-Tu.GTP.arg1-tRNA + 294 EF-Tu.GTP.asn1-tRNA + 532 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.cysT-tRNA + 210 EF-Tu.GTP.gln1-tRNA + 42 EF-Tu.GTP.gln2-tRNA + 644 EF-Tu.GTP.glu1-tRNA + 462 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyT-tRNA + 14 EF-Tu.GTP.glyU-tRNA + 168 EF-Tu.GTP.hisR-tRNA + 434 EF-Tu.GTP.ile1-tRNA + 462 EF-Tu.GTP.leu1-tRNA + 42 EF-Tu.GTP.leu2-tRNA + 154 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.leuZ-tRNA + 336 EF-Tu.GTP.lys1-tRNA + 238 EF-Tu.GTP.met1-tRNA + 406 EF-Tu.GTP.phe1-tRNA + 238 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proM-tRNA + 42 EF-Tu.GTP.ser1-tRNA + 112 EF-Tu.GTP.ser2-tRNA + 28 EF-Tu.GTP.ser3-tRNA + 42 EF-Tu.GTP.serV-tRNA + 266 EF-Tu.GTP.thr1-tRNA + 28 EF-Tu.GTP.thr2-tRNA + 56 EF-Tu.GTP.thr3-tRNA + 28 EF-Tu.GTP.thrU-tRNA + 28 EF-Tu.GTP.trpT-tRNA + 196 EF-Tu.GTP.tyr1-tRNA + 168 EF-Tu.GTP.val1-tRNA + 42 EF-Tu.GTP.val2-tRNA + 182 EF-Tu.GTP.val3-tRNA + 35280 mg2 + 1 rib_ini_b2890_14 --> 1 rib_70_elo1_b2890_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981

tl_elo_b2890_14_rib2	Translation elongation 2 b2890 14 ribosome(s)	7042 h2o + 1 rib_70_elo1_b2890_14_cplx --> 7042 EF-G.GDP + 7042 EF-Tu.GDP + 490 ala1_tRNA + 70 ala2_tRNA + 532 arg1_tRNA + 294 asn1_tRNA + 532 asp1_tRNA + 14 cysT_tRNA + 14 fmet_tRNA + 210 gln1_tRNA + 42 gln2_tRNA + 644 glu1_tRNA + 462 gly1_tRNA + 14 glyT_tRNA + 14 glyU_tRNA + 14084 h + 168 hisR_tRNA + 434 ile1_tRNA + 462 leu1_tRNA + 42 leu2_tRNA + 154 leuU_tRNA + 14 leuZ_tRNA + 322 lys1_tRNA + 238 met1_tRNA + 35280 mg2 + 406 phe1_tRNA + 14084 pi + 238 pro1_tRNA + 14 pro2_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b2890_14_cplx + 42 ser1_tRNA + 112 ser2_tRNA + 28 ser3_tRNA + 42 serV_tRNA + 266 thr1_tRNA + 28 thr2_tRNA + 56 thr3_tRNA + 28 thrU_tRNA + 28 trpT_tRNA + 196 tyr1_tRNA + 168 val1_tRNA + 42 val2_tRNA + 182 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_elo_b2890_1_rib1	Translation elongation 1 b2890 1 ribosome(s)	504 EF-G.GTP + 35 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 38 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.asn1-tRNA + 38 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 15 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 46 EF-Tu.GTP.glu1-tRNA + 33 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 31 EF-Tu.GTP.ile1-tRNA + 33 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 24 EF-Tu.GTP.lys1-tRNA + 17 EF-Tu.GTP.met1-tRNA + 29 EF-Tu.GTP.phe1-tRNA + 17 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serV-tRNA + 19 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 14 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 13 EF-Tu.GTP.val3-tRNA + 2520 mg2 + 1 rib_ini_b2890_1 --> 1 rib_70_elo1_b2890_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_elo_b2890_1_rib2	Translation elongation 2 b2890 1 ribosome(s)	503 h2o + 1 rib_70_elo1_b2890_1_cplx --> 503 EF-G.GDP + 503 EF-Tu.GDP + 35 ala1_tRNA + 5 ala2_tRNA + 38 arg1_tRNA + 21 asn1_tRNA + 38 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 15 gln1_tRNA + 3 gln2_tRNA + 46 glu1_tRNA + 33 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 1006 h + 12 hisR_tRNA + 31 ile1_tRNA + 33 leu1_tRNA + 3 leu2_tRNA + 11 leuU_tRNA + 1 leuZ_tRNA + 23 lys1_tRNA + 17 met1_tRNA + 2520 mg2 + 29 phe1_tRNA + 1006 pi + 17 pro1_tRNA + 1 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b2890_1_cplx + 3 ser1_tRNA + 8 ser2_tRNA + 2 ser3_tRNA + 3 serV_tRNA + 19 thr1_tRNA + 2 thr2_tRNA + 4 thr3_tRNA + 2 thrU_tRNA + 2 trpT_tRNA + 14 tyr1_tRNA + 12 val1_tRNA + 3 val2_tRNA + 13 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_elo_b2890_29_rib1	Translation elongation 1 b2890 29 ribosome(s)	14616 EF-G.GTP + 1015 EF-Tu.GTP.ala1-tRNA + 145 EF-Tu.GTP.ala2-tRNA + 1102 EF-Tu.GTP.arg1-tRNA + 609 EF-Tu.GTP.asn1-tRNA + 1102 EF-Tu.GTP.asp1-tRNA + 29 EF-Tu.GTP.cysT-tRNA + 435 EF-Tu.GTP.gln1-tRNA + 87 EF-Tu.GTP.gln2-tRNA + 1334 EF-Tu.GTP.glu1-tRNA + 957 EF-Tu.GTP.gly1-tRNA + 29 EF-Tu.GTP.glyT-tRNA + 29 EF-Tu.GTP.glyU-tRNA + 348 EF-Tu.GTP.hisR-tRNA + 899 EF-Tu.GTP.ile1-tRNA + 957 EF-Tu.GTP.leu1-tRNA + 87 EF-Tu.GTP.leu2-tRNA + 319 EF-Tu.GTP.leuU-tRNA + 29 EF-Tu.GTP.leuZ-tRNA + 696 EF-Tu.GTP.lys1-tRNA + 493 EF-Tu.GTP.met1-tRNA + 841 EF-Tu.GTP.phe1-tRNA + 493 EF-Tu.GTP.pro1-tRNA + 29 EF-Tu.GTP.pro2-tRNA + 29 EF-Tu.GTP.proM-tRNA + 87 EF-Tu.GTP.ser1-tRNA + 232 EF-Tu.GTP.ser2-tRNA + 58 EF-Tu.GTP.ser3-tRNA + 87 EF-Tu.GTP.serV-tRNA + 551 EF-Tu.GTP.thr1-tRNA + 58 EF-Tu.GTP.thr2-tRNA + 116 EF-Tu.GTP.thr3-tRNA + 58 EF-Tu.GTP.thrU-tRNA + 58 EF-Tu.GTP.trpT-tRNA + 406 EF-Tu.GTP.tyr1-tRNA + 348 EF-Tu.GTP.val1-tRNA + 87 EF-Tu.GTP.val2-tRNA + 377 EF-Tu.GTP.val3-tRNA + 73080 mg2 + 1 rib_ini_b2890_29 --> 1 rib_70_elo1_b2890_29_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_elo_b2890_29_rib2	Translation elongation 2 b2890 29 ribosome(s)	14587 h2o + 1 rib_70_elo1_b2890_29_cplx --> 14587 EF-G.GDP + 14587 EF-Tu.GDP + 1015 ala1_tRNA + 145 ala2_tRNA + 1102 arg1_tRNA + 609 asn1_tRNA + 1102 asp1_tRNA + 29 cysT_tRNA + 29 fmet_tRNA + 435 gln1_tRNA + 87 gln2_tRNA + 1334 glu1_tRNA + 957 gly1_tRNA + 29 glyT_tRNA + 29 glyU_tRNA + 29174 h + 348 hisR_tRNA + 899 ile1_tRNA + 957 leu1_tRNA + 87 leu2_tRNA + 319 leuU_tRNA + 29 leuZ_tRNA + 667 lys1_tRNA + 493 met1_tRNA + 73080 mg2 + 841 phe1_tRNA + 29174 pi + 493 pro1_tRNA + 29 pro2_tRNA + 29 proM_tRNA + 1 rib_70_elo2_b2890_29_cplx + 87 ser1_tRNA + 232 ser2_tRNA + 58 ser3_tRNA + 87 serV_tRNA + 551 thr1_tRNA + 58 thr2_tRNA + 116 thr3_tRNA + 58 thrU_tRNA + 58 trpT_tRNA + 406 tyr1_tRNA + 348 val1_tRNA + 87 val2_tRNA + 377 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_elo_b2891_10_rib1	Translation elongation 1 b2891 10 ribosome(s)	3640 EF-G.GTP + 200 EF-Tu.GTP.ala1-tRNA + 90 EF-Tu.GTP.ala2-tRNA + 240 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argW-tRNA + 130 EF-Tu.GTP.asn1-tRNA + 320 EF-Tu.GTP.asp1-tRNA + 20 EF-Tu.GTP.cysT-tRNA + 170 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 400 EF-Tu.GTP.glu1-tRNA + 190 EF-Tu.GTP.gly1-tRNA + 60 EF-Tu.GTP.glyU-tRNA + 50 EF-Tu.GTP.hisR-tRNA + 190 EF-Tu.GTP.ile1-tRNA + 170 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 110 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 200 EF-Tu.GTP.lys1-tRNA + 80 EF-Tu.GTP.met1-tRNA + 90 EF-Tu.GTP.phe1-tRNA + 60 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.proL-tRNA + 110 EF-Tu.GTP.ser1-tRNA + 50 EF-Tu.GTP.ser2-tRNA + 30 EF-Tu.GTP.ser3-tRNA + 70 EF-Tu.GTP.serV-tRNA + 90 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 60 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.thrU-tRNA + 50 EF-Tu.GTP.trpT-tRNA + 110 EF-Tu.GTP.tyr1-tRNA + 100 EF-Tu.GTP.val1-tRNA + 30 EF-Tu.GTP.val2-tRNA + 90 EF-Tu.GTP.val3-tRNA + 18200 mg2 + 1 rib_ini_b2891_10 --> 1 rib_70_elo1_b2891_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121

tl_elo_b2891_10_rib2	Translation elongation 2 b2891 10 ribosome(s)	3630 h2o + 1 rib_70_elo1_b2891_10_cplx --> 3630 EF-G.GDP + 3630 EF-Tu.GDP + 200 ala1_tRNA + 90 ala2_tRNA + 240 arg1_tRNA + 10 argW_tRNA + 130 asn1_tRNA + 320 asp1_tRNA + 20 cysT_tRNA + 10 fmet_tRNA + 170 gln1_tRNA + 20 gln2_tRNA + 400 glu1_tRNA + 190 gly1_tRNA + 60 glyU_tRNA + 7260 h + 50 hisR_tRNA + 190 ile1_tRNA + 170 leu1_tRNA + 10 leu2_tRNA + 110 leuU_tRNA + 200 lys1_tRNA + 80 met1_tRNA + 18200 mg2 + 90 phe1_tRNA + 7260 pi + 60 pro1_tRNA + 10 proL_tRNA + 1 rib_70_elo2_b2891_10_cplx + 110 ser1_tRNA + 50 ser2_tRNA + 30 ser3_tRNA + 70 serV_tRNA + 90 thr1_tRNA + 10 thr2_tRNA + 60 thr3_tRNA + 10 thrU_tRNA + 50 trpT_tRNA + 110 tyr1_tRNA + 100 val1_tRNA + 30 val2_tRNA + 90 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121
tl_elo_b2891_1_rib1	Translation elongation 1 b2891 1 ribosome(s)	364 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 13 EF-Tu.GTP.asn1-tRNA + 32 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 17 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 40 EF-Tu.GTP.glu1-tRNA + 19 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 19 EF-Tu.GTP.ile1-tRNA + 17 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proL-tRNA + 11 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 7 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 11 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 1820 mg2 + 1 rib_ini_b2891_1 --> 1 rib_70_elo1_b2891_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121
tl_elo_b2891_1_rib2	Translation elongation 2 b2891 1 ribosome(s)	363 h2o + 1 rib_70_elo1_b2891_1_cplx --> 363 EF-G.GDP + 363 EF-Tu.GDP + 20 ala1_tRNA + 9 ala2_tRNA + 24 arg1_tRNA + 1 argW_tRNA + 13 asn1_tRNA + 32 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 17 gln1_tRNA + 2 gln2_tRNA + 40 glu1_tRNA + 19 gly1_tRNA + 6 glyU_tRNA + 726 h + 5 hisR_tRNA + 19 ile1_tRNA + 17 leu1_tRNA + 1 leu2_tRNA + 11 leuU_tRNA + 20 lys1_tRNA + 8 met1_tRNA + 1820 mg2 + 9 phe1_tRNA + 726 pi + 6 pro1_tRNA + 1 proL_tRNA + 1 rib_70_elo2_b2891_1_cplx + 11 ser1_tRNA + 5 ser2_tRNA + 3 ser3_tRNA + 7 serV_tRNA + 9 thr1_tRNA + 1 thr2_tRNA + 6 thr3_tRNA + 1 thrU_tRNA + 5 trpT_tRNA + 11 tyr1_tRNA + 10 val1_tRNA + 3 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121
tl_elo_b2891_21_rib1	Translation elongation 1 b2891 21 ribosome(s)	7644 EF-G.GTP + 420 EF-Tu.GTP.ala1-tRNA + 189 EF-Tu.GTP.ala2-tRNA + 504 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.argW-tRNA + 273 EF-Tu.GTP.asn1-tRNA + 672 EF-Tu.GTP.asp1-tRNA + 42 EF-Tu.GTP.cysT-tRNA + 357 EF-Tu.GTP.gln1-tRNA + 42 EF-Tu.GTP.gln2-tRNA + 840 EF-Tu.GTP.glu1-tRNA + 399 EF-Tu.GTP.gly1-tRNA + 126 EF-Tu.GTP.glyU-tRNA + 105 EF-Tu.GTP.hisR-tRNA + 399 EF-Tu.GTP.ile1-tRNA + 357 EF-Tu.GTP.leu1-tRNA + 21 EF-Tu.GTP.leu2-tRNA + 231 EF-Tu.GTP.leuU-tRNA + 21 EF-Tu.GTP.leuZ-tRNA + 420 EF-Tu.GTP.lys1-tRNA + 168 EF-Tu.GTP.met1-tRNA + 189 EF-Tu.GTP.phe1-tRNA + 126 EF-Tu.GTP.pro1-tRNA + 21 EF-Tu.GTP.proL-tRNA + 231 EF-Tu.GTP.ser1-tRNA + 105 EF-Tu.GTP.ser2-tRNA + 63 EF-Tu.GTP.ser3-tRNA + 147 EF-Tu.GTP.serV-tRNA + 189 EF-Tu.GTP.thr1-tRNA + 21 EF-Tu.GTP.thr2-tRNA + 126 EF-Tu.GTP.thr3-tRNA + 21 EF-Tu.GTP.thrU-tRNA + 105 EF-Tu.GTP.trpT-tRNA + 231 EF-Tu.GTP.tyr1-tRNA + 210 EF-Tu.GTP.val1-tRNA + 63 EF-Tu.GTP.val2-tRNA + 189 EF-Tu.GTP.val3-tRNA + 38220 mg2 + 1 rib_ini_b2891_21 --> 1 rib_70_elo1_b2891_21_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121
tl_elo_b2891_21_rib2	Translation elongation 2 b2891 21 ribosome(s)	7623 h2o + 1 rib_70_elo1_b2891_21_cplx --> 7623 EF-G.GDP + 7623 EF-Tu.GDP + 420 ala1_tRNA + 189 ala2_tRNA + 504 arg1_tRNA + 21 argW_tRNA + 273 asn1_tRNA + 672 asp1_tRNA + 42 cysT_tRNA + 21 fmet_tRNA + 357 gln1_tRNA + 42 gln2_tRNA + 840 glu1_tRNA + 399 gly1_tRNA + 126 glyU_tRNA + 15246 h + 105 hisR_tRNA + 399 ile1_tRNA + 357 leu1_tRNA + 21 leu2_tRNA + 231 leuU_tRNA + 420 lys1_tRNA + 168 met1_tRNA + 38220 mg2 + 189 phe1_tRNA + 15246 pi + 126 pro1_tRNA + 21 proL_tRNA + 1 rib_70_elo2_b2891_21_cplx + 231 ser1_tRNA + 105 ser2_tRNA + 63 ser3_tRNA + 147 serV_tRNA + 189 thr1_tRNA + 21 thr2_tRNA + 126 thr3_tRNA + 21 thrU_tRNA + 105 trpT_tRNA + 231 tyr1_tRNA + 210 val1_tRNA + 63 val2_tRNA + 189 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121
tl_elo_b2892_16_rib1	Translation elongation 1 b2892 16 ribosome(s)	9216 EF-G.GTP + 688 EF-Tu.GTP.ala1-tRNA + 192 EF-Tu.GTP.ala2-tRNA + 624 EF-Tu.GTP.arg1-tRNA + 64 EF-Tu.GTP.argX-tRNA + 336 EF-Tu.GTP.asn1-tRNA + 592 EF-Tu.GTP.asp1-tRNA + 80 EF-Tu.GTP.cysT-tRNA + 192 EF-Tu.GTP.gln1-tRNA + 208 EF-Tu.GTP.gln2-tRNA + 592 EF-Tu.GTP.glu1-tRNA + 640 EF-Tu.GTP.gly1-tRNA + 80 EF-Tu.GTP.glyT-tRNA + 128 EF-Tu.GTP.glyU-tRNA + 192 EF-Tu.GTP.hisR-tRNA + 464 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.ile2-tRNA + 704 EF-Tu.GTP.leu1-tRNA + 192 EF-Tu.GTP.leu2-tRNA + 176 EF-Tu.GTP.leuU-tRNA + 64 EF-Tu.GTP.leuW-tRNA + 112 EF-Tu.GTP.leuZ-tRNA + 256 EF-Tu.GTP.lys1-tRNA + 240 EF-Tu.GTP.met1-tRNA + 304 EF-Tu.GTP.phe1-tRNA + 208 EF-Tu.GTP.pro1-tRNA + 80 EF-Tu.GTP.pro2-tRNA + 96 EF-Tu.GTP.proL-tRNA + 96 EF-Tu.GTP.proM-tRNA + 80 EF-Tu.GTP.ser1-tRNA + 96 EF-Tu.GTP.ser3-tRNA + 32 EF-Tu.GTP.serT-tRNA + 208 EF-Tu.GTP.serV-tRNA + 112 EF-Tu.GTP.thr1-tRNA + 16 EF-Tu.GTP.thr2-tRNA + 112 EF-Tu.GTP.thr3-tRNA + 48 EF-Tu.GTP.thrU-tRNA + 128 EF-Tu.GTP.trpT-tRNA + 128 EF-Tu.GTP.tyr1-tRNA + 320 EF-Tu.GTP.val1-tRNA + 192 EF-Tu.GTP.val2-tRNA + 128 EF-Tu.GTP.val3-tRNA + 46080 mg2 + 1 rib	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922

tl_elo_b2892_16_rib2	Translation elongation 2 b2892 16 ribosome(s)	9200 h2o + 1 rib_70_elo1_b2892_16_cplx --> 9200 EF-G.GDP + 9200 EF-Tu.GDP + 688 ala1_tRNA + 192 ala2_tRNA + 624 arg1_tRNA + 64 argX_tRNA + 336 asn1_tRNA + 592 asp1_tRNA + 80 cysT_tRNA + 16 fmet_tRNA + 192 gln1_tRNA + 208 gln2_tRNA + 592 glu1_tRNA + 640 gly1_tRNA + 80 glyT_tRNA + 128 glyU_tRNA + 18400 h + 192 hisR_tRNA + 448 ile1_tRNA + 16 ile2_tRNA + 704 leu1_tRNA + 192 leu2_tRNA + 176 leuU_tRNA + 64 leuW_tRNA + 112 leuZ_tRNA + 256 lys1_tRNA + 240 met1_tRNA + 46080 mg2 + 304 phe1_tRNA + 18400 pi + 208 pro1_tRNA + 80 pro2_tRNA + 96 proL_tRNA + 96 proM_tRNA + 1 rib_70_elo2_b2892_16_cplx + 80 ser1_tRNA + 96 ser3_tRNA + 32 serT_tRNA + 208 serV_tRNA + 112 thr1_tRNA + 16 thr2_tRNA + 112 thr3_tRNA + 48 thrU_tRNA + 128 trpT_tRNA + 128 tyr1_tRNA + 320 val1_tRNA + 192 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922
tl_elo_b2892_1_rib1	Translation elongation 1 b2892 1 ribosome(s)	576 EF-G.GTP + 43 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 39 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argX-tRNA + 21 EF-Tu.GTP.asn1-tRNA + 37 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 13 EF-Tu.GTP.gln2-tRNA + 37 EF-Tu.GTP.glu1-tRNA + 40 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 29 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 44 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuW-tRNA + 7 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 19 EF-Tu.GTP.phe1-tRNA + 13 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 13 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 2880 mg2 + 1 rib_ini_b2892_1 --> 1 rib_70_elo1_b2892_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922
tl_elo_b2892_1_rib2	Translation elongation 2 b2892 1 ribosome(s)	575 h2o + 1 rib_70_elo1_b2892_1_cplx --> 575 EF-G.GDP + 575 EF-Tu.GDP + 43 ala1_tRNA + 12 ala2_tRNA + 39 arg1_tRNA + 4 argX_tRNA + 21 asn1_tRNA + 37 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 12 gln1_tRNA + 13 gln2_tRNA + 37 glu1_tRNA + 40 gly1_tRNA + 5 glyT_tRNA + 8 glyU_tRNA + 1150 h + 12 hisR_tRNA + 28 ile1_tRNA + 1 ile2_tRNA + 44 leu1_tRNA + 12 leu2_tRNA + 11 leuU_tRNA + 4 leuW_tRNA + 7 leuZ_tRNA + 16 lys1_tRNA + 15 met1_tRNA + 2880 mg2 + 19 phe1_tRNA + 1150 pi + 13 pro1_tRNA + 5 pro2_tRNA + 6 proL_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b2892_1_cplx + 5 ser1_tRNA + 6 ser3_tRNA + 2 serT_tRNA + 13 serV_tRNA + 7 thr1_tRNA + 1 thr2_tRNA + 7 thr3_tRNA + 3 thrU_tRNA + 8 trpT_tRNA + 8 tyr1_tRNA + 20 val1_tRNA + 12 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922
tl_elo_b2892_33_rib1	Translation elongation 1 b2892 33 ribosome(s)	19008 EF-G.GTP + 1419 EF-Tu.GTP.ala1-tRNA + 396 EF-Tu.GTP.ala2-tRNA + 1287 EF-Tu.GTP.arg1-tRNA + 132 EF-Tu.GTP.argX-tRNA + 693 EF-Tu.GTP.asn1-tRNA + 1221 EF-Tu.GTP.asp1-tRNA + 165 EF-Tu.GTP.cysT-tRNA + 396 EF-Tu.GTP.gln1-tRNA + 429 EF-Tu.GTP.gln2-tRNA + 1221 EF-Tu.GTP.glu1-tRNA + 1320 EF-Tu.GTP.gly1-tRNA + 165 EF-Tu.GTP.glyT-tRNA + 264 EF-Tu.GTP.glyU-tRNA + 396 EF-Tu.GTP.hisR-tRNA + 957 EF-Tu.GTP.ile1-tRNA + 33 EF-Tu.GTP.ile2-tRNA + 1452 EF-Tu.GTP.leu1-tRNA + 396 EF-Tu.GTP.leu2-tRNA + 363 EF-Tu.GTP.leuU-tRNA + 132 EF-Tu.GTP.leuW-tRNA + 231 EF-Tu.GTP.leuZ-tRNA + 528 EF-Tu.GTP.lys1-tRNA + 495 EF-Tu.GTP.met1-tRNA + 627 EF-Tu.GTP.phe1-tRNA + 429 EF-Tu.GTP.pro1-tRNA + 165 EF-Tu.GTP.pro2-tRNA + 198 EF-Tu.GTP.proL-tRNA + 198 EF-Tu.GTP.proM-tRNA + 165 EF-Tu.GTP.ser1-tRNA + 198 EF-Tu.GTP.ser3-tRNA + 66 EF-Tu.GTP.serT-tRNA + 429 EF-Tu.GTP.serV-tRNA + 231 EF-Tu.GTP.thr1-tRNA + 33 EF-Tu.GTP.thr2-tRNA + 231 EF-Tu.GTP.thr3-tRNA + 99 EF-Tu.GTP.thrU-tRNA + 264 EF-Tu.GTP.trpT-tRNA + 264 EF-Tu.GTP.tyr1-tRNA + 660 EF-Tu.GTP.val1-tRNA + 396 EF-Tu.GTP.val2-tRNA + 264 EF-Tu.GTP.val3-tRNA + 95040 mg2 + 1 rib	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922
tl_elo_b2892_33_rib2	Translation elongation 2 b2892 33 ribosome(s)	18975 h2o + 1 rib_70_elo1_b2892_33_cplx --> 18975 EF-G.GDP + 18975 EF-Tu.GDP + 1419 ala1_tRNA + 396 ala2_tRNA + 1287 arg1_tRNA + 132 argX_tRNA + 693 asn1_tRNA + 1221 asp1_tRNA + 165 cysT_tRNA + 33 fmet_tRNA + 396 gln1_tRNA + 429 gln2_tRNA + 1221 glu1_tRNA + 1320 gly1_tRNA + 165 glyT_tRNA + 264 glyU_tRNA + 37950 h + 396 hisR_tRNA + 924 ile1_tRNA + 33 ile2_tRNA + 1452 leu1_tRNA + 396 leu2_tRNA + 363 leuU_tRNA + 132 leuW_tRNA + 231 leuZ_tRNA + 528 lys1_tRNA + 495 met1_tRNA + 95040 mg2 + 627 phe1_tRNA + 37950 pi + 429 pro1_tRNA + 165 pro2_tRNA + 198 proL_tRNA + 198 proM_tRNA + rib_70_elo2_b2892_33_cplx + 165 ser1_tRNA + 198 ser3_tRNA + 66 serT_tRNA + 429 serV_tRNA + 231 thr1_tRNA + 33 thr2_tRNA + 231 thr3_tRNA + 99 thrU_tRNA + 264 trpT_tRNA + 264 tyr1_tRNA + 660 val1_tRNA + 396 val2_tRNA + 264 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922
tl_elo_b2893_13_rib1	Translation elongation 1 b2893 13 ribosome(s)	3055 EF-G.GTP + 286 EF-Tu.GTP.ala1-tRNA + 39 EF-Tu.GTP.ala2-tRNA + 26 EF-Tu.GTP.arg1-tRNA + 91 EF-Tu.GTP.asn1-tRNA + 221 EF-Tu.GTP.asp1-tRNA + 52 EF-Tu.GTP.cysT-tRNA + 104 EF-Tu.GTP.gln1-tRNA + 52 EF-Tu.GTP.gln2-tRNA + 117 EF-Tu.GTP.glu1-tRNA + 195 EF-Tu.GTP.gly1-tRNA + 39 EF-Tu.GTP.glyU-tRNA + 78 EF-Tu.GTP.hisR-tRNA + 156 EF-Tu.GTP.ile1-tRNA + 78 EF-Tu.GTP.leu1-tRNA + 52 EF-Tu.GTP.leu2-tRNA + 78 EF-Tu.GTP.leuU-tRNA + 39 EF-Tu.GTP.leuZ-tRNA + 286 EF-Tu.GTP.lys1-tRNA + 143 EF-Tu.GTP.met1-tRNA + 104 EF-Tu.GTP.phe1-tRNA + 91 EF-Tu.GTP.pro1-tRNA + 13 EF-Tu.GTP.pro2-tRNA + 13 EF-Tu.GTP.proL-tRNA + 26 EF-Tu.GTP.proM-tRNA + 13 EF-Tu.GTP.serT-tRNA + 130 EF-Tu.GTP.serV-tRNA + 78 EF-Tu.GTP.thr1-tRNA + 52 EF-Tu.GTP.thr2-tRNA + 26 EF-Tu.GTP.thr3-tRNA + 26 EF-Tu.GTP.thrU-tRNA + 13 EF-Tu.GTP.trpT-tRNA + 104 EF-Tu.GTP.tyr1-tRNA + 91 EF-Tu.GTP.val1-tRNA + 65 EF-Tu.GTP.val2-tRNA + 78 EF-Tu.GTP.val3-tRNA + 15275 mg2 + 1 rib_ini_b2893_13 --> 1 rib_70_elo1_b2893_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862

tl_elo_b2893_13_rib2	Translation elongation 2 b2893 13 ribosome(s)	3042 h2o + 1 rib_70_elo1_b2893_13_cplx --> 3042 EF-G.GDP + 3042 EF-Tu.GDP + 286 ala1_tRNA + 39 ala2_tRNA + 26 arg1_tRNA + 91 asn1_tRNA + 221 asp1_tRNA + 52 cysT_tRNA + 13 fmet_tRNA + 104 gln1_tRNA + 52 gln2_tRNA + 117 glu1_tRNA + 195 gly1_tRNA + 39 glyU_tRNA + 6084 h + 78 hisR_tRNA + 156 ile1_tRNA + 78 leu1_tRNA + 52 leu2_tRNA + 78 leuU_tRNA + 39 leuZ_tRNA + 273 lys1_tRNA + 143 met1_tRNA + 15275 mg2 + 104 phe1_tRNA + 6084 pi + 91 pro1_tRNA + 13 pro2_tRNA + 13 proL_tRNA + 26 proM_tRNA + 1 rib_70_elo2_b2893_13_cplx + 13 serT_tRNA + 130 serV_tRNA + 78 thr1_tRNA + 52 thr2_tRNA + 26 thr3_tRNA + 26 thrU_tRNA + 13 trpT_tRNA + 104 tyr1_tRNA + 91 val1_tRNA + 65 val2_tRNA + 78 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_elo_b2893_1_rib1	Translation elongation 1 b2893 1 ribosome(s)	235 EF-G.GTP + 22 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 2 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 17 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 9 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 22 EF-Tu.GTP.lys1-tRNA + 11 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.serT-tRNA + 10 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1175 mg2 + 1 rib_ini_b2893_1 --> 1 rib_70_elo1_b2893_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_elo_b2893_1_rib2	Translation elongation 2 b2893 1 ribosome(s)	234 h2o + 1 rib_70_elo1_b2893_1_cplx --> 234 EF-G.GDP + 234 EF-Tu.GDP + 22 ala1_tRNA + 3 ala2_tRNA + 2 arg1_tRNA + 7 asn1_tRNA + 17 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 4 gln2_tRNA + 9 glu1_tRNA + 15 gly1_tRNA + 3 glyU_tRNA + 468 h + 6 hisR_tRNA + 12 ile1_tRNA + 6 leu1_tRNA + 4 leu2_tRNA + 6 leuU_tRNA + 3 leuZ_tRNA + 21 lys1_tRNA + 11 met1_tRNA + 1175 mg2 + 8 phe1_tRNA + 468 pi + 7 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b2893_1_cplx + 1 serT_tRNA + 10 serV_tRNA + 6 thr1_tRNA + 4 thr2_tRNA + 2 thr3_tRNA + 2 thrU_tRNA + 1 trpT_tRNA + 8 tyr1_tRNA + 7 val1_tRNA + 5 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_elo_b2893_6_rib1	Translation elongation 1 b2893 6 ribosome(s)	1410 EF-G.GTP + 132 EF-Tu.GTP.ala1-tRNA + 18 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 42 EF-Tu.GTP.asn1-tRNA + 102 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.cysT-tRNA + 48 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 54 EF-Tu.GTP.glu1-tRNA + 90 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyU-tRNA + 36 EF-Tu.GTP.hisR-tRNA + 72 EF-Tu.GTP.ile1-tRNA + 36 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.leu2-tRNA + 36 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 132 EF-Tu.GTP.lys1-tRNA + 66 EF-Tu.GTP.met1-tRNA + 48 EF-Tu.GTP.phe1-tRNA + 42 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 12 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.serT-tRNA + 60 EF-Tu.GTP.serV-tRNA + 36 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 48 EF-Tu.GTP.tyr1-tRNA + 42 EF-Tu.GTP.val1-tRNA + 30 EF-Tu.GTP.val2-tRNA + 36 EF-Tu.GTP.val3-tRNA + 7050 mg2 + 1 rib_ini_b2893_6 --> 1 rib_70_elo1_b2893_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_elo_b2893_6_rib2	Translation elongation 2 b2893 6 ribosome(s)	1404 h2o + 1 rib_70_elo1_b2893_6_cplx --> 1404 EF-G.GDP + 1404 EF-Tu.GDP + 132 ala1_tRNA + 18 ala2_tRNA + 12 arg1_tRNA + 42 asn1_tRNA + 102 asp1_tRNA + 24 cysT_tRNA + 6 fmet_tRNA + 48 gln1_tRNA + 24 gln2_tRNA + 54 glu1_tRNA + 90 gly1_tRNA + 18 glyU_tRNA + 2808 h + 36 hisR_tRNA + 72 ile1_tRNA + 36 leu1_tRNA + 24 leu2_tRNA + 36 leuU_tRNA + 18 leuZ_tRNA + 126 lys1_tRNA + 66 met1_tRNA + 7050 mg2 + 48 phe1_tRNA + 2808 pi + 42 pro1_tRNA + 6 pro2_tRNA + 6 proL_tRNA + 12 proM_tRNA + 1 rib_70_elo2_b2893_6_cplx + 6 serT_tRNA + 60 serV_tRNA + 36 thr1_tRNA + 24 thr2_tRNA + 12 thr3_tRNA + 12 thrU_tRNA + 6 trpT_tRNA + 48 tyr1_tRNA + 42 val1_tRNA + 30 val2_tRNA + 36 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_elo_b2946_14_rib1	Translation elongation 1 b2946 14 ribosome(s)	3388 EF-G.GTP + 126 EF-Tu.GTP.ala1-tRNA + 140 EF-Tu.GTP.ala2-tRNA + 238 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.argX-tRNA + 98 EF-Tu.GTP.asn1-tRNA + 154 EF-Tu.GTP.asp1-tRNA + 70 EF-Tu.GTP.cysT-tRNA + 140 EF-Tu.GTP.gln1-tRNA + 42 EF-Tu.GTP.gln2-tRNA + 280 EF-Tu.GTP.glu1-tRNA + 168 EF-Tu.GTP.gly1-tRNA + 28 EF-Tu.GTP.glyT-tRNA + 42 EF-Tu.GTP.glyU-tRNA + 98 EF-Tu.GTP.hisR-tRNA + 252 EF-Tu.GTP.ile1-tRNA + 168 EF-Tu.GTP.leu1-tRNA + 84 EF-Tu.GTP.leu2-tRNA + 112 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.leuW-tRNA + 28 EF-Tu.GTP.leuZ-tRNA + 140 EF-Tu.GTP.lys1-tRNA + 70 EF-Tu.GTP.met1-tRNA + 84 EF-Tu.GTP.phe1-tRNA + 98 EF-Tu.GTP.pro1-tRNA + 28 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proL-tRNA + 42 EF-Tu.GTP.proM-tRNA + 42 EF-Tu.GTP.ser2-tRNA + 42 EF-Tu.GTP.ser3-tRNA + 126 EF-Tu.GTP.serV-tRNA + 56 EF-Tu.GTP.thr1-tRNA + 56 EF-Tu.GTP.thr2-tRNA + 28 EF-Tu.GTP.thr3-tRNA + 28 EF-Tu.GTP.thrU-tRNA + 28 EF-Tu.GTP.trpT-tRNA + 28 EF-Tu.GTP.tyr1-tRNA + 112 EF-Tu.GTP.val1-tRNA + 28 EF-Tu.GTP.val2-tRNA + 42 EF-Tu.GTP.val3-tRNA + 16940 mg2 + 1 rib_ini_b2946_14 --> 1 rib_70_elo1_b2946_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_elo_b2946_14_rib2	Translation elongation 2 b2946 14 ribosome(s)	3374 h2o + 1 rib_70_elo1_b2946_14_cplx --> 3374 EF-G.GDP + 3374 EF-Tu.GDP + 126 ala1_tRNA + 140 ala2_tRNA + 238 arg1_tRNA + 14 argX_tRNA + 98 asn1_tRNA + 154 asp1_tRNA + 70 cysT_tRNA + 14 fmet_tRNA + 140 gln1_tRNA + 42 gln2_tRNA + 280 glu1_tRNA + 154 gly1_tRNA + 28 glyT_tRNA + 42 glyU_tRNA + 6748 h + 98 hisR_tRNA + 252 ile1_tRNA + 168 leu1_tRNA + 84 leu2_tRNA + 112 leuU_tRNA + 14 leuW_tRNA + 28 leuZ_tRNA + 140 lys1_tRNA + 70 met1_tRNA + 16940 mg2 + 84 phe1_tRNA + 6748 pi + 98 pro1_tRNA + 28 pro2_tRNA + 14 proL_tRNA + 42 proM_tRNA + 1 rib_70_elo2_b2946_14_cplx + 42 ser2_tRNA + 42 ser3_tRNA + 126 serV_tRNA + 56 thr1_tRNA + 56 thr2_tRNA + 28 thr3_tRNA + 28 thrU_tRNA + 28 trpT_tRNA + 28 tyr1_tRNA + 112 val1_tRNA + 28 val2_tRNA + 42 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956

tl_elo_b2946_1_rib1	Translation elongation 1 b2946 1 ribosome(s)	242 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 17 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 11 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 1210 mg2 + 1 rib_ini_b2946_1 --> 1 rib_70_elo1_b2946_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_elo_b2946_1_rib2	Translation elongation 2 b2946 1 ribosome(s)	241 h2o + 1 rib_70_elo1_b2946_1_cplx --> 241 EF-G.GDP + 241 EF-Tu.GDP + 9 ala1_tRNA + 10 ala2_tRNA + 17 arg1_tRNA + 1 argX_tRNA + 7 asn1_tRNA + 11 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 10 gln1_tRNA + 3 gln2_tRNA + 20 glu1_tRNA + 11 gly1_tRNA + 2 glyT_tRNA + 3 glyU_tRNA + 482 h + 7 hisR_tRNA + 18 ile1_tRNA + 12 leu1_tRNA + 6 leu2_tRNA + 8 leuU_tRNA + 1 leuW_tRNA + 2 leuZ_tRNA + 10 lys1_tRNA + 5 met1_tRNA + 1210 mg2 + 6 phe1_tRNA + 482 pi + 7 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b2946_1_cplx + 3 ser2_tRNA + 3 ser3_tRNA + 9 serV_tRNA + 4 thr1_tRNA + 4 thr2_tRNA + 2 thr3_tRNA + 2 thrU_tRNA + 2 trpT_tRNA + 2 tyr1_tRNA + 8 val1_tRNA + 2 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_elo_b2946_7_rib1	Translation elongation 1 b2946 7 ribosome(s)	1694 EF-G.GTP + 63 EF-Tu.GTP.ala1-tRNA + 70 EF-Tu.GTP.ala2-tRNA + 119 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argX-tRNA + 49 EF-Tu.GTP.asn1-tRNA + 77 EF-Tu.GTP.asp1-tRNA + 35 EF-Tu.GTP.cysT-tRNA + 70 EF-Tu.GTP.gln1-tRNA + 21 EF-Tu.GTP.gln2-tRNA + 140 EF-Tu.GTP.glu1-tRNA + 84 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyT-tRNA + 21 EF-Tu.GTP.glyU-tRNA + 49 EF-Tu.GTP.hisR-tRNA + 126 EF-Tu.GTP.ile1-tRNA + 84 EF-Tu.GTP.leu1-tRNA + 42 EF-Tu.GTP.leu2-tRNA + 56 EF-Tu.GTP.leuU-tRNA + 7 EF-Tu.GTP.leuW-tRNA + 14 EF-Tu.GTP.leuZ-tRNA + 70 EF-Tu.GTP.lys1-tRNA + 35 EF-Tu.GTP.met1-tRNA + 42 EF-Tu.GTP.phe1-tRNA + 49 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proL-tRNA + 21 EF-Tu.GTP.proM-tRNA + 21 EF-Tu.GTP.ser2-tRNA + 21 EF-Tu.GTP.ser3-tRNA + 63 EF-Tu.GTP.serV-tRNA + 28 EF-Tu.GTP.thr1-tRNA + 28 EF-Tu.GTP.thr2-tRNA + 14 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.thrU-tRNA + 14 EF-Tu.GTP.trpT-tRNA + 14 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 21 EF-Tu.GTP.val3-tRNA + 8470 mg2 + 1 rib_ini_b2946_7 --> 1 rib_70_elo1_b2946_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_elo_b2946_7_rib2	Translation elongation 2 b2946 7 ribosome(s)	1687 h2o + 1 rib_70_elo1_b2946_7_cplx --> 1687 EF-G.GDP + 1687 EF-Tu.GDP + 63 ala1_tRNA + 70 ala2_tRNA + 119 arg1_tRNA + 7 argX_tRNA + 49 asn1_tRNA + 77 asp1_tRNA + 35 cysT_tRNA + 7 fmet_tRNA + 70 gln1_tRNA + 21 gln2_tRNA + 140 glu1_tRNA + 77 gly1_tRNA + 14 glyT_tRNA + 21 glyU_tRNA + 3374 h + 49 hisR_tRNA + 126 ile1_tRNA + 84 leu1_tRNA + 42 leu2_tRNA + 56 leuU_tRNA + 7 leuW_tRNA + 14 leuZ_tRNA + 70 lys1_tRNA + 35 met1_tRNA + 8470 mg2 + 42 phe1_tRNA + 3374 pi + 49 pro1_tRNA + 14 pro2_tRNA + 7 proL_tRNA + 21 proM_tRNA + 1 rib_70_elo2_b2946_7_cplx + 21 ser2_tRNA + 21 ser3_tRNA + 63 serV_tRNA + 28 thr1_tRNA + 28 thr2_tRNA + 14 thr3_tRNA + 14 thrU_tRNA + 14 trpT_tRNA + 14 tyr1_tRNA + 56 val1_tRNA + 14 val2_tRNA + 21 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_elo_b2947_18_rib1	Translation elongation 1 b2947 18 ribosome(s)	5670 EF-G.GTP + 216 EF-Tu.GTP.ala1-tRNA + 180 EF-Tu.GTP.ala2-tRNA + 342 EF-Tu.GTP.arg1-tRNA + 216 EF-Tu.GTP.asn1-tRNA + 360 EF-Tu.GTP.asp1-tRNA + 72 EF-Tu.GTP.cysT-tRNA + 180 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 486 EF-Tu.GTP.glu1-tRNA + 360 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 72 EF-Tu.GTP.glyU-tRNA + 72 EF-Tu.GTP.hisR-tRNA + 468 EF-Tu.GTP.ile1-tRNA + 414 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.leu2-tRNA + 90 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuW-tRNA + 54 EF-Tu.GTP.leuZ-tRNA + 324 EF-Tu.GTP.lys1-tRNA + 162 EF-Tu.GTP.met1-tRNA + 198 EF-Tu.GTP.phe1-tRNA + 198 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proL-tRNA + 72 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 54 EF-Tu.GTP.ser3-tRNA + 90 EF-Tu.GTP.serV-tRNA + 162 EF-Tu.GTP.thr1-tRNA + 54 EF-Tu.GTP.thr2-tRNA + 126 EF-Tu.GTP.thr3-tRNA + 72 EF-Tu.GTP.trpT-tRNA + 162 EF-Tu.GTP.tyr1-tRNA + 180 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val2-tRNA + 54 EF-Tu.GTP.val3-tRNA + 28350 mg2 + 1 rib_ini_b2947_18 --> 1 rib_70_elo1_b2947_18_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_elo_b2947_18_rib2	Translation elongation 2 b2947 18 ribosome(s)	5652 h2o + 1 rib_70_elo1_b2947_18_cplx --> 5652 EF-G.GDP + 5652 EF-Tu.GDP + 216 ala1_tRNA + 180 ala2_tRNA + 342 arg1_tRNA + 216 asn1_tRNA + 360 asp1_tRNA + 72 cysT_tRNA + 18 fmet_tRNA + 162 gln1_tRNA + 18 gln2_tRNA + 486 glu1_tRNA + 360 gly1_tRNA + 18 glyT_tRNA + 72 glyU_tRNA + 11304 h + 72 hisR_tRNA + 468 ile1_tRNA + 414 leu1_tRNA + 18 leu2_tRNA + 90 leuU_tRNA + 18 leuW_tRNA + 54 leuZ_tRNA + 324 lys1_tRNA + 162 met1_tRNA + 28350 mg2 + 198 phe1_tRNA + 11304 pi + 198 pro1_tRNA + 18 pro2_tRNA + 18 proL_tRNA + 72 proM_tRNA + 1 rib_70_elo2_b2947_18_cplx + 18 ser1_tRNA + 18 ser2_tRNA + 54 ser3_tRNA + 90 serV_tRNA + 162 thr1_tRNA + 54 thr2_tRNA + 126 thr3_tRNA + 72 trpT_tRNA + 162 tyr1_tRNA + 180 val1_tRNA + 36 val2_tRNA + 54 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276

tl_elo_b2947_1_rib1	Translation elongation 1 b2947 1 ribosome(s)	315 EF-G.GTP + 12 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 19 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 20 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 27 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 26 EF-Tu.GTP.ile1-tRNA + 23 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 18 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 11 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 1575 mg2 + 1 rib_ini_b2947_1 --> 1 rib_70_elo1_b2947_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_elo_b2947_1_rib2	Translation elongation 2 b2947 1 ribosome(s)	314 h2o + 1 rib_70_elo1_b2947_1_cplx --> 314 EF-G.GDP + 314 EF-Tu.GDP + 12 ala1_tRNA + 10 ala2_tRNA + 19 arg1_tRNA + 12 asn1_tRNA + 20 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 9 gln1_tRNA + 1 gln2_tRNA + 27 glu1_tRNA + 20 gly1_tRNA + 1 glyT_tRNA + 4 glyU_tRNA + 628 h + 4 hisR_tRNA + 26 ile1_tRNA + 23 leu1_tRNA + 1 leu2_tRNA + 5 leuU_tRNA + 1 leuW_tRNA + 3 leuZ_tRNA + 18 lys1_tRNA + 9 met1_tRNA + 1575 mg2 + 11 phe1_tRNA + 628 pi + 11 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b2947_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 3 ser3_tRNA + 5 serV_tRNA + 9 thr1_tRNA + 3 thr2_tRNA + 7 thr3_tRNA + 4 trpT_tRNA + 9 tyr1_tRNA + 10 val1_tRNA + 2 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_elo_b2947_9_rib1	Translation elongation 1 b2947 9 ribosome(s)	2835 EF-G.GTP + 108 EF-Tu.GTP.ala1-tRNA + 90 EF-Tu.GTP.ala2-tRNA + 171 EF-Tu.GTP.arg1-tRNA + 108 EF-Tu.GTP.asn1-tRNA + 180 EF-Tu.GTP.asp1-tRNA + 36 EF-Tu.GTP.cysT-tRNA + 90 EF-Tu.GTP.gln1-tRNA + 9 EF-Tu.GTP.gln2-tRNA + 243 EF-Tu.GTP.glu1-tRNA + 180 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 36 EF-Tu.GTP.glyU-tRNA + 36 EF-Tu.GTP.hisR-tRNA + 234 EF-Tu.GTP.ile1-tRNA + 207 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 45 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuW-tRNA + 27 EF-Tu.GTP.leuZ-tRNA + 162 EF-Tu.GTP.lys1-tRNA + 81 EF-Tu.GTP.met1-tRNA + 99 EF-Tu.GTP.phe1-tRNA + 99 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.proL-tRNA + 36 EF-Tu.GTP.proM-tRNA + 9 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 27 EF-Tu.GTP.ser3-tRNA + 45 EF-Tu.GTP.serV-tRNA + 81 EF-Tu.GTP.thr1-tRNA + 27 EF-Tu.GTP.thr2-tRNA + 63 EF-Tu.GTP.thr3-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 81 EF-Tu.GTP.tyr1-tRNA + 90 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 27 EF-Tu.GTP.val3-tRNA + 14175 mg2 + 1 rib_ini_b2947_9 --> 1 rib_70_elo1_b2947_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_elo_b2947_9_rib2	Translation elongation 2 b2947 9 ribosome(s)	2826 h2o + 1 rib_70_elo1_b2947_9_cplx --> 2826 EF-G.GDP + 2826 EF-Tu.GDP + 108 ala1_tRNA + 90 ala2_tRNA + 171 arg1_tRNA + 108 asn1_tRNA + 180 asp1_tRNA + 36 cysT_tRNA + 9 fmet_tRNA + 81 gln1_tRNA + 9 gln2_tRNA + 243 glu1_tRNA + 180 gly1_tRNA + 9 glyT_tRNA + 36 glyU_tRNA + 5652 h + 36 hisR_tRNA + 234 ile1_tRNA + 207 leu1_tRNA + 9 leu2_tRNA + 45 leuU_tRNA + 9 leuW_tRNA + 27 leuZ_tRNA + 162 lys1_tRNA + 81 met1_tRNA + 14175 mg2 + 99 phe1_tRNA + 5652 pi + 99 pro1_tRNA + 9 pro2_tRNA + 9 proL_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b2947_9_cplx + 9 ser1_tRNA + 9 ser2_tRNA + 27 ser3_tRNA + 45 serV_tRNA + 81 thr1_tRNA + 27 thr2_tRNA + 63 thr3_tRNA + 36 trpT_tRNA + 81 tyr1_tRNA + 90 val1_tRNA + 18 val2_tRNA + 27 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_elo_b2959_1_rib1	Translation elongation 1 b2959 1 ribosome(s)	107 EF-G.GTP + 3 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 15 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val3-tRNA + 535 mg2 + 1 rib_ini_b2959_1 --> 1 rib_70_elo1_b2959_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_elo_b2959_1_rib2	Translation elongation 2 b2959 1 ribosome(s)	106 h2o + 1 rib_70_elo1_b2959_1_cplx --> 106 EF-G.GDP + 106 EF-Tu.GDP + 3 ala1_tRNA + 2 ala2_tRNA + 8 arg1_tRNA + 3 asn1_tRNA + 7 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 15 glu1_tRNA + 5 gly1_tRNA + 1 glyT_tRNA + 212 h + 2 hisR_tRNA + 7 ile1_tRNA + 6 leu1_tRNA + 1 leuU_tRNA + 1 leuZ_tRNA + 8 lys1_tRNA + 2 met1_tRNA + 535 mg2 + 6 phe1_tRNA + 212 pi + 2 pro1_tRNA + 1 rib_70_elo2_b2959_1_cplx + 2 ser3_tRNA + 3 serV_tRNA + 3 thr1_tRNA + 1 thrU_tRNA + 5 trpT_tRNA + 1 tyr1_tRNA + 3 val1_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_elo_b2959_3_rib1	Translation elongation 1 b2959 3 ribosome(s)	321 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 24 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 45 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 24 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 18 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 15 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val3-tRNA + 1605 mg2 + 1 rib_ini_b2959_3 --> 1 rib_70_elo1_b2959_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852

tl_elo_b2959_3_rib2	Translation elongation 2 b2959 3 ribosome(s)	318 h2o + 1 rib_70_elo1_b2959_3_cplx --> 318 EF-G.GDP + 318 EF-Tu.GDP + 9 ala1_tRNA + 6 ala2_tRNA + 24 arg1_tRNA + 9 asn1_tRNA + 21 asp1_tRNA + 6 cysT_tRNA + 3 fmet_tRNA + 12 gln1_tRNA + 45 glu1_tRNA + 15 gly1_tRNA + 3 glyT_tRNA + 636 h + 6 hisR_tRNA + 21 ile1_tRNA + 18 leu1_tRNA + 3 leuU_tRNA + 3 leuZ_tRNA + 24 lys1_tRNA + 6 met1_tRNA + 1605 mg2 + 18 phe1_tRNA + 636 pi + 6 pro1_tRNA + 1 rib_70_elo2_b2959_3_cplx + 6 ser3_tRNA + 9 serV_tRNA + 9 thr1_tRNA + 3 thrU_tRNA + 15 trpT_tRNA + 3 tyr1_tRNA + 9 val1_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_elo_b2959_6_rib1	Translation elongation 1 b2959 6 ribosome(s)	642 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 48 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 48 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 90 EF-Tu.GTP.glu1-tRNA + 30 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 42 EF-Tu.GTP.ile1-tRNA + 36 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 48 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 36 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serV-tRNA + 18 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 30 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 18 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val3-tRNA + 3210 mg2 + 1 rib_ini_b2959_6 --> 1 rib_70_elo1_b2959_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_elo_b2959_6_rib2	Translation elongation 2 b2959 6 ribosome(s)	636 h2o + 1 rib_70_elo1_b2959_6_cplx --> 636 EF-G.GDP + 636 EF-Tu.GDP + 18 ala1_tRNA + 12 ala2_tRNA + 48 arg1_tRNA + 18 asn1_tRNA + 42 asp1_tRNA + 12 cysT_tRNA + 6 fmet_tRNA + 24 gln1_tRNA + 90 glu1_tRNA + 30 gly1_tRNA + 6 glyT_tRNA + 1272 h + 12 hisR_tRNA + 42 ile1_tRNA + 36 leu1_tRNA + 6 leuU_tRNA + 6 leuZ_tRNA + 48 lys1_tRNA + 12 met1_tRNA + 3210 mg2 + 36 phe1_tRNA + 1272 pi + 12 pro1_tRNA + 1 rib_70_elo2_b2959_6_cplx + 12 ser3_tRNA + 18 serV_tRNA + 18 thr1_tRNA + 6 thrU_tRNA + 30 trpT_tRNA + 6 tyr1_tRNA + 18 val1_tRNA + 18 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_elo_b2960_14_rib1	Translation elongation 1 b2960 14 ribosome(s)	3332 EF-G.GTP + 196 EF-Tu.GTP.ala1-tRNA + 14 EF-Tu.GTP.ala2-tRNA + 252 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.argW-tRNA + 112 EF-Tu.GTP.asn1-tRNA + 182 EF-Tu.GTP.asp1-tRNA + 28 EF-Tu.GTP.cysT-tRNA + 84 EF-Tu.GTP.gln1-tRNA + 14 EF-Tu.GTP.gln2-tRNA + 280 EF-Tu.GTP.glu1-tRNA + 196 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyT-tRNA + 42 EF-Tu.GTP.glyU-tRNA + 154 EF-Tu.GTP.hisR-tRNA + 98 EF-Tu.GTP.ile1-tRNA + 168 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leu2-tRNA + 84 EF-Tu.GTP.leuU-tRNA + 28 EF-Tu.GTP.leuZ-tRNA + 154 EF-Tu.GTP.lys1-tRNA + 154 EF-Tu.GTP.met1-tRNA + 182 EF-Tu.GTP.phe1-tRNA + 126 EF-Tu.GTP.pro1-tRNA + 56 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proL-tRNA + 14 EF-Tu.GTP.proM-tRNA + 42 EF-Tu.GTP.ser2-tRNA + 14 EF-Tu.GTP.ser3-tRNA + 70 EF-Tu.GTP.serT-tRNA + 70 EF-Tu.GTP.serV-tRNA + 28 EF-Tu.GTP.thr1-tRNA + 28 EF-Tu.GTP.thr3-tRNA + 56 EF-Tu.GTP.trpT-tRNA + 56 EF-Tu.GTP.tyr1-tRNA + 224 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 56 EF-Tu.GTP.val3-tRNA + 16660 mg2 + 1 rib_ini_b2960_14 --> 1 rib_70_elo1_b2960_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_elo_b2960_14_rib2	Translation elongation 2 b2960 14 ribosome(s)	3318 h2o + 1 rib_70_elo1_b2960_14_cplx --> 3318 EF-G.GDP + 3318 EF-Tu.GDP + 196 ala1_tRNA + 14 ala2_tRNA + 252 arg1_tRNA + 14 argW_tRNA + 112 asn1_tRNA + 182 asp1_tRNA + 28 cysT_tRNA + 14 fmet_tRNA + 84 gln1_tRNA + 14 gln2_tRNA + 280 glu1_tRNA + 196 gly1_tRNA + 14 glyT_tRNA + 42 glyU_tRNA + 6636 h + 154 hisR_tRNA + 98 ile1_tRNA + 168 leu1_tRNA + 14 leu2_tRNA + 84 leuU_tRNA + 28 leuZ_tRNA + 140 lys1_tRNA + 154 met1_tRNA + 16660 mg2 + 182 phe1_tRNA + 6636 pi + 126 pro1_tRNA + 56 pro2_tRNA + 14 proL_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b2960_14_cplx + 42 ser2_tRNA + 14 ser3_tRNA + 70 serT_tRNA + 70 serV_tRNA + 28 thr1_tRNA + 28 thr3_tRNA + 56 trpT_tRNA + 56 tyr1_tRNA + 224 val1_tRNA + 14 val2_tRNA + 56 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_elo_b2960_1_rib1	Translation elongation 1 b2960 1 ribosome(s)	238 EF-G.GTP + 14 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 13 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 14 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 11 EF-Tu.GTP.met1-tRNA + 13 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 16 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1190 mg2 + 1 rib_ini_b2960_1 --> 1 rib_70_elo1_b2960_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_elo_b2960_1_rib2	Translation elongation 2 b2960 1 ribosome(s)	237 h2o + 1 rib_70_elo1_b2960_1_cplx --> 237 EF-G.GDP + 237 EF-Tu.GDP + 14 ala1_tRNA + 1 ala2_tRNA + 18 arg1_tRNA + 1 argW_tRNA + 8 asn1_tRNA + 13 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 1 gln2_tRNA + 20 glu1_tRNA + 14 gly1_tRNA + 1 glyT_tRNA + 3 glyU_tRNA + 474 h + 11 hisR_tRNA + 7 ile1_tRNA + 12 leu1_tRNA + 1 leu2_tRNA + 6 leuU_tRNA + 2 leuZ_tRNA + 10 lys1_tRNA + 11 met1_tRNA + 1190 mg2 + 13 phe1_tRNA + 474 pi + 9 pro1_tRNA + 4 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b2960_1_cplx + 3 ser2_tRNA + 1 ser3_tRNA + 5 serT_tRNA + 5 serV_tRNA + 2 thr1_tRNA + 2 thr3_tRNA + 4 trpT_tRNA + 4 tyr1_tRNA + 16 val1_tRNA + 1 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782

tl_elo_b2960_7_rib1	Translation elongation 1 b2960 7 ribosome(s)	1666 EF-G.GTP + 98 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 126 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argW-tRNA + 56 EF-Tu.GTP.asn1-tRNA + 91 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.cysT-tRNA + 42 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 140 EF-Tu.GTP.glu1-tRNA + 98 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyT-tRNA + 21 EF-Tu.GTP.glyU-tRNA + 77 EF-Tu.GTP.hisR-tRNA + 49 EF-Tu.GTP.ile1-tRNA + 84 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 42 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.leuZ-tRNA + 77 EF-Tu.GTP.lys1-tRNA + 77 EF-Tu.GTP.met1-tRNA + 91 EF-Tu.GTP.phe1-tRNA + 63 EF-Tu.GTP.pro1-tRNA + 28 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proL-tRNA + 7 EF-Tu.GTP.proM-tRNA + 21 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.ser3-tRNA + 35 EF-Tu.GTP.serT-tRNA + 35 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr3-tRNA + 28 EF-Tu.GTP.trpT-tRNA + 28 EF-Tu.GTP.tyr1-tRNA + 112 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 28 EF-Tu.GTP.val3-tRNA + 8330 mg2 + 1 rib_ini_b2960_7 --> 1 rib_70_elo1_b2960_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_elo_b2960_7_rib2	Translation elongation 2 b2960 7 ribosome(s)	1659 h2o + 1 rib_70_elo1_b2960_7_cplx --> 1659 EF-G.GDP + 1659 EF-Tu.GDP + 98 ala1_tRNA + 7 ala2_tRNA + 126 arg1_tRNA + 7 argW_tRNA + 56 asn1_tRNA + 91 asp1_tRNA + 14 cysT_tRNA + 7 fmet_tRNA + 42 gln1_tRNA + 7 gln2_tRNA + 140 glu1_tRNA + 98 gly1_tRNA + 7 glyT_tRNA + 21 glyU_tRNA + 3318 h + 77 hisR_tRNA + 49 ile1_tRNA + 84 leu1_tRNA + 7 leu2_tRNA + 42 leuU_tRNA + 14 leuZ_tRNA + 70 lys1_tRNA + 77 met1_tRNA + 8330 mg2 + 91 phe1_tRNA + 3318 pi + 63 pro1_tRNA + 28 pro2_tRNA + 7 proL_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b2960_7_cplx + 21 ser2_tRNA + 7 ser3_tRNA + 35 serT_tRNA + 35 serV_tRNA + 14 thr1_tRNA + 14 thr3_tRNA + 28 trpT_tRNA + 28 tyr1_tRNA + 112 val1_tRNA + 7 val2_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_elo_b3065_1_rib1	Translation elongation 1 b3065 1 ribosome(s)	70 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 1 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 1 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 1 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val3-tRNA + 350 mg2 + 1 rib_ini_b3065_1 --> 1 rib_70_elo1_b3065_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3065_1_rib2	Translation elongation 2 b3065 1 ribosome(s)	69 h2o + 1 rib_70_elo1_b3065_1_cplx --> 69 EF-G.GDP + 69 EF-Tu.GDP + 9 ala1_tRNA + 14 arg1_tRNA + 2 asn1_tRNA + 1 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 8 glu1_tRNA + 1 gly1_tRNA + 138 h + 1 hisR_tRNA + 1 ile1_tRNA + 4 leu1_tRNA + 9 lys1_tRNA + 350 mg2 + 3 phe1_tRNA + 138 pi + 3 pro1_tRNA + 1 rib_70_elo2_b3065_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 1 thr1_tRNA + 2 thr2_tRNA + 1 tyr1_tRNA + 4 val1_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3065_2_rib1	Translation elongation 1 b3065 2 ribosome(s)	140 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 28 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 2 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 2 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 2 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val3-tRNA + 700 mg2 + 1 rib_ini_b3065_2 --> 1 rib_70_elo1_b3065_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3065_2_rib2	Translation elongation 2 b3065 2 ribosome(s)	138 h2o + 1 rib_70_elo1_b3065_2_cplx --> 138 EF-G.GDP + 138 EF-Tu.GDP + 18 ala1_tRNA + 28 arg1_tRNA + 4 asn1_tRNA + 2 asp1_tRNA + 2 cysT_tRNA + 2 fmet_tRNA + 16 glu1_tRNA + 2 gly1_tRNA + 276 h + 2 hisR_tRNA + 2 ile1_tRNA + 8 leu1_tRNA + 18 lys1_tRNA + 700 mg2 + 6 phe1_tRNA + 276 pi + 6 pro1_tRNA + 1 rib_70_elo2_b3065_2_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 2 thr1_tRNA + 4 thr2_tRNA + 2 tyr1_tRNA + 8 val1_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3065_4_rib1	Translation elongation 1 b3065 4 ribosome(s)	280 EF-G.GTP + 36 EF-Tu.GTP.ala1-tRNA + 56 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 4 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 32 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 16 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val3-tRNA + 1400 mg2 + 1 rib_ini_b3065_4 --> 1 rib_70_elo1_b3065_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3065_4_rib2	Translation elongation 2 b3065 4 ribosome(s)	276 h2o + 1 rib_70_elo1_b3065_4_cplx --> 276 EF-G.GDP + 276 EF-Tu.GDP + 36 ala1_tRNA + 56 arg1_tRNA + 8 asn1_tRNA + 4 asp1_tRNA + 4 cysT_tRNA + 4 fmet_tRNA + 32 glu1_tRNA + 4 gly1_tRNA + 552 h + 4 hisR_tRNA + 4 ile1_tRNA + 16 leu1_tRNA + 36 lys1_tRNA + 1400 mg2 + 12 phe1_tRNA + 552 pi + 12 pro1_tRNA + 1 rib_70_elo2_b3065_4_cplx + 4 ser1_tRNA + 4 ser2_tRNA + 4 thr1_tRNA + 8 thr2_tRNA + 4 tyr1_tRNA + 16 val1_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3066_17_rib1	Translation elongation 1 b3066 17 ribosome(s)	9860 EF-G.GTP + 612 EF-Tu.GTP.ala1-tRNA + 119 EF-Tu.GTP.ala2-tRNA + 629 EF-Tu.GTP.arg1-tRNA + 17 EF-Tu.GTP.argU-tRNA + 17 EF-Tu.GTP.argW-tRNA + 68 EF-Tu.GTP.argX-tRNA + 527 EF-Tu.GTP.asn1-tRNA + 578 EF-Tu.GTP.asp1-tRNA + 119 EF-Tu.GTP.cysT-tRNA + 323 EF-Tu.GTP.gln1-tRNA + 204 EF-Tu.GTP.gln2-tRNA + 714 EF-Tu.GTP.glu1-tRNA + 561 EF-Tu.GTP.gly1-tRNA + 85 EF-Tu.GTP.glyT-tRNA + 85 EF-Tu.GTP.glyU-tRNA + 204 EF-Tu.GTP.hisR-tRNA + 272 EF-Tu.GTP.ile1-tRNA + 119 EF-Tu.GTP.ile2-tRNA + 510 EF-Tu.GTP.leu1-tRNA + 153 EF-Tu.GTP.leu2-tRNA + 340 EF-Tu.GTP.leuU-tRNA + 68 EF-Tu.GTP.leuW-tRNA + 204 EF-Tu.GTP.leuZ-tRNA + 374 EF-Tu.GTP.lys1-tRNA + 255 EF-Tu.GTP.met1-tRNA + 442 EF-Tu.GTP.phe1-tRNA + 119 EF-Tu.GTP.pro1-tRNA + 119 EF-Tu.GTP.pro2-tRNA + 102 EF-Tu.GTP.proL-tRNA + 153 EF-Tu.GTP.proM-tRNA + 51 EF-Tu.GTP.ser1-tRNA + 51 EF-Tu.GTP.ser2-tRNA + 85 EF-Tu.GTP.ser3-tRNA + 51 EF-Tu.GTP.serT-tRNA + 170 EF-Tu.GTP.serV-tRNA + 221 EF-Tu.GTP.thr1-tRNA + 51 EF-Tu.GTP.thr2-tRNA + 204 EF-Tu.GTP.thr3-tRNA + 68 EF-Tu.GTP.thrU-tRNA + 68 EF-Tu.GTP.trpT-tRNA + 272 EF-Tu.GTP.tyr1-tRNA + 204 EF-Tu.GTP.val1-tRNA + 153 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015

tl_elo_b3066_17_rib2	Translation elongation 2 b3066 17 ribosome(s)	9843 h2o + 1 rib_70_elo1_b3066_17_cplx --> 9843 EF-G.GDP + 9843 EF-Tu.GDP + 612 ala1_tRNA + 119 ala2_tRNA + 629 arg1_tRNA + 17 argU_tRNA + 17 argW_tRNA + 68 argX_tRNA + 527 asn1_tRNA + 578 asp1_tRNA + 119 cysT_tRNA + 17 fmet_tRNA + 323 gln1_tRNA + 204 gln2_tRNA + 714 glu1_tRNA + 561 gly1_tRNA + 85 glyT_tRNA + 85 glyU_tRNA + 19686 h + 204 hisR_tRNA + 272 ile1_tRNA + 119 ile2_tRNA + 510 leu1_tRNA + 153 leu2_tRNA + 340 leuU_tRNA + 68 leuW_tRNA + 204 leuZ_tRNA + 357 lys1_tRNA + 255 met1_tRNA + 49300 mg2 + 442 phe1_tRNA + 19686 pi + 119 pro1_tRNA + 119 pro2_tRNA + 102 proL_tRNA + 153 proM_tRNA + rib_70_elo2_b3066_17_cplx + 51 ser1_tRNA + 51 ser2_tRNA + 85 ser3_tRNA + 51 serT_tRNA + 170 serV_tRNA + 221 thr1_tRNA + 51 thr2_tRNA + 204 thr3_tRNA + 68 thrU_tRNA + 68 trpT_tRNA + 272 tyr1_tRNA + 204 val1_tRNA + 153 val2_tRNA + 119 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015
tl_elo_b3066_1_rib1	Translation elongation 1 b3066 1 ribosome(s)	580 EF-G.GTP + 36 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 37 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argW-tRNA + 4 EF-Tu.GTP.argX-tRNA + 31 EF-Tu.GTP.asn1-tRNA + 34 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 19 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 42 EF-Tu.GTP.glu1-tRNA + 33 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.ile2-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 20 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuW-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 22 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 26 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 9 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 10 EF-Tu.GTP.serV-tRNA + 13 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 16 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 2900 mg2 + 1 rib_ini_b3066_1 --> 1 rib_70_elo1	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015
tl_elo_b3066_1_rib2	Translation elongation 2 b3066 1 ribosome(s)	579 h2o + 1 rib_70_elo1_b3066_1_cplx --> 579 EF-G.GDP + 579 EF-Tu.GDP + 36 ala1_tRNA + 7 ala2_tRNA + 37 arg1_tRNA + 1 argU_tRNA + 1 argW_tRNA + 4 argX_tRNA + 31 asn1_tRNA + 34 asp1_tRNA + 7 cysT_tRNA + 1 fmet_tRNA + 19 gln1_tRNA + 12 gln2_tRNA + 42 glu1_tRNA + 33 gly1_tRNA + 5 glyT_tRNA + 5 glyU_tRNA + 1158 h + 12 hisR_tRNA + 16 ile1_tRNA + 7 ile2_tRNA + 30 leu1_tRNA + 9 leu2_tRNA + 20 leuU_tRNA + 4 leuW_tRNA + 12 leuZ_tRNA + 21 lys1_tRNA + 15 met1_tRNA + 2900 mg2 + 26 phe1_tRNA + 1158 pi + 7 pro1_tRNA + 7 pro2_tRNA + 6 proL_tRNA + 9 proM_tRNA + 1 rib_70_elo2_b3066_1_cplx + 3 ser1_tRNA + 3 ser2_tRNA + 5 ser3_tRNA + 3 serT_tRNA + 10 serV_tRNA + 13 thr1_tRNA + 3 thr2_tRNA + 12 thr3_tRNA + 4 thrU_tRNA + 4 trpT_tRNA + 16 tyr1_tRNA + 12 val1_tRNA + 9 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015
tl_elo_b3066_34_rib1	Translation elongation 1 b3066 34 ribosome(s)	19720 EF-G.GTP + 1224 EF-Tu.GTP.ala1-tRNA + 238 EF-Tu.GTP.ala2-tRNA + 1258 EF-Tu.GTP.arg1-tRNA + 34 EF-Tu.GTP.argU-tRNA + 34 EF-Tu.GTP.argW-tRNA + 136 EF-Tu.GTP.argX-tRNA + 1054 EF-Tu.GTP.asn1-tRNA + 1156 EF-Tu.GTP.asp1-tRNA + 238 EF-Tu.GTP.cysT-tRNA + 646 EF-Tu.GTP.gln1-tRNA + 408 EF-Tu.GTP.gln2-tRNA + 1428 EF-Tu.GTP.glu1-tRNA + 1122 EF-Tu.GTP.gly1-tRNA + 170 EF-Tu.GTP.glyT-tRNA + 170 EF-Tu.GTP.glyU-tRNA + 408 EF-Tu.GTP.hisR-tRNA + 544 EF-Tu.GTP.ile1-tRNA + 238 EF-Tu.GTP.ile2-tRNA + 1020 EF-Tu.GTP.leu1-tRNA + 306 EF-Tu.GTP.leu2-tRNA + 680 EF-Tu.GTP.leuU-tRNA + 136 EF-Tu.GTP.leuW-tRNA + 408 EF-Tu.GTP.leuZ-tRNA + 748 EF-Tu.GTP.lys1-tRNA + 510 EF-Tu.GTP.met1-tRNA + 884 EF-Tu.GTP.phe1-tRNA + 238 EF-Tu.GTP.pro1-tRNA + 238 EF-Tu.GTP.pro2-tRNA + 204 EF-Tu.GTP.proL-tRNA + 306 EF-Tu.GTP.proM-tRNA + 102 EF-Tu.GTP.ser1-tRNA + 102 EF-Tu.GTP.ser2-tRNA + 170 EF-Tu.GTP.ser3-tRNA + 102 EF-Tu.GTP.serT-tRNA + 340 EF-Tu.GTP.serV-tRNA + 442 EF-Tu.GTP.thr1-tRNA + 102 EF-Tu.GTP.thr2-tRNA + 408 EF-Tu.GTP.thr3-tRNA + 136 EF-Tu.GTP.thrU-tRNA + 136 EF-Tu.GTP.trpT-tRNA + 544 EF-Tu.GTP.tyr1-tRNA + 408 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015
tl_elo_b3066_34_rib2	Translation elongation 2 b3066 34 ribosome(s)	19686 h2o + 1 rib_70_elo1_b3066_34_cplx --> 19686 EF-G.GDP + 19686 EF-Tu.GDP + 1224 ala1_tRNA + 238 ala2_tRNA + 1258 arg1_tRNA + 34 argU_tRNA + 34 argW_tRNA + 136 argX_tRNA + 1054 asn1_tRNA + 1156 asp1_tRNA + 238 cysT_tRNA + 34 fmet_tRNA + 646 gln1_tRNA + 408 gln2_tRNA + 1428 glu1_tRNA + 1122 gly1_tRNA + 170 glyT_tRNA + 170 glyU_tRNA + 39372 h + 408 hisR_tRNA + 544 ile1_tRNA + 238 ile2_tRNA + 1020 leu1_tRNA + 306 leu2_tRNA + 680 leuU_tRNA + 136 leuW_tRNA + 408 leuZ_tRNA + 714 lys1_tRNA + 510 met1_tRNA + 98600 mg2 + 884 phe1_tRNA + 39372 pi + 238 pro1_tRNA + 238 pro2_tRNA + 204 proL_tRNA + 306 proM_tRNA + 1 rib_70_elo2_b3066_34_cplx + 102 ser1_tRNA + 102 ser2_tRNA + 170 ser3_tRNA + 102 serT_tRNA + 340 serV_tRNA + 442 thr1_tRNA + 102 thr2_tRNA + 408 thr3_tRNA + 136 thrU_tRNA + 136 trpT_tRNA + 544 tyr1_tRNA + 408 val1_tRNA + 306 val2_tRNA + 238 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015
tl_elo_b3067_18_rib1	Translation elongation 1 b3067 18 ribosome(s)	11016 EF-G.GTP + 702 EF-Tu.GTP.ala1-tRNA + 180 EF-Tu.GTP.ala2-tRNA + 828 EF-Tu.GTP.arg1-tRNA + 342 EF-Tu.GTP.asn1-tRNA + 972 EF-Tu.GTP.asp1-tRNA + 54 EF-Tu.GTP.cysT-tRNA + 414 EF-Tu.GTP.gln1-tRNA + 126 EF-Tu.GTP.gln2-tRNA + 1278 EF-Tu.GTP.glu1-tRNA + 378 EF-Tu.GTP.gly1-tRNA + 54 EF-Tu.GTP.glyU-tRNA + 162 EF-Tu.GTP.hisR-tRNA + 774 EF-Tu.GTP.ile1-tRNA + 756 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 144 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuW-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 612 EF-Tu.GTP.lys1-tRNA + 432 EF-Tu.GTP.met1-tRNA + 270 EF-Tu.GTP.phe1-tRNA + 306 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proM-tRNA + 126 EF-Tu.GTP.ser1-tRNA + 162 EF-Tu.GTP.ser2-tRNA + 36 EF-Tu.GTP.ser3-tRNA + 36 EF-Tu.GTP.serT-tRNA + 162 EF-Tu.GTP.serV-tRNA + 522 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 126 EF-Tu.GTP.thr3-tRNA + 72 EF-Tu.GTP.trpT-tRNA + 234 EF-Tu.GTP.tyr1-tRNA + 234 EF-Tu.GTP.val1-tRNA + 126 EF-Tu.GTP.val2-tRNA + 252 EF-Tu.GTP.val3-tRNA + 55080 mg2 + 1 rib_ini_b3067_18 --> 1 rib_70_elo1_b3067_18_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	1.21E+02	120.6262	0	2.83E+00	2.829

tl_elo_b3067_18_rib2	Translation elongation 2 b3067 18 ribosome(s)	10998 h2o + 1 rib_70_elo1_b3067_18_cplx --> 10998 EF-G.GDP + 10998 EF-Tu.GDP + 702 ala1_tRNA + 180 ala2_tRNA + 828 arg1_tRNA + 342 asn1_tRNA + 954 asp1_tRNA + 54 cysT_tRNA + 18 fmet_tRNA + 414 gln1_tRNA + 126 gln2_tRNA + 1278 glu1_tRNA + 378 gly1_tRNA + 54 glyU_tRNA + 21996 h + 162 hisR_tRNA + 774 ile1_tRNA + 756 leu1_tRNA + 36 leu2_tRNA + 144 leuU_tRNA + 18 leuW_tRNA + 18 leuZ_tRNA + 612 lys1_tRNA + 432 met1_tRNA + 55080 mg2 + 270 phe1_tRNA + 21996 pi + 306 pro1_tRNA + 18 pro2_tRNA + 18 proM_tRNA + 1 rib_70_elo2_b3067_18_cplx + 126 ser1_tRNA + 162 ser2_tRNA + 36 ser3_tRNA + 36 serT_tRNA + 162 serV_tRNA + 522 thr1_tRNA + 36 thr2_tRNA + 126 thr3_tRNA + 72 trpT_tRNA + 234 tyr1_tRNA + 234 val1_tRNA + 126 val2_tRNA + 25 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	1.21E+02	120.6262	0	2.83E+00	2.829
tl_elo_b3067_1_rib1	Translation elongation 1 b3067 1 ribosome(s)	612 EF-G.GTP + 39 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 46 EF-Tu.GTP.arg1-tRNA + 19 EF-Tu.GTP.asn1-tRNA + 54 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 23 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 71 EF-Tu.GTP.glu1-tRNA + 21 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 43 EF-Tu.GTP.ile1-tRNA + 42 EF-Tu.GTP.leu1 tRNA + 2 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 34 EF-Tu.GTP.lys1 tRNA + 24 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 17 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 9 EF-Tu.GTP.serV-tRNA + 29 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 13 EF-Tu.GTP.tyr1-tRNA + 13 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 14 EF-Tu.GTP.val3-tRNA + 3060 mg2 + 1 rib_ini_b3067_1 --> 1 rib_70_elo1_b3067_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	1.21E+02	120.6262	0	2.83E+00	2.829
tl_elo_b3067_1_rib2	Translation elongation 2 b3067 1 ribosome(s)	611 h2o + 1 rib_70_elo1_b3067_1_cplx --> 611 EF-G.GDP + 611 EF-Tu.GDP + 39 ala1_tRNA + 10 ala2_tRNA + 46 arg1_tRNA + 19 asn1_tRNA + 53 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 23 gln1_tRNA + 7 gln2_tRNA + 71 glu1_tRNA + 21 gly1_tRNA + 3 glyU_tRNA + 1222 h + 9 hisR_tRNA + 43 ile1_tRNA + 42 leu1_tRNA + 2 leu2_tRNA + 8 leuU_tRNA + 1 leuW_tRNA + 1 leuZ_tRNA + 34 lys1_tRNA + 24 met1_tRNA + 3060 mg2 + 15 phe1_tRNA + 1222 pi + 17 pro1_tRNA + 1 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3067_1_cplx + 7 ser1_tRNA + 9 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 9 serV_tRNA + 29 thr1_tRNA + 2 thr2_tRNA + 7 thr3_tRNA + 4 trpT_tRNA + 13 tyr1_tRNA + 13 val1_tRNA + 7 val2_tRNA + 14 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	1.21E+02	120.6262	0	2.83E+00	2.829
tl_elo_b3067_36_rib1	Translation elongation 1 b3067 36 ribosome(s)	22032 EF-G.GTP + 1404 EF-Tu.GTP.ala1-tRNA + 360 EF-Tu.GTP.ala2-tRNA + 1656 EF-Tu.GTP.arg1-tRNA + 684 EF-Tu.GTP.asn1-tRNA + 1944 EF-Tu.GTP.asp1-tRNA + 108 EF-Tu.GTP.cysT-tRNA + 828 EF-Tu.GTP.gln1-tRNA + 252 EF-Tu.GTP.gln2-tRNA + 2556 EF-Tu.GTP.glu1-tRNA + 756 EF-Tu.GTP.gly1-tRNA + 108 EF-Tu.GTP.glyU-tRNA + 324 EF-Tu.GTP.hisR-tRNA + 1548 EF-Tu.GTP.ile1-tRNA + 1512 EF-Tu.GTP.leu1-tRNA + 72 EF-Tu.GTP.leu2-tRNA + 288 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuW-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 1224 EF-Tu.GTP.lys1-tRNA + 864 EF-Tu.GTP.met1-tRNA + 540 EF-Tu.GTP.phe1-tRNA + 612 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 36 EF-Tu.GTP.proM-tRNA + 252 EF-Tu.GTP.ser1-tRNA + 324 EF-Tu.GTP.ser2-tRNA + 72 EF-Tu.GTP.ser3-tRNA + 72 EF-Tu.GTP.serT-tRNA + 324 EF-Tu.GTP.serV-tRNA + 1044 EF-Tu.GTP.thr1-tRNA + 72 EF-Tu.GTP.thr2-tRNA + 252 EF-Tu.GTP.thr3-tRNA + 144 EF-Tu.GTP.trpT-tRNA + 468 EF-Tu.GTP.tyr1-tRNA + 468 EF-Tu.GTP.val1-tRNA + 252 EF-Tu.GTP.val2-tRNA + 504 EF-Tu.GTP.val3-tRNA + 110160 mg2 + 1 rib_ini_b3067_36 --> 1 rib_70_elo1_b3067_36_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	7.71E+01	77.12959	0	2.83E+00	2.829
tl_elo_b3067_36_rib2	Translation elongation 2 b3067 36 ribosome(s)	21996 h2o + 1 rib_70_elo1_b3067_36_cplx --> 21996 EF-G.GDP + 21996 EF-Tu.GDP + 1404 ala1_tRNA + 360 ala2_tRNA + 1656 arg1_tRNA + 684 asn1_tRNA + 1908 asp1_tRNA + 108 cysT_tRNA + 36 fmet_tRNA + 828 gln1_tRNA + 252 gln2_tRNA + 2556 glu1_tRNA + 756 gly1_tRNA + 108 glyU_tRNA + 43992 h + 324 hisR_tRNA + 1548 ile1_tRNA + 1512 leu1_tRNA + 72 leu2_tRNA + 288 leuU_tRNA + 36 leuW_tRNA + 36 leuZ_tRNA + 1224 lys1_tRNA + 864 met1_tRNA + 110160 mg2 + 540 phe1_tRNA + 43992 pi + 612 pro1_tRNA + 36 pro2_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b3067_36_cplx + 252 ser1_tRNA + 324 ser2_tRNA + 72 ser3_tRNA + 72 serT_tRNA + 324 serV_tRNA + 1044 thr1_tRNA + 72 thr2_tRNA + 252 thr3_tRNA + 144 trpT_tRNA + 468 tyr1_tRNA + 468 val1_tRNA + 252 val2_tRNA + 504 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	7.71E+01	77.12959	0	2.83E+00	2.829
tl_elo_b3124_12_rib1	Translation elongation 1 b3124 12 ribosome(s)	4884 EF-G.GTP + 468 EF-Tu.GTP.ala1-tRNA + 144 EF-Tu.GTP.ala2 tRNA + 144 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argU-tRNA + 12 EF-Tu.GTP.argW-tRNA + 24 EF-Tu.GTP.argX-tRNA + 228 EF-Tu.GTP.asn1-tRNA + 276 EF-Tu.GTP.asp1-tRNA + 72 EF-Tu.GTP.cysT-tRNA + 84 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 288 EF-Tu.GTP.glu1-tRNA + 468 EF-Tu.GTP.gly1-tRNA + 60 EF-Tu.GTP.glyT-tRNA + 108 EF-Tu.GTP.glyU-tRNA + 120 EF-Tu.GTP.hisR-tRNA + 372 EF-Tu.GTP.ile1-tRNA + 36 EF-Tu.GTP.ile2-tRNA + 204 EF-Tu.GTP.leu1 tRNA + 24 EF-Tu.GTP.leu2-tRNA + 72 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuW-tRNA + 48 EF-Tu.GTP.leuZ-tRNA + 216 EF-Tu.GTP.lys1-tRNA + 96 EF-Tu.GTP.met1-tRNA + 96 EF-Tu.GTP.phe1-tRNA + 96 EF-Tu.GTP.pro1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proL-tRNA + 36 EF-Tu.GTP.proM-tRNA + 36 EF-Tu.GTP.ser1-tRNA + 48 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serT-tRNA + 168 EF-Tu.GTP.serV-tRNA + 84 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 48 EF-Tu.GTP.thr3-tRNA + 72 EF-Tu.GTP.thrU-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 72 EF-Tu.GTP.tyr1-tRNA + 192 EF-Tu.GTP.val1-tRNA + 96 EF-Tu.GTP	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399

tl_elo_b3124_12_rib2	Translation elongation 2 b3124 12 ribosome(s)	4872 h2o + 1 rib_70_elo1_b3124_12_cplx --> 4872 EF-G.GDP + 4872 EF-Tu.GDP + 468 ala1_tRNA + 144 ala2_tRNA + 144 arg1_tRNA + 12 argU_tRNA + 12 argW_tRNA + 24 argX_tRNA + 22 asn1_tRNA + 276 asp1_tRNA + 72 cysT_tRNA + 12 fmet_tRNA + 84 gln1_tRNA + 12 gln2_tRNA + 288 glu1_tRNA + 468 gly1_tRNA + 60 glyT_tRNA + 96 glyU_tRNA + 9744 h + 120 hisR_tRNA + 372 ile1_tRNA + 36 ile2_tRNA + 204 leu1_tRNA + 24 leu2_tRNA + 72 leuU_tRNA + 12 leuW_tRNA + 48 leuZ_tRNA + 216 lys1_tRNA + 96 met1_tRNA + 24420 mg2 + 96 phe1_tRNA + 9744 pi + 96 pro1_tRNA + 24 pro2_tRNA + 12 proL_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b3124_12_cplx + 36 ser1_tRNA + 48 ser2_tRNA + 12 ser3_tRNA + 24 serT_tRNA + 168 serV_tRNA + 84 thr1_tRNA + 36 thr2_tRNA + 48 thr3_tRNA + 72 thrU_tRNA + 24 trpT_tRNA + 72 tyr1_tRNA + 192 val1_tRNA + 96 val2_tRNA + 108 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399
tl_elo_b3124_1_rib1	Translation elongation 1 b3124 1 ribosome(s)	407 EF-G.GTP + 39 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argW-tRNA + 2 EF-Tu.GTP.argX-tRNA + 19 EF-Tu.GTP.asn1-tRNA + 23 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 39 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 9 EF-Tu.GTP.glyU-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 31 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 17 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 18 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 14 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 16 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 2035 mg2 + 1 rib_ini_b3124_1 --> 1 rib_70_elo1	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399
tl_elo_b3124_1_rib2	Translation elongation 2 b3124 1 ribosome(s)	406 h2o + 1 rib_70_elo1_b3124_1_cplx --> 406 EF-G.GDP + 406 EF-Tu.GDP + 39 ala1_tRNA + 12 ala2_tRNA + 12 arg1_tRNA + 1 argU_tRNA + 1 argW_tRNA + 2 argX_tRNA + 19 asn1_tRNA + 23 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 1 gln2_tRNA + 24 glu1_tRNA + 39 gly1_tRNA + 5 glyT_tRNA + 8 glyU_tRNA + 812 h + 10 hisR_tRNA + 31 ile1_tRNA + 3 ile2_tRNA + 17 leu1_tRNA + 2 leu2_tRNA + 6 leuU_tRNA + 1 leuW_tRNA + 4 leuZ_tRNA + 18 lys1_tRNA + 8 met1_tRNA + 2035 mg2 + 8 phe1_tRNA + 812 pi + 8 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3124_1_cplx + 3 ser1_tRNA + 4 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 14 serV_tRNA + 7 thr1_tRNA + 3 thr2_tRNA + 4 thr3_tRNA + 6 thrU_tRNA + 2 trpT_tRNA + 6 tyr1_tRNA + 16 val1_tRNA + 8 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399
tl_elo_b3124_24_rib1	Translation elongation 1 b3124 24 ribosome(s)	9768 EF-G.GTP + 936 EF-Tu.GTP.ala1-tRNA + 288 EF-Tu.GTP.ala2-tRNA + 288 EF-Tu.GTP.arg1-tRNA + 24 EF-Tu.GTP.argU-tRNA + 24 EF-Tu.GTP.argW-tRNA + 48 EF-Tu.GTP.argX-tRNA + 456 EF-Tu.GTP.asn1-tRNA + 552 EF-Tu.GTP.asp1-tRNA + 144 EF-Tu.GTP.cysT-tRNA + 168 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 576 EF-Tu.GTP.glu1-tRNA + 936 EF-Tu.GTP.gly1-tRNA + 120 EF-Tu.GTP.glyT-tRNA + 216 EF-Tu.GTP.glyU-tRNA + 240 EF-Tu.GTP.hisR-tRNA + 744 EF-Tu.GTP.ile1-tRNA + 72 EF-Tu.GTP.ile2-tRNA + 408 EF-Tu.GTP.leu1-tRNA + 48 EF-Tu.GTP.leu2-tRNA + 144 EF-Tu.GTP.leuU-tRNA + 24 EF-Tu.GTP.leuW-tRNA + 96 EF-Tu.GTP.leuZ-tRNA + 432 EF-Tu.GTP.lys1-tRNA + 192 EF-Tu.GTP.met1-tRNA + 192 EF-Tu.GTP.phe1-tRNA + 192 EF-Tu.GTP.pro1-tRNA + 48 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proL-tRNA + 72 EF-Tu.GTP.proM-tRNA + 72 EF-Tu.GTP.ser1-tRNA + 96 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 48 EF-Tu.GTP.serT-tRNA + 336 EF-Tu.GTP.serV-tRNA + 168 EF-Tu.GTP.thr1-tRNA + 72 EF-Tu.GTP.thr2-tRNA + 96 EF-Tu.GTP.thr3-tRNA + 144 EF-Tu.GTP.thrU-tRNA + 48 EF-Tu.GTP.trpT-tRNA + 144 EF-Tu.GTP.tyr1-tRNA + 384 EF-Tu.GTP.val1-tRNA + 192 EF-Tu	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399
tl_elo_b3124_24_rib2	Translation elongation 2 b3124 24 ribosome(s)	9744 h2o + 1 rib_70_elo1_b3124_24_cplx --> 9744 EF-G.GDP + 9744 EF-Tu.GDP + 936 ala1_tRNA + 288 ala2_tRNA + 288 arg1_tRNA + 24 argU_tRNA + 24 argW_tRNA + 48 argX_tRNA + 456 asn1_tRNA + 552 asp1_tRNA + 144 cysT_tRNA + 24 fmet_tRNA + 168 gln1_tRNA + 24 gln2_tRNA + 576 glu1_tRNA + 936 gly1_tRNA + 120 glyT_tRNA + 192 glyU_tRNA + 19488 h + 240 hisR_tRNA + 744 ile1_tRNA + 72 ile2_tRNA + 408 leu1_tRNA + 48 leu2_tRNA + 144 leuU_tRNA + 24 leuW_tRNA + 96 leuZ_tRNA + 432 lys1_tRNA + 192 met1_tRNA + 48840 mg2 + 192 phe1_tRNA + 19488 pi + 192 pro1_tRNA + 48 pro2_tRNA + 24 proL_tRNA + 72 proM_tRNA + 1 rib_70_elo2_b3124_24_cplx + 72 ser1_tRNA + 96 ser2_tRNA + 24 ser3_tRNA + 48 serT_tRNA + 336 serV_tRNA + 168 thr1_tRNA + 72 thr2_tRNA + 96 thr3_tRNA + 144 thrU_tRNA + 48 trpT_tRNA + 144 tyr1_tRNA + 384 val1_tRNA + 192 val2_tRNA + 216 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399
tl_elo_b3125_17_rib1	Translation elongation 1 b3125 17 ribosome(s)	5015 EF-G.GTP + 697 EF-Tu.GTP.ala1-tRNA + 68 EF-Tu.GTP.ala2-tRNA + 119 EF-Tu.GTP.arg1-tRNA + 170 EF-Tu.GTP.asn1-tRNA + 306 EF-Tu.GTP.asp1-tRNA + 34 EF-Tu.GTP.cysT-tRNA + 68 EF-Tu.GTP.gln1-tRNA + 17 EF-Tu.GTP.gln2-tRNA + 238 EF-Tu.GTP.glu1-tRNA + 425 EF-Tu.GTP.gly1-tRNA + 34 EF-Tu.GTP.glyT-tRNA + 34 EF-Tu.GTP.glyU-tRNA + 85 EF-Tu.GTP.hisR-tRNA + 340 EF-Tu.GTP.ile1-tRNA + 17 EF-Tu.GTP.ile2-tRNA + 374 EF-Tu.GTP.leu1-tRNA + 34 EF-Tu.GTP.leu2-tRNA + 34 EF-Tu.GTP.leuU-tRNA + 34 EF-Tu.GTP.leuZ-tRNA + 340 EF-Tu.GTP.lys1-tRNA + 255 EF-Tu.GTP.met1-tRNA + 68 EF-Tu.GTP.phe1-tRNA + 119 EF-Tu.GTP.pro1-tRNA + 17 EF-Tu.GTP.pro2-tRNA + 68 EF-Tu.GTP.proM-tRNA + 34 EF-Tu.GTP.ser1-tRNA + 51 EF-Tu.GTP.ser2-tRNA + 17 EF-Tu.GTP.ser3-tRNA + 34 EF-Tu.GTP.serT-tRNA + 119 EF-Tu.GTP.serV-tRNA + 68 EF-Tu.GTP.thr1-tRNA + 68 EF-Tu.GTP.thr2-tRNA + 85 EF-Tu.GTP.thr3-tRNA + 34 EF-Tu.GTP.thrU-tRNA + 102 EF-Tu.GTP.tyr1-tRNA + 221 EF-Tu.GTP.val1-tRNA + 85 EF-Tu.GTP.val2-tRNA + 102 EF-Tu.GTP.val3-tRNA + 25075 mg2 + 1 rib_ini_b3125_17 --> 1 rib_70_elo1_b3125_17_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299

tl_elo_b3125_17_rib2	Translation elongation 2 b3125 17 ribosome(s)	4998 h2o + 1 rib_70_elo1_b3125_17_cplx --> 4998 EF-G.GDP + 4998 EF-Tu.GDP + 697 ala1_tRNA + 68 ala2_tRNA + 102 arg1_tRNA + 170 asn1_tRNA + 306 asp1_tRNA + 34 cysT_tRNA + 17 fmet_tRNA + 68 gln1_tRNA + 17 gln2_tRNA + 238 glu1_tRNA + 425 gly1_tRNA + 34 glyT_tRNA + 34 glyU_tRNA + 9996 h + 85 hisR_tRNA + 340 ile1_tRNA + 17 ile2_tRNA + 374 leu1_tRNA + 34 leu2_tRNA + 34 leuU_tRNA + 34 leuZ_tRNA + 340 lys1_tRNA + 255 met1_tRNA + 25075 mg2 + 68 phe1_tRNA + 9996 pi + 119 pro1_tRNA + 17 pro2_tRNA + 68 proM_tRNA + 1 rib_70_elo2_b3125_17_cplx + 34 ser1_tRNA + 51 ser2_tRNA + 17 ser3_tRNA + 34 serT_tRNA + 119 serV_tRNA + 68 thr1_tRNA + 68 thr2_tRNA + 85 thr3_tRNA + 34 thrU_tRNA + 102 tyr1_tRNA + 221 val1_tRNA + 85 val2_tRNA + 102 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_elo_b3125_1_rib1	Translation elongation 1 b3125 1 ribosome(s)	295 EF-G.GTP + 41 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 25 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 22 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 13 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1475 mg2 + 1 rib_ini_b3125_1 --> 1 rib_70_elo1_b3125_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_elo_b3125_1_rib2	Translation elongation 2 b3125 1 ribosome(s)	294 h2o + 1 rib_70_elo1_b3125_1_cplx --> 294 EF-G.GDP + 294 EF-Tu.GDP + 41 ala1_tRNA + 4 ala2_tRNA + 6 arg1_tRNA + 10 asn1_tRNA + 18 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 1 gln2_tRNA + 14 glu1_tRNA + 25 gly1_tRNA + 2 glyT_tRNA + 2 glyU_tRNA + 588 h + 5 hisR_tRNA + 20 ile1_tRNA + 1 ile2_tRNA + 22 leu1_tRNA + 2 leu2_tRNA + 2 leuU_tRNA + 2 leuZ_tRNA + 20 lys1_tRNA + 15 met1_tRNA + 1475 mg2 + 4 phe1_tRNA + 588 pi + 7 pro1_tRNA + 1 pro2_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b3125_1_cplx + 2 ser1_tRNA + 3 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 7 serV_tRNA + 4 thr1_tRNA + 4 thr2_tRNA + 5 thr3_tRNA + 2 thrU_tRNA + 6 tyr1_tRNA + 13 val1_tRNA + 5 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_elo_b3125_8_rib1	Translation elongation 1 b3125 8 ribosome(s)	2360 EF-G.GTP + 328 EF-Tu.GTP.ala1-tRNA + 32 EF-Tu.GTP.ala2-tRNA + 56 EF-Tu.GTP.arg1-tRNA + 80 EF-Tu.GTP.asn1-tRNA + 144 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.cysT-tRNA + 32 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 112 EF-Tu.GTP.glu1-tRNA + 200 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 16 EF-Tu.GTP.glyU-tRNA + 40 EF-Tu.GTP.hisR-tRNA + 160 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.ile2-tRNA + 176 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuZ-tRNA + 160 EF-Tu.GTP.lys1-tRNA + 120 EF-Tu.GTP.met1-tRNA + 32 EF-Tu.GTP.phe1-tRNA + 56 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 32 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 16 EF-Tu.GTP.serT-tRNA + 56 EF-Tu.GTP.serV-tRNA + 32 EF-Tu.GTP.thr1-tRNA + 32 EF-Tu.GTP.thr2-tRNA + 40 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 48 EF-Tu.GTP.tyr1-tRNA + 104 EF-Tu.GTP.val1-tRNA + 40 EF-Tu.GTP.val2-tRNA + 48 EF-Tu.GTP.val3-tRNA + 11800 mg2 + 1 rib_ini_b3125_8 --> 1 rib_70_elo1_b3125_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_elo_b3125_8_rib2	Translation elongation 2 b3125 8 ribosome(s)	2352 h2o + 1 rib_70_elo1_b3125_8_cplx --> 2352 EF-G.GDP + 2352 EF-Tu.GDP + 328 ala1_tRNA + 32 ala2_tRNA + 48 arg1_tRNA + 80 asn1_tRNA + 144 asp1_tRNA + 16 cysT_tRNA + 8 fmet_tRNA + 32 gln1_tRNA + 8 gln2_tRNA + 112 glu1_tRNA + 200 gly1_tRNA + 16 glyT_tRNA + 16 glyU_tRNA + 4704 h + 40 hisR_tRNA + 160 ile1_tRNA + 8 ile2_tRNA + 176 leu1_tRNA + 16 leu2_tRNA + 16 leuU_tRNA + 16 leuZ_tRNA + 160 lys1_tRNA + 120 met1_tRNA + 11800 mg2 + 32 phe1_tRNA + 4704 pi + 56 pro1_tRNA + 8 pro2_tRNA + 32 proM_tRNA + 1 rib_70_elo2_b3125_8_cplx + 16 ser1_tRNA + 24 ser2_tRNA + 8 ser3_tRNA + 16 serT_tRNA + 56 serV_tRNA + 32 thr1_tRNA + 32 thr2_tRNA + 40 thr3_tRNA + 16 thrU_tRNA + 48 tyr1_tRNA + 104 val1_tRNA + 40 val2_tRNA + 48 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_elo_b3126_15_rib1	Translation elongation 1 b3126 15 ribosome(s)	3825 EF-G.GTP + 345 EF-Tu.GTP.ala1-tRNA + 150 EF-Tu.GTP.ala2-tRNA + 135 EF-Tu.GTP.arg1-tRNA + 195 EF-Tu.GTP.asn1-tRNA + 210 EF-Tu.GTP.asp1-tRNA + 15 EF-Tu.GTP.cysT-tRNA + 120 EF-Tu.GTP.gln1-tRNA + 30 EF-Tu.GTP.gln2-tRNA + 180 EF-Tu.GTP.glu1-tRNA + 285 EF-Tu.GTP.gly1-tRNA + 15 EF-Tu.GTP.glyU-tRNA + 90 EF-Tu.GTP.hisR-tRNA + 240 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.ile2-tRNA + 150 EF-Tu.GTP.leu1-tRNA + 30 EF-Tu.GTP.leu2-tRNA + 90 EF-Tu.GTP.leuU-tRNA + 30 EF-Tu.GTP.leuZ-tRNA + 180 EF-Tu.GTP.lys1-tRNA + 30 EF-Tu.GTP.met1-tRNA + 210 EF-Tu.GTP.phe1-tRNA + 120 EF-Tu.GTP.pro1-tRNA + 15 EF-Tu.GTP.pro2-tRNA + 30 EF-Tu.GTP.proL-tRNA + 45 EF-Tu.GTP.proM-tRNA + 30 EF-Tu.GTP.ser1-tRNA + 45 EF-Tu.GTP.ser2-tRNA + 15 EF-Tu.GTP.ser3-tRNA + 45 EF-Tu.GTP.serT-tRNA + 120 EF-Tu.GTP.serV-tRNA + 75 EF-Tu.GTP.thr1-tRNA + 45 EF-Tu.GTP.thr2-tRNA + 30 EF-Tu.GTP.thr3-tRNA + 15 EF-Tu.GTP.thrU-tRNA + 45 EF-Tu.GTP.trpT-tRNA + 60 EF-Tu.GTP.tyr1-tRNA + 195 EF-Tu.GTP.val1-tRNA + 105 EF-Tu.GTP.val2-tRNA + 45 EF-Tu.GTP.val3-tRNA + 19125 mg2 + 1 rib_ini_b3126_15 --> 1 rib_70_elo1_b3126_15_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399

tl_elo_b3126_15_rib2	Translation elongation 2 b3126 15 ribosome(s)	3810 h2o + 1 rib_70_elo1_b3126_15_cplx --> 3810 EF-G.GDP + 3810 EF-Tu.GDP + 345 ala1_tRNA + 150 ala2_tRNA + 135 arg1_tRNA + 195 asn1_tRNA + 210 asp1_tRNA + 15 cysT_tRNA + 15 fmet_tRNA + 120 gln1_tRNA + 30 gln2_tRNA + 180 glu1_tRNA + 285 gly1_tRNA + 15 glyU_tRNA + 7620 h + 90 hisR_tRNA + 240 ile1_tRNA + 15 ile2_tRNA + 150 leu1_tRNA + 30 leu2_tRNA + 90 leuU_tRNA + 30 leuZ_tRNA + 165 lys1_tRNA + 30 met1_tRNA + 19125 mg2 + 210 phe1_tRNA + 7620 pi + 120 pro1_tRNA + 15 pro2_tRNA + 30 proL_tRNA + 45 proM_tRNA + 1 rib_70_elo2_b3126_15_cplx + 30 ser1_tRNA + 45 ser2_tRNA + 15 ser3_tRNA + 45 serT_tRNA + 120 serV_tRNA + 75 thr1_tRNA + 45 thr2_tRNA + 30 thr3_tRNA + 15 thrU_tRNA + 45 trpT_tRNA + 60 tyr1_tRNA + 195 val1_tRNA + 105 val2_tRNA + 45 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_elo_b3126_1_rib1	Translation elongation 1 b3126 1 ribosome(s)	255 EF-G.GTP + 23 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 9 EF-Tu.GTP.arg1-tRNA + 13 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 19 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 14 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 8 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 13 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 1275 mg2 + 1 rib_ini_b3126_1 --> 1 rib_70_elo1_b3126_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_elo_b3126_1_rib2	Translation elongation 2 b3126 1 ribosome(s)	254 h2o + 1 rib_70_elo1_b3126_1_cplx --> 254 EF-G.GDP + 254 EF-Tu.GDP + 23 ala1_tRNA + 10 ala2_tRNA + 9 arg1_tRNA + 13 asn1_tRNA + 14 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 2 gln2_tRNA + 12 glu1_tRNA + 19 gly1_tRNA + 1 glyU_tRNA + 508 h + 6 hisR_tRNA + 16 ile1_tRNA + 1 ile2_tRNA + 10 leu1_tRNA + 2 leu2_tRNA + 6 leuU_tRNA + 2 leuZ_tRNA + 11 lys1_tRNA + 2 met1_tRNA + 1275 mg2 + 14 phe1_tRNA + 508 pi + 8 pro1_tRNA + 1 pro2_tRNA + 2 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3126_1_cplx + 2 ser1_tRNA + 3 ser2_tRNA + 1 ser3_tRNA + 3 serT_tRNA + 8 serV_tRNA + 5 thr1_tRNA + 3 thr2_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 3 trpT_tRNA + 4 tyr1_tRNA + 13 val1_tRNA + 7 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_elo_b3126_7_rib1	Translation elongation 1 b3126 7 ribosome(s)	1785 EF-G.GTP + 161 EF-Tu.GTP.ala1-tRNA + 70 EF-Tu.GTP.ala2-tRNA + 63 EF-Tu.GTP.arg1-tRNA + 91 EF-Tu.GTP.asn1-tRNA + 98 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 56 EF-Tu.GTP.gln1-tRNA + 14 EF-Tu.GTP.gln2-tRNA + 84 EF-Tu.GTP.glu1-tRNA + 133 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 42 EF-Tu.GTP.hisR-tRNA + 112 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.ile2-tRNA + 70 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leu2-tRNA + 42 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.leuZ-tRNA + 84 EF-Tu.GTP.lys1-tRNA + 14 EF-Tu.GTP.met1-tRNA + 98 EF-Tu.GTP.phe1-tRNA + 56 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proL-tRNA + 21 EF-Tu.GTP.proM-tRNA + 14 EF-Tu.GTP.ser1-tRNA + 21 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.ser3-tRNA + 21 EF-Tu.GTP.serT-tRNA + 56 EF-Tu.GTP.serV-tRNA + 35 EF-Tu.GTP.thr1-tRNA + 21 EF-Tu.GTP.thr2-tRNA + 14 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 21 EF-Tu.GTP.trpT-tRNA + 28 EF-Tu.GTP.tyr1-tRNA + 91 EF-Tu.GTP.val1-tRNA + 49 EF-Tu.GTP.val2-tRNA + 21 EF-Tu.GTP.val3-tRNA + 8925 mg2 + 1 rib_ini_b3126_7 --> 1 rib_70_elo1_b3126_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_elo_b3126_7_rib2	Translation elongation 2 b3126 7 ribosome(s)	1778 h2o + 1 rib_70_elo1_b3126_7_cplx --> 1778 EF-G.GDP + 1778 EF-Tu.GDP + 161 ala1_tRNA + 70 ala2_tRNA + 63 arg1_tRNA + 91 asn1_tRNA + 98 asp1_tRNA + 7 cysT_tRNA + 7 fmet_tRNA + 56 gln1_tRNA + 14 gln2_tRNA + 84 glu1_tRNA + 133 gly1_tRNA + 7 glyU_tRNA + 3556 h + 42 hisR_tRNA + 112 ile1_tRNA + 7 ile2_tRNA + 70 leu1_tRNA + 14 leu2_tRNA + 42 leuU_tRNA + 14 leuZ_tRNA + 77 lys1_tRNA + 14 met1_tRNA + 8925 mg2 + 98 phe1_tRNA + 3556 pi + 56 pro1_tRNA + 7 pro2_tRNA + 14 proL_tRNA + 21 proM_tRNA + 1 rib_70_elo2_b3126_7_cplx + 14 ser1_tRNA + 21 ser2_tRNA + 7 ser3_tRNA + 21 serT_tRNA + 56 serV_tRNA + 35 thr1_tRNA + 21 thr2_tRNA + 14 thr3_tRNA + 7 thrU_tRNA + 21 trpT_tRNA + 28 tyr1_tRNA + 91 val1_tRNA + 49 val2_tRNA + 21 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_elo_b3127_13_rib1	Translation elongation 1 b3127 13 ribosome(s)	5759 EF-G.GTP + 364 EF-Tu.GTP.ala1-tRNA + 156 EF-Tu.GTP.ala2-tRNA + 130 EF-Tu.GTP.arg1-tRNA + 169 EF-Tu.GTP.asn1-tRNA + 143 EF-Tu.GTP.asp1-tRNA + 65 EF-Tu.GTP.cysT-tRNA + 39 EF-Tu.GTP.gln1-tRNA + 65 EF-Tu.GTP.gln2-tRNA + 169 EF-Tu.GTP.glu1-tRNA + 416 EF-Tu.GTP.gly1-tRNA + 78 EF-Tu.GTP.glyT-tRNA + 26 EF-Tu.GTP.glyU-tRNA + 91 EF-Tu.GTP.hisR-tRNA + 377 EF-Tu.GTP.ile1-tRNA + 13 EF-Tu.GTP.ile2-tRNA + 442 EF-Tu.GTP.leu1-tRNA + 78 EF-Tu.GTP.leu2-tRNA + 117 EF-Tu.GTP.leuU-tRNA + 26 EF-Tu.GTP.leuW-tRNA + 65 EF-Tu.GTP.leuZ-tRNA + 286 EF-Tu.GTP.lys1-tRNA + 234 EF-Tu.GTP.met1-tRNA + 507 EF-Tu.GTP.phe1-tRNA + 130 EF-Tu.GTP.pro1-tRNA + 26 EF-Tu.GTP.proL-tRNA + 52 EF-Tu.GTP.proM-tRNA + 91 EF-Tu.GTP.ser1-tRNA + 65 EF-Tu.GTP.ser2-tRNA + 130 EF-Tu.GTP.ser3-tRNA + 26 EF-Tu.GTP.serT-tRNA + 65 EF-Tu.GTP.serV-tRNA + 195 EF-Tu.GTP.thr1-tRNA + 39 EF-Tu.GTP.thr2-tRNA + 52 EF-Tu.GTP.thr3-tRNA + 13 EF-Tu.GTP.thrU-tRNA + 156 EF-Tu.GTP.trpT-tRNA + 182 EF-Tu.GTP.tyr1-tRNA + 208 EF-Tu.GTP.val1-tRNA + 130 EF-Tu.GTP.val2-tRNA + 143 EF-Tu.GTP.val3-tRNA + 28795 mg2 + 1 rib_ini_b3127_13 --> 1 rib_70_elo1_b3127_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599

tl_elo_b3127_13_rib2	Translation elongation 2 b3127 13 ribosome(s)	5746 h2o + 1 rib_70_elo1_b3127_13_cplx --> 5746 EF-G.GDP + 5746 EF-Tu.GDP + 364 ala1_tRNA + 156 ala2_tRNA + 130 arg1_tRNA + 169 asn1_tRNA + 143 asp1_tRNA + 65 cysT_tRNA + 13 fmet_tRNA + 39 gln1_tRNA + 65 gln2_tRNA + 169 glu1_tRNA + 416 gly1_tRNA + 78 glyT_tRNA + 26 glyU_tRNA + 11492 h + 91 hisR_tRNA + 377 ile1_tRNA + 13 ile2_tRNA + 442 leu1_tRNA + 78 leu2_tRNA + 117 leuU_tRNA + 26 leuW_tRNA + 65 leuZ_tRNA + 27 lys1_tRNA + 234 met1_tRNA + 28795 mg2 + 507 phe1_tRNA + 11492 pi + 130 pro1_tRNA + 26 proL_tRNA + 52 proM_tRNA + 1 rib_70_elo2_b3127_13_cplx + 91 ser1_tRNA + 65 ser2_tRNA + 130 ser3_tRNA + 26 serT_tRNA + 65 serV_tRNA + 195 thr1_tRNA + 39 thr2_tRNA + 52 thr3_tRNA + 13 thrU_tRNA + 156 trpT_tRNA + 182 tyr1_tRNA + 208 val1_tRNA + 130 val2_tRNA + 143 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_elo_b3127_1_rib1	Translation elongation 1 b3127 1 ribosome(s)	443 EF-G.GTP + 28 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 13 EF-Tu.GTP.asn1-tRNA + 11 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 13 EF-Tu.GTP.glu1-tRNA + 32 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 29 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 34 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 22 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 39 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 14 EF-Tu.GTP.tyr1-tRNA + 16 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 11 EF-Tu.GTP.val3-tRNA + 2215 mg2 + 1 rib_ini_b3127_1 --> 1 rib_70_elo1_b3127_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_elo_b3127_1_rib2	Translation elongation 2 b3127 1 ribosome(s)	442 h2o + 1 rib_70_elo1_b3127_1_cplx --> 442 EF-G.GDP + 442 EF-Tu.GDP + 28 ala1_tRNA + 12 ala2_tRNA + 10 arg1_tRNA + 13 asn1_tRNA + 11 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 5 gln2_tRNA + 13 glu1_tRNA + 32 gly1_tRNA + 6 glyT_tRNA + 2 glyU_tRNA + 884 h + 7 hisR_tRNA + 29 ile1_tRNA + 1 ile2_tRNA + 34 leu1_tRNA + 6 leu2_tRNA + 9 leuU_tRNA + 2 leuW_tRNA + 5 leuZ_tRNA + 21 lys1_tRNA + 18 met1_tRNA + 2215 mg2 + 39 phe1_tRNA + 884 pi + 10 pro1_tRNA + 2 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b3127_1_cplx + 7 ser1_tRNA + 5 ser2_tRNA + 10 ser3_tRNA + 2 serT_tRNA + 5 serV_tRNA + 15 thr1_tRNA + 3 thr2_tRNA + 4 thr3_tRNA + 1 thrU_tRNA + 12 trpT_tRNA + 14 tyr1_tRNA + 16 val1_tRNA + 10 val2_tRNA + 11 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_elo_b3127_26_rib1	Translation elongation 1 b3127 26 ribosome(s)	11518 EF-G.GTP + 728 EF-Tu.GTP.ala1-tRNA + 312 EF-Tu.GTP.ala2-tRNA + 260 EF-Tu.GTP.arg1-tRNA + 338 EF-Tu.GTP.asn1-tRNA + 286 EF-Tu.GTP.asp1-tRNA + 130 EF-Tu.GTP.cysT-tRNA + 78 EF-Tu.GTP.gln1-tRNA + 130 EF-Tu.GTP.gln2-tRNA + 338 EF-Tu.GTP.glu1-tRNA + 832 EF-Tu.GTP.gly1-tRNA + 156 EF-Tu.GTP.glyT-tRNA + 52 EF-Tu.GTP.glyU-tRNA + 182 EF-Tu.GTP.hisR-tRNA + 754 EF-Tu.GTP.ile1-tRNA + 26 EF-Tu.GTP.ile2-tRNA + 884 EF-Tu.GTP.leu1-tRNA + 156 EF-Tu.GTP.leu2-tRNA + 234 EF-Tu.GTP.leuU-tRNA + 52 EF-Tu.GTP.leuW-tRNA + 130 EF-Tu.GTP.leuZ-tRNA + 572 EF-Tu.GTP.lys1-tRNA + 468 EF-Tu.GTP.met1-tRNA + 1014 EF-Tu.GTP.phe1-tRNA + 260 EF-Tu.GTP.pro1-tRNA + 52 EF-Tu.GTP.proL-tRNA + 104 EF-Tu.GTP.proM-tRNA + 182 EF-Tu.GTP.ser1-tRNA + 130 EF-Tu.GTP.ser2-tRNA + 260 EF-Tu.GTP.ser3-tRNA + 52 EF-Tu.GTP.serT-tRNA + 130 EF-Tu.GTP.serV-tRNA + 390 EF-Tu.GTP.thr1-tRNA + 78 EF-Tu.GTP.thr2-tRNA + 104 EF-Tu.GTP.thr3-tRNA + 26 EF-Tu.GTP.thrU-tRNA + 312 EF-Tu.GTP.trpT-tRNA + 364 EF-Tu.GTP.tyr1-tRNA + 416 EF-Tu.GTP.val1-tRNA + 260 EF-Tu.GTP.val2-tRNA + 286 EF-Tu.GTP.val3-tRNA + 57590 mg2 + 1 rib_ini_b3127_26 --> 1 rib_70_elo1_b3127_26_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_elo_b3127_26_rib2	Translation elongation 2 b3127 26 ribosome(s)	11492 h2o + 1 rib_70_elo1_b3127_26_cplx --> 11492 EF-G.GDP + 11492 EF-Tu.GDP + 728 ala1_tRNA + 312 ala2_tRNA + 260 arg1_tRNA + 338 asn1_tRNA + 286 asp1_tRNA + 130 cysT_tRNA + 26 fmet_tRNA + 78 gln1_tRNA + 130 gln2_tRNA + 338 glu1_tRNA + 832 gly1_tRNA + 156 glyT_tRNA + 52 glyU_tRNA + 22984 h + 182 hisR_tRNA + 754 ile1_tRNA + 26 ile2_tRNA + 884 leu1_tRNA + 156 leu2_tRNA + 234 leuU_tRNA + 52 leuW_tRNA + 130 leuZ_tRNA + 546 lys1_tRNA + 468 met1_tRNA + 57590 mg2 + 1014 phe1_tRNA + 22984 pi + 260 pro1_tRNA + 52 proL_tRNA + 104 proM_tRNA + 1 rib_70_elo2_b3127_26_cplx + 182 ser1_tRNA + 130 ser2_tRNA + 260 ser3_tRNA + 52 serT_tRNA + 130 serV_tRNA + 390 thr1_tRNA + 78 thr2_tRNA + 104 thr3_tRNA + 26 thrU_tRNA + 312 trpT_tRNA + 364 tyr1_tRNA + 416 val1_tRNA + 260 val2_tRNA + 286 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_elo_b3164_1_rib1	Translation elongation 1 b3164 1 ribosome(s)	733 EF-G.GTP + 64 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 45 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argW-tRNA + 21 EF-Tu.GTP.asn1-tRNA + 43 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 25 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 60 EF-Tu.GTP.glu1-tRNA + 64 EF-Tu.GTP.gly1-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 54 EF-Tu.GTP.ile1-tRNA + 46 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 36 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 19 EF-Tu.GTP.phe1-tRNA + 26 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 17 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serV-tRNA + 26 EF-Tu.GTP.thr1-tRNA + 13 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 14 EF-Tu.GTP.tyr1-tRNA + 30 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 34 EF-Tu.GTP.val3-tRNA + 3665 mg2 + 1 rib_ini_b3164_1 --> 1 rib_70_elo1_b3164_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.09E+01	6.09E+01	0	1.04E+02	103.7766	0	4.46E+00	4.456

tl_elo_b3164_1_rib2	Translation elongation 2 b3164 1 ribosome(s)	732 h2o + 1 rib_70_elo1_b3164_1_cplx --> 732 EF-G.GDP + 732 EF-Tu.GDP + 64 ala1_tRNA + 10 ala2_tRNA + 45 arg1_tRNA + 4 argU_tRNA + 1 argW_tRNA + 21 asn1_tRNA + 43 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 25 gln1_tRNA + 7 gln2_tRNA + 59 glu1_tRNA + 64 gly1_tRNA + 1464 h + 11 hisR_tRNA + 54 ile1_tRNA + 46 leu1_tRNA + 2 leu2_tRNA + 3 leuU_tRNA + 2 leuW_tRNA + 36 lys1_tRNA + 20 met1_tRNA + 3665 mg2 + 19 phe1_tRNA + 1464 pi + 26 pro1_tRNA + 2 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3164_1_cplx + 6 ser1_tRNA + 17 ser2_tRNA + 1 ser3_tRNA + 9 serV_tRNA + 26 thr1_tRNA + 13 thr2_tRNA + 3 thr3_tRNA + 1 thrU_tRNA + 2 trpT_tRNA + 14 tyr1_tRNA + 30 val1_tRNA + 7 val2_tRNA + 34 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.09E+01	6.09E+01	0	1.04E+02	103.7766	0	4.46E+00	4.456
tl_elo_b3164_21_rib1	Translation elongation 1 b3164 21 ribosome(s)	15393 EF-G.GTP + 1344 EF-Tu.GTP.ala1-tRNA + 210 EF-Tu.GTP.ala2-tRNA + 945 EF-Tu.GTP.arg1-tRNA + 84 EF-Tu.GTP.argU-tRNA + 21 EF-Tu.GTP.argW-tRNA + 441 EF-Tu.GTP.asn1-tRNA + 903 EF-Tu.GTP.asp1-tRNA + 42 EF-Tu.GTP.cysT-tRNA + 525 EF-Tu.GTP.gln1-tRNA + 147 EF-Tu.GTP.gln2-tRNA + 1260 EF-Tu.GTP.glu1-tRNA + 1344 EF-Tu.GTP.gly1-tRNA + 231 EF-Tu.GTP.hisR-tRNA + 1134 EF-Tu.GTP.ile1-tRNA + 966 EF-Tu.GTP.leu1-tRNA + 42 EF-Tu.GTP.leu2-tRNA + 63 EF-Tu.GTP.leuU-tRNA + 42 EF-Tu.GTP.leuW-tRNA + 756 EF-Tu.GTP.lys1-tRNA + 420 EF-Tu.GTP.met1-tRNA + 399 EF-Tu.GTP.phe1-tRNA + 546 EF-Tu.GTP.pro1-tRNA + 42 EF-Tu.GTP.pro2-tRNA + 63 EF-Tu.GTP.proM-tRNA + 126 EF-Tu.GTP.ser1-tRNA + 357 EF-Tu.GTP.ser2-tRNA + 21 EF-Tu.GTP.ser3-tRNA + 189 EF-Tu.GTP.serV-tRNA + 546 EF-Tu.GTP.thr1-tRNA + 273 EF-Tu.GTP.thr2-tRNA + 63 EF-Tu.GTP.thr3-tRNA + 21 EF-Tu.GTP.thrU-tRNA + 42 EF-Tu.GTP.trpT-tRNA + 294 EF-Tu.GTP.tyr1-tRNA + 630 EF-Tu.GTP.val1-tRNA + 147 EF-Tu.GTP.val2-tRNA + 714 EF-Tu.GTP.val3-tRNA + 76965 mg2 + 1 rib_ini_b3164_21 --> 1 rib_70_elo1_b3164_21_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.76E+01	2.76E+01	0	3.41E+01	34.10083	0	4.12E+00	4.116357
tl_elo_b3164_21_rib2	Translation elongation 2 b3164 21 ribosome(s)	15372 h2o + 1 rib_70_elo1_b3164_21_cplx --> 15372 EF-G.GDP + 15372 EF-Tu.GDP + 1344 ala1_tRNA + 210 ala2_tRNA + 945 arg1_tRNA + 84 argU_tRNA + 21 argW_tRNA + 441 asn1_tRNA + 903 asp1_tRNA + 42 cysT_tRNA + 21 fmet_tRNA + 525 gln1_tRNA + 147 gln2_tRNA + 1239 glu1_tRNA + 1344 gly1_tRNA + 30744 h + 231 hisR_tRNA + 1134 ile1_tRNA + 966 leu1_tRNA + 42 leu2_tRNA + 63 leuU_tRNA + 42 leuW_tRNA + 756 lys1_tRNA + 420 met1_tRNA + 76965 mg2 + 399 phe1_tRNA + 30744 pi + 546 pro1_tRNA + 42 pro2_tRNA + 63 proM_tRNA + 1 rib_70_elo2_b3164_21_cplx + 126 ser1_tRNA + 357 ser2_tRNA + 21 ser3_tRNA + 189 serV_tRNA + 546 thr1_tRNA + 273 thr2_tRNA + 63 thr3_tRNA + 21 thrU_tRNA + 42 trpT_tRNA + 294 tyr1_tRNA + 630 val1_tRNA + 147 val2_tRNA + 714 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.76E+01	2.76E+01	0	3.41E+01	34.10083	0	4.12E+00	4.116357
tl_elo_b3164_43_rib1	Translation elongation 1 b3164 43 ribosome(s)	31519 EF-G.GTP + 2752 EF-Tu.GTP.ala1-tRNA + 430 EF-Tu.GTP.ala2-tRNA + 1935 EF-Tu.GTP.arg1-tRNA + 172 EF-Tu.GTP.argU-tRNA + 43 EF-Tu.GTP.argW-tRNA + 903 EF-Tu.GTP.asn1-tRNA + 1849 EF-Tu.GTP.asp1-tRNA + 86 EF-Tu.GTP.cysT-tRNA + 1075 EF-Tu.GTP.gln1-tRNA + 301 EF-Tu.GTP.gln2-tRNA + 2580 EF-Tu.GTP.glu1-tRNA + 2752 EF-Tu.GTP.gly1-tRNA + 473 EF-Tu.GTP.hisR-tRNA + 2322 EF-Tu.GTP.ile1-tRNA + 1978 EF-Tu.GTP.leu1-tRNA + 86 EF-Tu.GTP.leu2-tRNA + 129 EF-Tu.GTP.leuU-tRNA + 86 EF-Tu.GTP.leuW-tRNA + 1548 EF-Tu.GTP.lys1-tRNA + 860 EF-Tu.GTP.met1-tRNA + 817 EF-Tu.GTP.phe1-tRNA + 1118 EF-Tu.GTP.pro1-tRNA + 86 EF-Tu.GTP.pro2-tRNA + 129 EF-Tu.GTP.proM-tRNA + 258 EF-Tu.GTP.ser1-tRNA + 731 EF-Tu.GTP.ser2-tRNA + 43 EF-Tu.GTP.ser3-tRNA + 387 EF-Tu.GTP.serV-tRNA + 1118 EF-Tu.GTP.thr1-tRNA + 559 EF-Tu.GTP.thr2-tRNA + 129 EF-Tu.GTP.thr3-tRNA + 43 EF-Tu.GTP.thrU-tRNA + 86 EF-Tu.GTP.trpT-tRNA + 602 EF-Tu.GTP.tyr1-tRNA + 1290 EF-Tu.GTP.val1-tRNA + 301 EF-Tu.GTP.val2-tRNA + 1462 EF-Tu.GTP.val3-tRNA + 157595 mg2 + 1 rib_ini_b3164_43 --> 1 rib_70_elo1_b3164_43_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	1.67E+01	16.65389	0	2.01E+00	2.010314
tl_elo_b3164_43_rib2	Translation elongation 2 b3164 43 ribosome(s)	31476 h2o + 1 rib_70_elo1_b3164_43_cplx --> 31476 EF-G.GDP + 31476 EF-Tu.GDP + 2752 ala1_tRNA + 430 ala2_tRNA + 1935 arg1_tRNA + 172 argU_tRNA + 43 argW_tRNA + 903 asn1_tRNA + 1849 asp1_tRNA + 86 cysT_tRNA + 43 fmet_tRNA + 1075 gln1_tRNA + 301 gln2_tRNA + 2537 glu1_tRNA + 2752 gly1_tRNA + 62952 h + 473 hisR_tRNA + 2322 ile1_tRNA + 1978 leu1_tRNA + 86 leu2_tRNA + 129 leuU_tRNA + 86 leuW_tRNA + 1548 lys1_tRNA + 860 met1_tRNA + 157595 mg2 + 817 phe1_tRNA + 62952 pi + 1118 pro1_tRNA + 86 pro2_tRNA + 129 proM_tRNA + 1 rib_70_elo2_b3164_43_cplx + 258 ser1_tRNA + 731 ser2_tRNA + 43 ser3_tRNA + 387 serV_tRNA + 1118 thr1_tRNA + 559 thr2_tRNA + 129 thr3_tRNA + 43 thrU_tRNA + 86 trpT_tRNA + 602 tyr1_tRNA + 1290 val1_tRNA + 301 val2_tRNA + 1462 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	1.67E+01	16.65389	0	2.01E+00	2.010314
tl_elo_b3165_1_rib1	Translation elongation 1 b3165 1 ribosome(s)	88 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 3 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 6 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val3-tRNA + 440 mg2 + 1 rib_ini_b3165_1 --> 1 rib_70_elo1_b3165_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	5.44E+01	54.43625
tl_elo_b3165_1_rib2	Translation elongation 2 b3165 1 ribosome(s)	87 h2o + 1 rib_70_elo1_b3165_1_cplx --> 87 EF-G.GDP + 87 EF-Tu.GDP + 7 ala1_tRNA + 10 arg1_tRNA + 2 asn1_tRNA + 5 asp1_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 5 glu1_tRNA + 5 gly1_tRNA + 174 h + 5 hisR_tRNA + 3 ile1_tRNA + 9 leu1_tRNA + 2 leuU_tRNA + 1 leuW_tRNA + 6 lys1_tRNA + 1 met1_tRNA + 440 mg2 + 2 phe1_tRNA + 174 pi + 1 rib_70_elo2_b3165_1_cplx + 4 ser2_tRNA + 2 serV_tRNA + 3 thr1_tRNA + 2 thr2_tRNA + 1 thrU_tRNA + 2 tyr1_tRNA + 2 val1_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	5.44E+01	54.43625

tl_elo_b3165_2_rib1	Translation elongation 1 b3165 2 ribosome(s)	176 EF-G.GTP + 14 EF-Tu.GTP.ala1-tRNA + 22 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val3-tRNA + 880 mg2 + 1 rib_ini_b3165_2 --> 1 rib_70_elo1_b3165_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3165_2_rib2	Translation elongation 2 b3165 2 ribosome(s)	174 h2o + 1 rib_70_elo1_b3165_2_cplx --> 174 EF-G.GDP + 174 EF-Tu.GDP + 14 ala1_tRNA + 20 arg1_tRNA + 4 asn1_tRNA + 10 asp1_tRNA + 2 fmet_tRNA + 10 gln1_tRNA + 10 glu1_tRNA + 10 gly1_tRNA + 348 h + 10 hisR_tRNA + 6 ile1_tRNA + 18 leu1_tRNA + 4 leuU_tRNA + 2 leuW_tRNA + 12 lys1_tRNA + 2 met1_tRNA + 880 mg2 + 4 phe1_tRNA + 348 pi + 1 rib_70_elo2_b3165_2_cplx + 8 ser2_tRNA + 4 serV_tRNA + 6 thr1_tRNA + 4 thr2_tRNA + 2 thrU_tRNA + 4 tyr1_tRNA + 4 val1_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3165_5_rib1	Translation elongation 1 b3165 5 ribosome(s)	440 EF-G.GTP + 35 EF-Tu.GTP.ala1-tRNA + 55 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 25 EF-Tu.GTP.asp1-tRNA + 25 EF-Tu.GTP.gln1-tRNA + 25 EF-Tu.GTP.glu1-tRNA + 25 EF-Tu.GTP.gly1-tRNA + 25 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 45 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuW-tRNA + 30 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 15 EF-Tu.GTP.val3-tRNA + 2200 mg2 + 1 rib_ini_b3165_5 --> 1 rib_70_elo1_b3165_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3165_5_rib2	Translation elongation 2 b3165 5 ribosome(s)	435 h2o + 1 rib_70_elo1_b3165_5_cplx --> 435 EF-G.GDP + 435 EF-Tu.GDP + 35 ala1_tRNA + 50 arg1_tRNA + 10 asn1_tRNA + 25 asp1_tRNA + 5 fmet_tRNA + 25 gln1_tRNA + 25 glu1_tRNA + 25 gly1_tRNA + 870 h + 25 hisR_tRNA + 15 ile1_tRNA + 45 leu1_tRNA + 10 leuU_tRNA + 5 leuW_tRNA + 30 lys1_tRNA + 5 met1_tRNA + 2200 mg2 + 10 phe1_tRNA + 870 pi + 1 rib_70_elo2_b3165_5_cplx + 20 ser2_tRNA + 10 serV_tRNA + 15 thr1_tRNA + 10 thr2_tRNA + 5 thrU_tRNA + 10 tyr1_tRNA + 10 val1_tRNA + 15 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3166_18_rib1	Translation elongation 1 b3166 18 ribosome(s)	5634 EF-G.GTP + 360 EF-Tu.GTP.ala1-tRNA + 72 EF-Tu.GTP.ala2-tRNA + 450 EF-Tu.GTP.arg1-tRNA + 36 EF-Tu.GTP.argX-tRNA + 162 EF-Tu.GTP.asn1-tRNA + 342 EF-Tu.GTP.asp1-tRNA + 54 EF-Tu.GTP.cysT-tRNA + 180 EF-Tu.GTP.gln1-tRNA + 36 EF-Tu.GTP.gln2-tRNA + 468 EF-Tu.GTP.glu1-tRNA + 360 EF-Tu.GTP.gly1-tRNA + 54 EF-Tu.GTP.glyT-tRNA + 36 EF-Tu.GTP.glyU-tRNA + 90 EF-Tu.GTP.hisR-tRNA + 306 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.ile2-tRNA + 396 EF-Tu.GTP.leu1-tRNA + 72 EF-Tu.GTP.leu2-tRNA + 108 EF-Tu.GTP.leuU-tRNA + 54 EF-Tu.GTP.leuZ-tRNA + 234 EF-Tu.GTP.lys1-tRNA + 126 EF-Tu.GTP.met1-tRNA + 108 EF-Tu.GTP.phe1-tRNA + 180 EF-Tu.GTP.pro1-tRNA + 72 EF-Tu.GTP.pro2-tRNA + 90 EF-Tu.GTP.proM-tRNA + 54 EF-Tu.GTP.ser1-tRNA + 72 EF-Tu.GTP.ser2-tRNA + 36 EF-Tu.GTP.ser3-tRNA + 36 EF-Tu.GTP.serT-tRNA + 90 EF-Tu.GTP.serV-tRNA + 126 EF-Tu.GTP.thr1-tRNA + 54 EF-Tu.GTP.thr2-tRNA + 54 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 252 EF-Tu.GTP.tyr1-tRNA + 126 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val2-tRNA + 216 EF-Tu.GTP.val3-tRNA + 28170 mg2 + 1 rib_ini_b3166_18 --> 1 rib_70_elo1_b3166_18_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_elo_b3166_18_rib2	Translation elongation 2 b3166 18 ribosome(s)	5616 h2o + 1 rib_70_elo1_b3166_18_cplx --> 5616 EF-G.GDP + 5616 EF-Tu.GDP + 342 ala1_tRNA + 72 ala2_tRNA + 450 arg1_tRNA + 36 argX_tRNA + 162 asn1_tRNA + 342 asp1_tRNA + 54 cysT_tRNA + 18 fmet_tRNA + 180 gln1_tRNA + 36 gln2_tRNA + 468 glu1_tRNA + 360 gly1_tRNA + 54 glyT_tRNA + 36 glyU_tRNA + 11232 h + 90 hisR_tRNA + 306 ile1_tRNA + 18 ile2_tRNA + 396 leu1_tRNA + 72 leu2_tRNA + 108 leuU_tRNA + 54 leuZ_tRNA + 234 lys1_tRNA + 126 met1_tRNA + 28170 mg2 + 108 phe1_tRNA + 11232 pi + 180 pro1_tRNA + 72 pro2_tRNA + 90 proM_tRNA + 1 rib_70_elo2_b3166_18_cplx + 54 ser1_tRNA + 72 ser2_tRNA + 36 ser3_tRNA + 36 serT_tRNA + 90 serV_tRNA + 126 thr1_tRNA + 54 thr2_tRNA + 54 thr3_tRNA + 18 thrU_tRNA + 252 tyr1_tRNA + 126 val1_tRNA + 36 val2_tRNA + 216 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_elo_b3166_1_rib1	Translation elongation 1 b3166 1 ribosome(s)	313 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 25 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 19 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 26 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 17 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 22 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 14 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1565 mg2 + 1 rib_ini_b3166_1 --> 1 rib_70_elo1_b3166_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_elo_b3166_1_rib2	Translation elongation 2 b3166 1 ribosome(s)	312 h2o + 1 rib_70_elo1_b3166_1_cplx --> 312 EF-G.GDP + 312 EF-Tu.GDP + 19 ala1_tRNA + 4 ala2_tRNA + 25 arg1_tRNA + 2 argX_tRNA + 9 asn1_tRNA + 19 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 10 gln1_tRNA + 2 gln2_tRNA + 26 glu1_tRNA + 20 gly1_tRNA + 3 glyT_tRNA + 2 glyU_tRNA + 624 h + 5 hisR_tRNA + 17 ile1_tRNA + 1 ile2_tRNA + 22 leu1_tRNA + 4 leu2_tRNA + 6 leuU_tRNA + 3 leuZ_tRNA + 13 lys1_tRNA + 7 met1_tRNA + 1565 mg2 + 6 phe1_tRNA + 624 pi + 10 pro1_tRNA + 4 pro2_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b3166_1_cplx + 3 ser1_tRNA + 4 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 5 serV_tRNA + 7 thr1_tRNA + 3 thr2_tRNA + 3 thr3_tRNA + 1 thrU_tRNA + 14 tyr1_tRNA + 7 val1_tRNA + 2 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006

tl_elo_b3166_9_rib1	Translation elongation 1 b3166 9 ribosome(s)	2817 EF-G.GTP + 180 EF-Tu.GTP.ala1-tRNA + 36 EF-Tu.GTP.ala2-tRNA + 225 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argX-tRNA + 81 EF-Tu.GTP.asn1-tRNA + 171 EF-Tu.GTP.asp1-tRNA + 27 EF-Tu.GTP.cysT-tRNA + 90 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 234 EF-Tu.GTP.glu1-tRNA + 180 EF-Tu.GTP.gly1-tRNA + 27 EF-Tu.GTP.glyT-tRNA + 18 EF-Tu.GTP.glyU-tRNA + 45 EF-Tu.GTP.hisR-tRNA + 153 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.ile2-tRNA + 198 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 54 EF-Tu.GTP.leuU-tRNA + 27 EF-Tu.GTP.leuZ-tRNA + 117 EF-Tu.GTP.lys1-tRNA + 63 EF-Tu.GTP.met1-tRNA + 54 EF-Tu.GTP.phe1-tRNA + 90 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 45 EF-Tu.GTP.proM-tRNA + 27 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serT-tRNA + 45 EF-Tu.GTP.serV-tRNA + 63 EF-Tu.GTP.thr1-tRNA + 27 EF-Tu.GTP.thr2-tRNA + 27 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 126 EF-Tu.GTP.tyr1-tRNA + 63 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 108 EF-Tu.GTP.val3-tRNA + 14085 mg2 + 1 rib_ini_b3166_9 --> 1 rib_70_elo1_b3166_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_elo_b3166_9_rib2	Translation elongation 2 b3166 9 ribosome(s)	2808 h2o + 1 rib_70_elo1_b3166_9_cplx --> 2808 EF-G.GDP + 2808 EF-Tu.GDP + 171 ala1_tRNA + 36 ala2_tRNA + 225 arg1_tRNA + 18 argX_tRNA + 81 asn1_tRNA + 171 asp1_tRNA + 27 cysT_tRNA + 9 fmet_tRNA + 90 gln1_tRNA + 18 gln2_tRNA + 234 glu1_tRNA + 180 gly1_tRNA + 27 glyT_tRNA + 18 glyU_tRNA + 5616 h + 45 hisR_tRNA + 153 ile1_tRNA + 9 ile2_tRNA + 198 leu1_tRNA + 36 leu2_tRNA + 54 leuU_tRNA + 27 leuZ_tRNA + 117 lys1_tRNA + 63 met1_tRNA + 14085 mg2 + 54 phe1_tRNA + 5616 pi + 90 pro1_tRNA + 36 pro2_tRNA + 45 proM_tRNA + 1 rib_70_elo2_b3166_9_cplx + 27 ser1_tRNA + 36 ser2_tRNA + 18 ser3_tRNA + 18 serT_tRNA + 45 serV_tRNA + 63 thr1_tRNA + 27 thr2_tRNA + 27 thr3_tRNA + 9 thrU_tRNA + 126 tyr1_tRNA + 63 val1_tRNA + 18 val2_tRNA + 108 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_elo_b3167_1_rib1	Translation elongation 1 b3167 1 ribosome(s)	132 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 660 mg2 + 1 rib_ini_b3167_1 --> 1 rib_70_elo1_b3167_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_elo_b3167_1_rib2	Translation elongation 2 b3167 1 ribosome(s)	131 h2o + 1 rib_70_elo1_b3167_1_cplx --> 131 EF-G.GDP + 131 EF-Tu.GDP + 9 ala1_tRNA + 1 ala2_tRNA + 11 arg1_tRNA + 4 asn1_tRNA + 9 asp1_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 2 gln2_tRNA + 12 glu1_tRNA + 5 gly1_tRNA + 2 glyU_tRNA + 262 h + 1 hisR_tRNA + 6 ile1_tRNA + 9 leu1_tRNA + 1 leu2_tRNA + 2 leuU_tRNA + 10 lys1_tRNA + 7 met1_tRNA + 660 mg2 + 5 phe1_tRNA + 262 pi + 3 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b3167_1_cplx + 1 ser1_tRNA + 3 ser2_tRNA + 1 serT_tRNA + 3 serV_tRNA + 4 thr1_tRNA + 1 thr3_tRNA + 3 tyr1_tRNA + 6 val1_tRNA + 2 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_elo_b3167_3_rib1	Translation elongation 1 b3167 3 ribosome(s)	396 EF-G.GTP + 27 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 33 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 30 EF-Tu.GTP.asp1-tRNA + 9 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 36 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 27 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 30 EF-Tu.GTP.lys1-tRNA + 21 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serT-tRNA + 9 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 18 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1980 mg2 + 1 rib_ini_b3167_3 --> 1 rib_70_elo1_b3167_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_elo_b3167_3_rib2	Translation elongation 2 b3167 3 ribosome(s)	393 h2o + 1 rib_70_elo1_b3167_3_cplx --> 393 EF-G.GDP + 393 EF-Tu.GDP + 27 ala1_tRNA + 3 ala2_tRNA + 33 arg1_tRNA + 12 asn1_tRNA + 27 asp1_tRNA + 3 fmet_tRNA + 9 gln1_tRNA + 6 gln2_tRNA + 36 glu1_tRNA + 15 gly1_tRNA + 6 glyU_tRNA + 786 h + 3 hisR_tRNA + 18 ile1_tRNA + 27 leu1_tRNA + 3 leu2_tRNA + 6 leuU_tRNA + 30 lys1_tRNA + 21 met1_tRNA + 1980 mg2 + 15 phe1_tRNA + 786 pi + 9 pro1_tRNA + 3 pro2_tRNA + 1 rib_70_elo2_b3167_3_cplx + 3 ser1_tRNA + 9 ser2_tRNA + 3 serT_tRNA + 9 serV_tRNA + 12 thr1_tRNA + 3 thr3_tRNA + 9 tyr1_tRNA + 18 val1_tRNA + 6 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_elo_b3167_7_rib1	Translation elongation 1 b3167 7 ribosome(s)	924 EF-G.GTP + 63 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 77 EF-Tu.GTP.arg1-tRNA + 28 EF-Tu.GTP.asn1-tRNA + 70 EF-Tu.GTP.asp1-tRNA + 21 EF-Tu.GTP.gln1-tRNA + 14 EF-Tu.GTP.gln2-tRNA + 84 EF-Tu.GTP.glu1-tRNA + 35 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 42 EF-Tu.GTP.ile1-tRNA + 63 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 14 EF-Tu.GTP.leuU-tRNA + 70 EF-Tu.GTP.lys1-tRNA + 49 EF-Tu.GTP.met1-tRNA + 35 EF-Tu.GTP.phe1-tRNA + 21 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 21 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.serT-tRNA + 21 EF-Tu.GTP.serV-tRNA + 28 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 21 EF-Tu.GTP.tyr1-tRNA + 42 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 28 EF-Tu.GTP.val3-tRNA + 4620 mg2 + 1 rib_ini_b3167_7 --> 1 rib_70_elo1_b3167_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966

tl_elo_b3167_7_rib2	Translation elongation 2 b3167 7 ribosome(s)	917 h2o + 1 rib_70_elo1_b3167_7_cplx --> 917 EF-G.GDP + 917 EF-Tu.GDP + 63 ala1_tRNA + 7 ala2_tRNA + 77 arg1_tRNA + 28 asn1_tRNA + 63 asp1_tRNA + 7 fmet_tRNA + 21 gln1_tRNA + 14 gln2_tRNA + 84 glu1_tRNA + 35 gly1_tRNA + 14 glyU_tRNA + 1834 h + 7 hisR_tRNA + 42 ile1_tRNA + 63 leu1_tRNA + 7 leu2_tRNA + 14 leuU_tRNA + 70 lys1_tRNA + 49 met1_tRNA + 4620 mg2 + 35 phe1_tRNA + 1834 pi + 21 pro1_tRNA + 7 pro2_tRNA + 1 rib_70_elo2_b3167_7_cplx + 7 ser1_tRNA + 21 ser2_tRNA + 7 serT_tRNA + 21 serV_tRNA + 28 thr1_tRNA + 7 thr3_tRNA + 21 tyr1_tRNA + 42 val1_tRNA + 14 val2_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_elo_b3168_1_rib1	Translation elongation 1 b3168 1 ribosome(s)	889 EF-G.GTP + 95 EF-Tu.GTP.ala1-tRNA + 14 EF-Tu.GTP.ala2-tRNA + 66 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 29 EF-Tu.GTP.asn1-tRNA + 48 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 30 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.gln2-tRNA + 99 EF-Tu.GTP.glu1-tRNA + 65 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 47 EF-Tu.GTP.ile1-tRNA + 42 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 66 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 11 EF-Tu.GTP.ser1-tRNA + 15 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 10 EF-Tu.GTP.serV-tRNA + 22 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 11 EF-Tu.GTP.tyr1-tRNA + 38 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 35 EF-Tu.GTP.val3-tRNA + 4445 mg2 + 1 rib_ini_b3168_1 --> 1 rib_70_elo1_b3168_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.97E+01	2.97E+01	0	5.26E+01	52.64525	0	9.63E-01	0.9631374
tl_elo_b3168_1_rib2	Translation elongation 2 b3168 1 ribosome(s)	888 h2o + 1 rib_70_elo1_b3168_1_cplx --> 888 EF-G.GDP + 888 EF-Tu.GDP + 94 ala1_tRNA + 14 ala2_tRNA + 66 arg1_tRNA + 1 argX_tRNA + 29 asn1_tRNA + 48 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 30 gln1_tRNA + 16 gln2_tRNA + 99 glu1_tRNA + 65 gly1_tRNA + 2 glyT_tRNA + 1 glyU_tRNA + 1776 h + 15 hisR_tRNA + 47 ile1_tRNA + 42 leu1_tRNA + 3 leu2_tRNA + 9 leuU_tRNA + 66 lys1_tRNA + 20 met1_tRNA + 4445 mg2 + 15 phe1_tRNA + 1776 pi + 18 pro1_tRNA + 2 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3168_1_cplx + 11 ser1_tRNA + 15 ser2_tRNA + 4 ser3_tRNA + 4 serT_tRNA + 10 serV_tRNA + 22 thr1_tRNA + 12 thr2_tRNA + 6 thr3_tRNA + 2 thrU_tRNA + 2 trpT_tRNA + 11 tyr1_tRNA + 38 val1_tRNA + 10 val2_tRNA + 35 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.97E+01	2.97E+01	0	5.26E+01	52.64525	0	9.63E-01	0.9631374
tl_elo_b3168_26_rib1	Translation elongation 1 b3168 26 ribosome(s)	23114 EF-G.GTP + 2470 EF-Tu.GTP.ala1-tRNA + 364 EF-Tu.GTP.ala2-tRNA + 1716 EF-Tu.GTP.arg1-tRNA + 26 EF-Tu.GTP.argX-tRNA + 754 EF-Tu.GTP.asn1-tRNA + 1248 EF-Tu.GTP.asp1-tRNA + 78 EF-Tu.GTP.cysT-tRNA + 780 EF-Tu.GTP.gln1-tRNA + 416 EF-Tu.GTP.gln2-tRNA + 2574 EF-Tu.GTP.glu1-tRNA + 1690 EF-Tu.GTP.gly1-tRNA + 52 EF-Tu.GTP.glyT-tRNA + 26 EF-Tu.GTP.glyU-tRNA + 390 EF-Tu.GTP.hisR-tRNA + 1222 EF-Tu.GTP.ile1-tRNA + 1092 EF-Tu.GTP.leu1-tRNA + 78 EF-Tu.GTP.leu2-tRNA + 234 EF-Tu.GTP.leuU-tRNA + 1716 EF-Tu.GTP.lys1-tRNA + 520 EF-Tu.GTP.met1-tRNA + 390 EF-Tu.GTP.phe1-tRNA + 468 EF-Tu.GTP.pro1-tRNA + 52 EF-Tu.GTP.pro2-tRNA + 26 EF-Tu.GTP.proM-tRNA + 286 EF-Tu.GTP.ser1-tRNA + 390 EF-Tu.GTP.ser2-tRNA + 104 EF-Tu.GTP.ser3-tRNA + 104 EF-Tu.GTP.serT-tRNA + 260 EF-Tu.GTP.serV-tRNA + 572 EF-Tu.GTP.thr1-tRNA + 312 EF-Tu.GTP.thr2-tRNA + 156 EF-Tu.GTP.thr3-tRNA + 52 EF-Tu.GTP.thrU-tRNA + 52 EF-Tu.GTP.trpT-tRNA + 286 EF-Tu.GTP.tyr1-tRNA + 988 EF-Tu.GTP.val1-tRNA + 260 EF-Tu.GTP.val2-tRNA + 910 EF-Tu.GTP.val3-tRNA + 115570 mg2 + 1 rib_ini_b3168_26 --> 1 rib_70_elo1_b3168_26_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.08E+01	3.08E+01	0	5.28E+01	52.82823	0	1.89E+00	1.889231
tl_elo_b3168_26_rib2	Translation elongation 2 b3168 26 ribosome(s)	23088 h2o + 1 rib_70_elo1_b3168_26_cplx --> 23088 EF-G.GDP + 23088 EF-Tu.GDP + 2444 ala1_tRNA + 364 ala2_tRNA + 1716 arg1_tRNA + 26 argX_tRNA + 754 asn1_tRNA + 1248 asp1_tRNA + 78 cysT_tRNA + 26 fmet_tRNA + 780 gln1_tRNA + 416 gln2_tRNA + 2574 glu1_tRNA + 1690 gly1_tRNA + 52 glyT_tRNA + 26 glyU_tRNA + 46176 h + 390 hisR_tRNA + 1222 ile1_tRNA + 1092 leu1_tRNA + 78 leu2_tRNA + 234 leuU_tRNA + 1716 lys1_tRNA + 520 met1_tRNA + 115570 mg2 + 390 phe1_tRNA + 46176 pi + 468 pro1_tRNA + 52 pro2_tRNA + 26 proM_tRNA + 1 rib_70_elo2_b3168_26_cplx + 286 ser1_tRNA + 390 ser2_tRNA + 104 ser3_tRNA + 104 serT_tRNA + 260 serV_tRNA + 572 thr1_tRNA + 312 thr2_tRNA + 156 thr3_tRNA + 52 thrU_tRNA + 52 trpT_tRNA + 286 tyr1_tRNA + 988 val1_tRNA + 260 val2_tRNA + 910 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.08E+01	3.08E+01	0	5.28E+01	52.82823	0	1.89E+00	1.889231
tl_elo_b3168_52_rib1	Translation elongation 1 b3168 52 ribosome(s)	46228 EF-G.GTP + 4940 EF-Tu.GTP.ala1-tRNA + 728 EF-Tu.GTP.ala2-tRNA + 3432 EF-Tu.GTP.arg1-tRNA + 52 EF-Tu.GTP.argX-tRNA + 1508 EF-Tu.GTP.asn1-tRNA + 2496 EF-Tu.GTP.asp1-tRNA + 156 EF-Tu.GTP.cysT-tRNA + 1560 EF-Tu.GTP.gln1-tRNA + 832 EF-Tu.GTP.gln2-tRNA + 5148 EF-Tu.GTP.glu1-tRNA + 3380 EF-Tu.GTP.gly1-tRNA + 104 EF-Tu.GTP.glyT-tRNA + 52 EF-Tu.GTP.glyU-tRNA + 780 EF-Tu.GTP.hisR-tRNA + 2444 EF-Tu.GTP.ile1-tRNA + 2184 EF-Tu.GTP.leu1-tRNA + 156 EF-Tu.GTP.leu2-tRNA + 468 EF-Tu.GTP.leuU-tRNA + 3432 EF-Tu.GTP.lys1-tRNA + 1040 EF-Tu.GTP.met1-tRNA + 780 EF-Tu.GTP.phe1-tRNA + 936 EF-Tu.GTP.pro1-tRNA + 104 EF-Tu.GTP.pro2-tRNA + 52 EF-Tu.GTP.proM-tRNA + 572 EF-Tu.GTP.ser1-tRNA + 780 EF-Tu.GTP.ser2-tRNA + 208 EF-Tu.GTP.ser3-tRNA + 208 EF-Tu.GTP.serT-tRNA + 520 EF-Tu.GTP.serV-tRNA + 1144 EF-Tu.GTP.thr1-tRNA + 624 EF-Tu.GTP.thr2-tRNA + 312 EF-Tu.GTP.thr3-tRNA + 104 EF-Tu.GTP.thrU-tRNA + 104 EF-Tu.GTP.trpT-tRNA + 572 EF-Tu.GTP.tyr1-tRNA + 1976 EF-Tu.GTP.val1-tRNA + 520 EF-Tu.GTP.val2-tRNA + 1820 EF-Tu.GTP.val3-tRNA + 231140 mg2 + 1 rib_ini_b3168_52 --> 1 rib_70_elo1_b3168_52_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.08E+01	3.08E+01	0	3.90E+01	39.00161	2.51E-01	2.14E+00	1.8892309

tl_elo_b3168_52_rib2	Translation elongation 2 b3168 52 ribosome(s)	46176 h2o + 1 rib_70_elo1_b3168_52_cplx --> 46176 EF-G.GDP + 46176 EF-Tu.GDP + 4888 ala1_tRNA + 728 ala2_tRNA + 3432 arg1_tRNA + 52 argX_tRNA + 1508 asn1_tRNA + 2496 asp1_tRNA + 156 cysT_tRNA + 52 fmet_tRNA + 1560 gln1_tRNA + 832 gln2_tRNA + 5148 glu1_tRNA + 3380 gly1_tRNA + 104 glyT_tRNA + 52 glyU_tRNA + 92352 h + 780 hisR_tRNA + 2444 ile1_tRNA + 2184 leu1_tRNA + 156 leu2_tRNA + 468 leuU_tRNA + 3432 lys1_tRNA + 1040 met1_tRNA + 231140 mg2 + 780 phe1_tRNA + 92352 pi + 936 pro1_tRNA + 104 pro2_tRNA + 52 proM_tRNA + 1 rib_70_elo2_b3168_52_cplx + 572 ser1_tRNA + 780 ser2_tRNA + 208 ser3_tRNA + 208 serT_tRNA + 520 serV_tRNA + 1144 thr1_tRNA + 624 thr2_tRNA + 312 thr3_tRNA + 104 thrU_tRNA + 104 trpT_tRNA + 572 tyr1_tRNA + 1976 val1_tRNA + 520 val2_tRNA + 1820 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.08E+01	3.08E+01	0	3.90E+01	39.00161	2.51E-01	2.14E+00	1.8892309
tl_elo_b3169_14_rib1	Translation elongation 1 b3169 14 ribosome(s)	6916 EF-G.GTP + 616 EF-Tu.GTP.ala1-tRNA + 196 EF-Tu.GTP.ala2-tRNA + 462 EF-Tu.GTP.arg1-tRNA + 266 EF-Tu.GTP.asn1-tRNA + 588 EF-Tu.GTP.asp1-tRNA + 42 EF-Tu.GTP.cysT-tRNA + 238 EF-Tu.GTP.gln1-tRNA + 28 EF-Tu.GTP.gln2-tRNA + 784 EF-Tu.GTP.glu1-tRNA + 350 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyT-tRNA + 28 EF-Tu.GTP.glyU-tRNA + 56 EF-Tu.GTP.hisR-tRNA + 462 EF-Tu.GTP.ile1-tRNA + 378 EF-Tu.GTP.leu1-tRNA + 84 EF-Tu.GTP.leu2-tRNA + 112 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.leuW-tRNA + 14 EF-Tu.GTP.leuZ-tRNA + 350 EF-Tu.GTP.lys1-tRNA + 126 EF-Tu.GTP.met1-tRNA + 196 EF-Tu.GTP.phe1-tRNA + 154 EF-Tu.GTP.pro1-tRNA + 28 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proM-tRNA + 42 EF-Tu.GTP.ser1-tRNA + 70 EF-Tu.GTP.ser2-tRNA + 28 EF-Tu.GTP.ser3-tRNA + 70 EF-Tu.GTP.serV-tRNA + 196 EF-Tu.GTP.thr1-tRNA + 70 EF-Tu.GTP.thr2-tRNA + 42 EF-Tu.GTP.thr3-tRNA + 28 EF-Tu.GTP.thrU-tRNA + 56 EF-Tu.GTP.trpT-tRNA + 84 EF-Tu.GTP.tyr1-tRNA + 350 EF-Tu.GTP.val1-tRNA + 56 EF-Tu.GTP.val2-tRNA + 224 EF-Tu.GTP.val3-tRNA + 34580 mg2 + 1 rib_ini_b3169_14 --> 1 rib_70_elo1_b3169_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_elo_b3169_14_rib2	Translation elongation 2 b3169 14 ribosome(s)	6902 h2o + 1 rib_70_elo1_b3169_14_cplx --> 6902 EF-G.GDP + 6902 EF-Tu.GDP + 602 ala1_tRNA + 196 ala2_tRNA + 462 arg1_tRNA + 266 asn1_tRNA + 588 asp1_tRNA + 42 cysT_tRNA + 14 fmet_tRNA + 238 gln1_tRNA + 28 gln2_tRNA + 784 glu1_tRNA + 350 gly1_tRNA + 14 glyT_tRNA + 28 glyU_tRNA + 13804 h + 56 hisR_tRNA + 462 ile1_tRNA + 378 leu1_tRNA + 84 leu2_tRNA + 112 leuU_tRNA + 14 leuW_tRNA + 14 leuZ_tRNA + 350 lys1_tRNA + 126 met1_tRNA + 34580 mg2 + 196 phe1_tRNA + 13804 pi + 154 pro1_tRNA + 28 pro2_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b3169_14_cplx + 42 ser1_tRNA + 70 ser2_tRNA + 28 ser3_tRNA + 70 serV_tRNA + 196 thr1_tRNA + 70 thr2_tRNA + 42 thr3_tRNA + 28 thrU_tRNA + 56 trpT_tRNA + 84 tyr1_tRNA + 350 val1_tRNA + 56 val2_tRNA + 224 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_elo_b3169_1_rib1	Translation elongation 1 b3169 1 ribosome(s)	494 EF-G.GTP + 44 EF-Tu.GTP.ala1-tRNA + 14 EF-Tu.GTP.ala2-tRNA + 33 EF-Tu.GTP.arg1-tRNA + 19 EF-Tu.GTP.asn1-tRNA + 42 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 17 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 56 EF-Tu.GTP.glu1-tRNA + 25 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 33 EF-Tu.GTP.ile1-tRNA + 27 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 25 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 14 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 25 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 16 EF-Tu.GTP.val3-tRNA + 2470 mg2 + 1 rib_ini_b3169_1 --> 1 rib_70_elo1_b3169_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_elo_b3169_1_rib2	Translation elongation 2 b3169 1 ribosome(s)	493 h2o + 1 rib_70_elo1_b3169_1_cplx --> 493 EF-G.GDP + 493 EF-Tu.GDP + 43 ala1_tRNA + 14 ala2_tRNA + 33 arg1_tRNA + 19 asn1_tRNA + 42 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 17 gln1_tRNA + 2 gln2_tRNA + 56 glu1_tRNA + 25 gly1_tRNA + 1 glyT_tRNA + 2 glyU_tRNA + 986 h + 4 hisR_tRNA + 33 ile1_tRNA + 27 leu1_tRNA + 6 leu2_tRNA + 8 leuU_tRNA + 1 leuW_tRNA + 1 leuZ_tRNA + 25 lys1_tRNA + 9 met1_tRNA + 2470 mg2 + 14 phe1_tRNA + 986 pi + 11 pro1_tRNA + 2 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3169_1_cplx + 3 ser1_tRNA + 5 ser2_tRNA + 2 ser3_tRNA + 5 serV_tRNA + 14 thr1_tRNA + 5 thr2_tRNA + 3 thr3_tRNA + 2 thrU_tRNA + 4 trpT_tRNA + 6 tyr1_tRNA + 25 val1_tRNA + 4 val2_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_elo_b3169_29_rib1	Translation elongation 1 b3169 29 ribosome(s)	14326 EF-G.GTP + 1276 EF-Tu.GTP.ala1-tRNA + 406 EF-Tu.GTP.ala2-tRNA + 957 EF-Tu.GTP.arg1-tRNA + 551 EF-Tu.GTP.asn1-tRNA + 1218 EF-Tu.GTP.asp1-tRNA + 87 EF-Tu.GTP.cysT-tRNA + 493 EF-Tu.GTP.gln1-tRNA + 58 EF-Tu.GTP.gln2-tRNA + 1624 EF-Tu.GTP.glu1-tRNA + 725 EF-Tu.GTP.gly1-tRNA + 29 EF-Tu.GTP.glyT-tRNA + 58 EF-Tu.GTP.glyU-tRNA + 116 EF-Tu.GTP.hisR-tRNA + 957 EF-Tu.GTP.ile1-tRNA + 783 EF-Tu.GTP.leu1-tRNA + 174 EF-Tu.GTP.leu2-tRNA + 232 EF-Tu.GTP.leuU-tRNA + 29 EF-Tu.GTP.leuW-tRNA + 29 EF-Tu.GTP.leuZ-tRNA + 725 EF-Tu.GTP.lys1-tRNA + 261 EF-Tu.GTP.met1-tRNA + 406 EF-Tu.GTP.phe1-tRNA + 319 EF-Tu.GTP.pro1-tRNA + 58 EF-Tu.GTP.pro2-tRNA + 29 EF-Tu.GTP.proM-tRNA + 87 EF-Tu.GTP.ser1-tRNA + 145 EF-Tu.GTP.ser2-tRNA + 58 EF-Tu.GTP.ser3-tRNA + 145 EF-Tu.GTP.serV-tRNA + 406 EF-Tu.GTP.thr1-tRNA + 145 EF-Tu.GTP.thr2-tRNA + 87 EF-Tu.GTP.thr3-tRNA + 58 EF-Tu.GTP.thrU-tRNA + 116 EF-Tu.GTP.trpT-tRNA + 174 EF-Tu.GTP.tyr1-tRNA + 725 EF-Tu.GTP.val1-tRNA + 116 EF-Tu.GTP.val2-tRNA + 464 EF-Tu.GTP.val3-tRNA + 71630 mg2 + 1 rib_ini_b3169_29 --> 1 rib_70_elo1_b3169_29_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79

tl_elo_b3169_29_rib2	Translation elongation 2 b3169 29 ribosome(s)	14297 h2o + 1 rib_70_elo1_b3169_29_cplx --> 14297 EF-G.GDP + 14297 EF-Tu.GDP + 1247 ala1_tRNA + 406 ala2_tRNA + 957 arg1_tRNA + 551 asn1_tRNA + 1218 asp1_tRNA + 87 cysT_tRNA + 29 fmet_tRNA + 493 gln1_tRNA + 58 gln2_tRNA + 1624 glu1_tRNA + 725 gly1_tRNA + 29 glyT_tRNA + 58 glyU_tRNA + 28594 h + 116 hisR_tRNA + 957 ile1_tRNA + 783 leu1_tRNA + 174 leu2_tRNA + 232 leuU_tRNA + 29 leuW_tRNA + 29 leuZ_tRNA + 725 lys1_tRNA + 261 met1_tRNA + 71630 mg2 + 406 phe1_tRNA + 28594 pi + 319 pro1_tRNA + 58 pro2_tRNA + 29 proM_tRNA + 1 rib_70_elo2_b3169_29_cplx + 87 ser1_tRNA + 145 ser2_tRNA + 58 ser3_tRNA + 145 serV_tRNA + 406 thr1_tRNA + 145 thr2_tRNA + 87 thr3_tRNA + 58 thrU_tRNA + 116 trpT_tRNA + 174 tyr1_tRNA + 725 val1_tRNA + 116 val2_tRNA + 464 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_elo_b3170_1_rib1	Translation elongation 1 b3170 1 ribosome(s)	149 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 5 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 745 mg2 + 1 rib_ini_b3170_1 --> 1 rib_70_elo1_b3170_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_elo_b3170_1_rib2	Translation elongation 2 b3170 1 ribosome(s)	148 h2o + 1 rib_70_elo1_b3170_1_cplx --> 148 EF-G.GDP + 148 EF-Tu.GDP + 9 ala1_tRNA + 2 ala2_tRNA + 8 arg1_tRNA + 5 asn1_tRNA + 10 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 2 gln2_tRNA + 14 glu1_tRNA + 8 gly1_tRNA + 1 glyT_tRNA + 296 h + 3 hisR_tRNA + 10 ile1_tRNA + 9 leu1_tRNA + 2 leuU_tRNA + 2 leuZ_tRNA + 5 lys1_tRNA + 3 met1_tRNA + 745 mg2 + 5 phe1_tRNA + 296 pi + 1 pro1_tRNA + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3170_1_cplx + 3 ser1_tRNA + 1 serT_tRNA + 4 serV_tRNA + 2 thr1_tRNA + 2 thr2_tRNA + 1 thr3_tRNA + 5 thrU_tRNA + 1 trpT_tRNA + 3 tyr1_tRNA + 7 val1_tRNA + 3 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_elo_b3170_4_rib1	Translation elongation 1 b3170 4 ribosome(s)	596 EF-G.GTP + 36 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 32 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 40 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 56 EF-Tu.GTP.glu1-tRNA + 32 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 40 EF-Tu.GTP.ile1-tRNA + 36 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.proL-tRNA + 8 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.serT-tRNA + 16 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 28 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 36 EF-Tu.GTP.val3-tRNA + 2980 mg2 + 1 rib_ini_b3170_4 --> 1 rib_70_elo1_b3170_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_elo_b3170_4_rib2	Translation elongation 2 b3170 4 ribosome(s)	592 h2o + 1 rib_70_elo1_b3170_4_cplx --> 592 EF-G.GDP + 592 EF-Tu.GDP + 36 ala1_tRNA + 8 ala2_tRNA + 32 arg1_tRNA + 20 asn1_tRNA + 40 asp1_tRNA + 4 cysT_tRNA + 4 fmet_tRNA + 12 gln1_tRNA + 8 gln2_tRNA + 56 glu1_tRNA + 32 gly1_tRNA + 4 glyT_tRNA + 1184 h + 12 hisR_tRNA + 40 ile1_tRNA + 36 leu1_tRNA + 8 leuU_tRNA + 8 leuZ_tRNA + 20 lys1_tRNA + 12 met1_tRNA + 2980 mg2 + 20 phe1_tRNA + 1184 pi + 4 pro1_tRNA + 8 proL_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b3170_4_cplx + 12 ser1_tRNA + 4 serT_tRNA + 16 serV_tRNA + 8 thr1_tRNA + 8 thr2_tRNA + 4 thr3_tRNA + 20 thrU_tRNA + 4 trpT_tRNA + 12 tyr1_tRNA + 28 val1_tRNA + 12 val2_tRNA + 36 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_elo_b3170_8_rib1	Translation elongation 1 b3170 8 ribosome(s)	1192 EF-G.GTP + 72 EF-Tu.GTP.ala1-tRNA + 16 EF-Tu.GTP.ala2-tRNA + 64 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 80 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.gln2-tRNA + 112 EF-Tu.GTP.glu1-tRNA + 64 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 24 EF-Tu.GTP.hisR-tRNA + 80 EF-Tu.GTP.ile1-tRNA + 72 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuZ-tRNA + 40 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 48 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.proL-tRNA + 16 EF-Tu.GTP.proM-tRNA + 24 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.serT-tRNA + 32 EF-Tu.GTP.serV-tRNA + 16 EF-Tu.GTP.thr1-tRNA + 16 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 40 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 24 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val2-tRNA + 72 EF-Tu.GTP.val3-tRNA + 5960 mg2 + 1 rib_ini_b3170_8 --> 1 rib_70_elo1_b3170_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_elo_b3170_8_rib2	Translation elongation 2 b3170 8 ribosome(s)	1184 h2o + 1 rib_70_elo1_b3170_8_cplx --> 1184 EF-G.GDP + 1184 EF-Tu.GDP + 72 ala1_tRNA + 16 ala2_tRNA + 64 arg1_tRNA + 40 asn1_tRNA + 80 asp1_tRNA + 8 cysT_tRNA + 8 fmet_tRNA + 24 gln1_tRNA + 16 gln2_tRNA + 112 glu1_tRNA + 64 gly1_tRNA + 8 glyT_tRNA + 2368 h + 24 hisR_tRNA + 80 ile1_tRNA + 72 leu1_tRNA + 16 leuU_tRNA + 16 leuZ_tRNA + 40 lys1_tRNA + 24 met1_tRNA + 5960 mg2 + 40 phe1_tRNA + 2368 pi + 8 pro1_tRNA + 16 proL_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b3170_8_cplx + 24 ser1_tRNA + 8 serT_tRNA + 32 serV_tRNA + 16 thr1_tRNA + 16 thr2_tRNA + 8 thr3_tRNA + 40 thrU_tRNA + 8 trpT_tRNA + 24 tyr1_tRNA + 56 val1_tRNA + 24 val2_tRNA + 72 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1

tl_elo_b3178_18_rib1	Translation elongation 1 b3178 18 ribosome(s)	11574 EF-G.GTP + 936 EF-Tu.GTP.ala1-tRNA + 126 EF-Tu.GTP.ala2-tRNA + 774 EF-Tu.GTP.arg1-tRNA + 468 EF-Tu.GTP.asn1-tRNA + 666 EF-Tu.GTP.asp1-tRNA + 36 EF-Tu.GTP.cysT-tRNA + 360 EF-Tu.GTP.gln1-tRNA + 36 EF-Tu.GTP.gln2-tRNA + 900 EF-Tu.GTP.glu1-tRNA + 990 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 36 EF-Tu.GTP.glyU-tRNA + 162 EF-Tu.GTP.hisR-tRNA + 702 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.ile2-tRNA + 612 EF-Tu.GTP.leu1-tRNA + 126 EF-Tu.GTP.leu2-tRNA + 108 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuW-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 666 EF-Tu.GTP.lys1-tRNA + 432 EF-Tu.GTP.met1-tRNA + 450 EF-Tu.GTP.phe1-tRNA + 360 EF-Tu.GTP.pro1-tRNA + 108 EF-Tu.GTP.pro2-tRNA + 36 EF-Tu.GTP.proL-tRNA + 144 EF-Tu.GTP.proM-tRNA + 126 EF-Tu.GTP.ser1-tRNA + 162 EF-Tu.GTP.ser2-tRNA + 54 EF-Tu.GTP.ser3-tRNA + 36 EF-Tu.GTP.serT-tRNA + 198 EF-Tu.GTP.serV-tRNA + 180 EF-Tu.GTP.thr1-tRNA + 162 EF-Tu.GTP.thr2-tRNA + 144 EF-Tu.GTP.thr3-tRNA + 90 EF-Tu.GTP.trpT-tRNA + 180 EF-Tu.GTP.tyr1-tRNA + 378 EF-Tu.GTP.val1-tRNA + 162 EF-Tu.GTP.val2-tRNA + 360 EF-Tu.GTP.val3-tRNA + 57870 mg2 + 1 rib_ini_b3178_18 --> 1 rib_70_elo1_b3178_18_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_elo_b3178_18_rib2	Translation elongation 2 b3178 18 ribosome(s)	11556 h2o + 1 rib_70_elo1_b3178_18_cplx --> 11556 EF-G.GDP + 11556 EF-Tu.GDP + 936 ala1_tRNA + 126 ala2_tRNA + 774 arg1_tRNA + 468 asn1_tRNA + 666 asp1_tRNA + 36 cysT_tRNA + 18 fmet_tRNA + 360 gln1_tRNA + 36 gln2_tRNA + 900 glu1_tRNA + 990 gly1_tRNA + 18 glyT_tRNA + 36 glyU_tRNA + 23112 h + 162 hisR_tRNA + 702 ile1_tRNA + 18 ile2_tRNA + 612 leu1_tRNA + 126 leu2_tRNA + 108 leuU_tRNA + 36 leuW_tRNA + 36 leuZ_tRNA + 64 lys1_tRNA + 432 met1_tRNA + 57870 mg2 + 450 phe1_tRNA + 23112 pi + 360 pro1_tRNA + 108 pro2_tRNA + 36 proL_tRNA + 144 proM_tRNA + 1 rib_70_elo2_b3178_18_cplx + 126 ser1_tRNA + 162 ser2_tRNA + 54 ser3_tRNA + 36 serT_tRNA + 198 serV_tRNA + 180 thr1_tRNA + 162 thr2_tRNA + 144 thr3_tRNA + 90 trpT_tRNA + 180 tyr1_tRNA + 378 val1_tRNA + 162 val2_tRNA + 360 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_elo_b3178_1_rib1	Translation elongation 1 b3178 1 ribosome(s)	643 EF-G.GTP + 52 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 43 EF-Tu.GTP.arg1-tRNA + 26 EF-Tu.GTP.asn1-tRNA + 37 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 20 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 50 EF-Tu.GTP.glu1-tRNA + 55 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 39 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 34 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 37 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 25 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 8 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 11 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 21 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 20 EF-Tu.GTP.val3-tRNA + 3215 mg2 + 1 rib_ini_b3178_1 --> 1 rib_70_elo1_b3178_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_elo_b3178_1_rib2	Translation elongation 2 b3178 1 ribosome(s)	642 h2o + 1 rib_70_elo1_b3178_1_cplx --> 642 EF-G.GDP + 642 EF-Tu.GDP + 52 ala1_tRNA + 7 ala2_tRNA + 43 arg1_tRNA + 26 asn1_tRNA + 37 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 20 gln1_tRNA + 2 gln2_tRNA + 50 glu1_tRNA + 55 gly1_tRNA + 1 glyT_tRNA + 2 glyU_tRNA + 1284 h + 9 hisR_tRNA + 39 ile1_tRNA + 1 ile2_tRNA + 34 leu1_tRNA + 7 leu2_tRNA + 6 leuU_tRNA + 2 leuW_tRNA + 2 leuZ_tRNA + 36 lys1_tRNA + 24 met1_tRNA + 3215 mg2 + 25 phe1_tRNA + 1284 pi + 20 pro1_tRNA + 6 pro2_tRNA + 2 proL_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b3178_1_cplx + 7 ser1_tRNA + 9 ser2_tRNA + 3 ser3_tRNA + 2 serT_tRNA + 11 serV_tRNA + 10 thr1_tRNA + 9 thr2_tRNA + 8 thr3_tRNA + 5 trpT_tRNA + 10 tyr1_tRNA + 21 val1_tRNA + 9 val2_tRNA + 20 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_elo_b3178_37_rib1	Translation elongation 1 b3178 37 ribosome(s)	23791 EF-G.GTP + 1924 EF-Tu.GTP.ala1-tRNA + 259 EF-Tu.GTP.ala2-tRNA + 1591 EF-Tu.GTP.arg1-tRNA + 962 EF-Tu.GTP.asn1-tRNA + 1369 EF-Tu.GTP.asp1-tRNA + 74 EF-Tu.GTP.cysT-tRNA + 740 EF-Tu.GTP.gln1-tRNA + 74 EF-Tu.GTP.gln2-tRNA + 1850 EF-Tu.GTP.glu1-tRNA + 2035 EF-Tu.GTP.gly1-tRNA + 37 EF-Tu.GTP.glyT-tRNA + 74 EF-Tu.GTP.glyU-tRNA + 333 EF-Tu.GTP.hisR-tRNA + 1443 EF-Tu.GTP.ile1-tRNA + 37 EF-Tu.GTP.ile2-tRNA + 1258 EF-Tu.GTP.leu1-tRNA + 259 EF-Tu.GTP.leu2-tRNA + 222 EF-Tu.GTP.leuU-tRNA + 74 EF-Tu.GTP.leuW-tRNA + 74 EF-Tu.GTP.leuZ-tRNA + 1369 EF-Tu.GTP.lys1-tRNA + 888 EF-Tu.GTP.met1-tRNA + 925 EF-Tu.GTP.phe1-tRNA + 740 EF-Tu.GTP.pro1-tRNA + 222 EF-Tu.GTP.pro2-tRNA + 74 EF-Tu.GTP.proL-tRNA + 296 EF-Tu.GTP.proM-tRNA + 259 EF-Tu.GTP.ser1-tRNA + 333 EF-Tu.GTP.ser2-tRNA + 111 EF-Tu.GTP.ser3-tRNA + 74 EF-Tu.GTP.serT-tRNA + 407 EF-Tu.GTP.serV-tRNA + 370 EF-Tu.GTP.thr1-tRNA + 333 EF-Tu.GTP.thr2-tRNA + 296 EF-Tu.GTP.thr3-tRNA + 185 EF-Tu.GTP.trpT-tRNA + 370 EF-Tu.GTP.tyr1-tRNA + 777 EF-Tu.GTP.val1-tRNA + 333 EF-Tu.GTP.val2-tRNA + 740 EF-Tu.GTP.val3-tRNA + 118955 mg2 + 1 rib_ini_b3178_37 --> 1 rib_70_	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_elo_b3178_37_rib2	Translation elongation 2 b3178 37 ribosome(s)	23754 h2o + 1 rib_70_elo1_b3178_37_cplx --> 23754 EF-G.GDP + 23754 EF-Tu.GDP + 1924 ala1_tRNA + 259 ala2_tRNA + 1591 arg1_tRNA + 962 asn1_tRNA + 1369 asp1_tRNA + 74 cysT_tRNA + 37 fmet_tRNA + 740 gln1_tRNA + 74 gln2_tRNA + 1850 glu1_tRNA + 2035 gly1_tRNA + 37 glyT_tRNA + 74 glyU_tRNA + 47508 h + 333 hisR_tRNA + 1443 ile1_tRNA + 37 ile2_tRNA + 1258 leu1_tRNA + 259 leu2_tRNA + 222 leuU_tRNA + 74 leuW_tRNA + 74 leuZ_tRNA + 1332 lys1_tRNA + 888 met1_tRNA + 118955 mg2 + 925 phe1_tRNA + 47508 pi + 740 pro1_tRNA + 222 pro2_tRNA + 74 proL_tRNA + 29 proM_tRNA + 1 rib_70_elo2_b3178_37_cplx + 259 ser1_tRNA + 333 ser2_tRNA + 111 ser3_tRNA + 74 serT_tRNA + 407 serV_tRNA + 370 thr1_tRNA + 333 thr2_tRNA + 296 thr3_tRNA + 185 trpT_tRNA + 370 tyr1_tRNA + 777 val1_tRNA + 333 val2_tRNA + 740 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565

tl_elo_b3179_12_rib1	Translation elongation 1 b3179 12 ribosome(s)	2496 EF-G.GTP + 132 EF-Tu.GTP.ala1-tRNA + 36 EF-Tu.GTP.ala2-tRNA + 168 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argW-tRNA + 12 EF-Tu.GTP.argX-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 180 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.cysT-tRNA + 84 EF-Tu.GTP.gln1-tRNA + 48 EF-Tu.GTP.gln2-tRNA + 120 EF-Tu.GTP.glu1-tRNA + 168 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.glyT-tRNA + 24 EF-Tu.GTP.glyU-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 84 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.ile2-tRNA + 72 EF-Tu.GTP.leu1-tRNA + 72 EF-Tu.GTP.leuU-tRNA + 24 EF-Tu.GTP.leuW-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 192 EF-Tu.GTP.lys1-tRNA + 96 EF-Tu.GTP.met1-tRNA + 108 EF-Tu.GTP.phe1-tRNA + 48 EF-Tu.GTP.pro1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proL-tRNA + 24 EF-Tu.GTP.proM-tRNA + 48 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 12 EF-Tu.GTP.serT-tRNA + 84 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr3-tRNA + 24 EF-Tu.GTP.thrU-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 60 EF-Tu.GTP.tyr1-tRNA + 132 EF-Tu.GTP.val1-tRNA + 60 EF-Tu.GTP.val2-tRNA + 72 EF-Tu.GTP.val3-tRNA + 12480 mg2 + 1 rib_ini_b3179_12 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_elo_b3179_12_rib2	Translation elongation 2 b3179 12 ribosome(s)	2484 h2o + 1 rib_70_elo1_b3179_12_cplx --> 2484 EF-G.GDP + 2484 EF-Tu.GDP + 132 ala1_tRNA + 36 ala2_tRNA + 168 arg1_tRNA + 12 argW_tRNA + 12 argX_tRNA + 12 asn1_tRNA + 180 asp1_tRNA + 24 cysT_tRNA + 12 fmet_tRNA + 84 gln1_tRNA + 48 gln2_tRNA + 120 glu1_tRNA + 168 gly1_tRNA + 24 glyT_tRNA + 24 glyU_tRNA + 4968 h + 12 hisR_tRNA + 84 ile1_tRNA + 12 ile2_tRNA + 72 leu1_tRNA + 72 leuU_tRNA + 24 leuW_tRNA + 36 leuZ_tRNA + 192 lys1_tRNA + 96 met1_tRNA + 12480 mg2 + 108 phe1_tRNA + 4968 pi + 48 pro1_tRNA + 24 pro2_tRNA + 12 proL_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b3179_12_cplx + 48 ser1_tRNA + 36 ser2_tRNA + 12 ser3_tRNA + 12 serT_tRNA + 84 serV_tRNA + 24 thr1_tRNA + 24 thr3_tRNA + 24 thrU_tRNA + 36 trpT_tRNA + 60 tyr1_tRNA + 132 val1_tRNA + 60 val2_tRNA + 72 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_elo_b3179_1_rib1	Translation elongation 1 b3179 1 ribosome(s)	208 EF-G.GTP + 11 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.argX-tRNA + 1 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 10 EF-Tu.GTP.glu1-tRNA + 14 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 11 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1040 mg2 + 1 rib_ini_b3179_1 --> 1 rib_70_elo1_b3179_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_elo_b3179_1_rib2	Translation elongation 2 b3179 1 ribosome(s)	207 h2o + 1 rib_70_elo1_b3179_1_cplx --> 207 EF-G.GDP + 207 EF-Tu.GDP + 11 ala1_tRNA + 3 ala2_tRNA + 14 arg1_tRNA + 1 argW_tRNA + 1 argX_tRNA + 1 asn1_tRNA + 15 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 4 gln2_tRNA + 10 glu1_tRNA + 14 gly1_tRNA + 2 glyT_tRNA + 2 glyU_tRNA + 414 h + 1 hisR_tRNA + 7 ile1_tRNA + 1 ile2_tRNA + 6 leu1_tRNA + 6 leuU_tRNA + 2 leuW_tRNA + 3 leuZ_tRNA + 16 lys1_tRNA + 8 met1_tRNA + 1040 mg2 + 9 phe1_tRNA + 414 pi + 4 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3179_1_cplx + 4 ser1_tRNA + 3 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 7 serV_tRNA + 2 thr1_tRNA + 2 thr3_tRNA + 2 thrU_tRNA + 3 trpT_tRNA + 5 tyr1_tRNA + 11 val1_tRNA + 5 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_elo_b3179_6_rib1	Translation elongation 1 b3179 6 ribosome(s)	1248 EF-G.GTP + 66 EF-Tu.GTP.ala1-tRNA + 18 EF-Tu.GTP.ala2-tRNA + 84 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argW-tRNA + 6 EF-Tu.GTP.argX-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 90 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 42 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 60 EF-Tu.GTP.glu1-tRNA + 84 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 42 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.ile2-tRNA + 36 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuW-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 96 EF-Tu.GTP.lys1-tRNA + 48 EF-Tu.GTP.met1-tRNA + 54 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proL-tRNA + 12 EF-Tu.GTP.proM-tRNA + 24 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serT-tRNA + 42 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.thrU-tRNA + 18 EF-Tu.GTP.trpT-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 66 EF-Tu.GTP.val1-tRNA + 30 EF-Tu.GTP.val2-tRNA + 36 EF-Tu.GTP.val3-tRNA + 6240 mg2 + 1 rib_ini_b3179_6 --> 1 rib_70_elo1_b3179_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_elo_b3179_6_rib2	Translation elongation 2 b3179 6 ribosome(s)	1242 h2o + 1 rib_70_elo1_b3179_6_cplx --> 1242 EF-G.GDP + 1242 EF-Tu.GDP + 66 ala1_tRNA + 18 ala2_tRNA + 84 arg1_tRNA + 6 argW_tRNA + 6 argX_tRNA + 6 asn1_tRNA + 90 asp1_tRNA + 12 cysT_tRNA + 6 fmet_tRNA + 42 gln1_tRNA + 24 gln2_tRNA + 60 glu1_tRNA + 84 gly1_tRNA + 12 glyT_tRNA + 12 glyU_tRNA + 2484 h + 6 hisR_tRNA + 42 ile1_tRNA + 6 ile2_tRNA + 36 leu1_tRNA + 36 leuU_tRNA + 12 leuW_tRNA + 18 leuZ_tRNA + 96 lys1_tRNA + 48 met1_tRNA + 6240 mg2 + 54 phe1_tRNA + 2484 pi + 24 pro1_tRNA + 12 pro2_tRNA + 6 proL_tRNA + 12 proM_tRNA + 1 rib_70_elo2_b3179_6_cplx + 24 ser1_tRNA + 18 ser2_tRNA + 6 ser3_tRNA + 6 serT_tRNA + 42 serV_tRNA + 12 thr1_tRNA + 12 thr3_tRNA + 12 thrU_tRNA + 18 trpT_tRNA + 30 tyr1_tRNA + 66 val1_tRNA + 30 val2_tRNA + 36 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615

tl_elo_b3181_1_rib1	Translation elongation 1 b3181 1 ribosome(s)	157 EF-G.GTP + 12 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 11 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 14 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 785 mg2 + 1 rib_ini_b3181_1 --> 1 rib_70_elo1_b3181_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_elo_b3181_1_rib2	Translation elongation 2 b3181 1 ribosome(s)	156 h2o + 1 rib_70_elo1_b3181_1_cplx --> 156 EF-G.GDP + 156 EF-Tu.GDP + 12 ala1_tRNA + 2 ala2_tRNA + 10 arg1_tRNA + 7 asn1_tRNA + 11 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 2 gln2_tRNA + 20 glu1_tRNA + 10 gly1_tRNA + 1 glyU_tRNA + 312 h + 2 hisR_tRNA + 14 ile1_tRNA + 8 leu1_tRNA + 2 leuZ_tRNA + 10 lys1_tRNA + 2 met1_tRNA + 785 mg2 + 5 phe1_tRNA + 312 pi + 2 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 1 rib_70_elo2_b3181_1_cplx + 3 ser2_tRNA + 2 ser3_tRNA + 3 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 3 tyr1_tRNA + 9 val1_tRNA + 2 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_elo_b3181_4_rib1	Translation elongation 1 b3181 4 ribosome(s)	628 EF-G.GTP + 48 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 40 EF-Tu.GTP.arg1-tRNA + 28 EF-Tu.GTP.asn1-tRNA + 44 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 80 EF-Tu.GTP.glu1-tRNA + 40 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 56 EF-Tu.GTP.ile1-tRNA + 36 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 40 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 20 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 36 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 3140 mg2 + 1 rib_ini_b3181_4 --> 1 rib_70_elo1_b3181_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_elo_b3181_4_rib2	Translation elongation 2 b3181 4 ribosome(s)	624 h2o + 1 rib_70_elo1_b3181_4_cplx --> 624 EF-G.GDP + 624 EF-Tu.GDP + 48 ala1_tRNA + 8 ala2_tRNA + 40 arg1_tRNA + 28 asn1_tRNA + 44 asp1_tRNA + 4 cysT_tRNA + 4 fmet_tRNA + 16 gln1_tRNA + 8 gln2_tRNA + 80 glu1_tRNA + 40 gly1_tRNA + 4 glyU_tRNA + 1248 h + 8 hisR_tRNA + 56 ile1_tRNA + 32 leu1_tRNA + 8 leuZ_tRNA + 40 lys1_tRNA + 8 met1_tRNA + 3140 mg2 + 20 phe1_tRNA + 1248 pi + 8 pro1_tRNA + 8 pro2_tRNA + 4 proL_tRNA + 1 rib_70_elo2_b3181_4_cplx + 12 ser2_tRNA + 8 ser3_tRNA + 12 thr1_tRNA + 4 thr2_tRNA + 8 thr3_tRNA + 12 tyr1_tRNA + 36 val1_tRNA + 8 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_elo_b3181_9_rib1	Translation elongation 1 b3181 9 ribosome(s)	1413 EF-G.GTP + 108 EF-Tu.GTP.ala1-tRNA + 18 EF-Tu.GTP.ala2-tRNA + 90 EF-Tu.GTP.arg1-tRNA + 63 EF-Tu.GTP.asn1-tRNA + 99 EF-Tu.GTP.asp1-tRNA + 9 EF-Tu.GTP.cysT-tRNA + 36 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 180 EF-Tu.GTP.glu1-tRNA + 90 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyU-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 126 EF-Tu.GTP.ile1-tRNA + 81 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 90 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 45 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.proL-tRNA + 27 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 27 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.thr3-tRNA + 27 EF-Tu.GTP.tyr1-tRNA + 81 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 27 EF-Tu.GTP.val3-tRNA + 7065 mg2 + 1 rib_ini_b3181_9 --> 1 rib_70_elo1_b3181_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_elo_b3181_9_rib2	Translation elongation 2 b3181 9 ribosome(s)	1404 h2o + 1 rib_70_elo1_b3181_9_cplx --> 1404 EF-G.GDP + 1404 EF-Tu.GDP + 108 ala1_tRNA + 18 ala2_tRNA + 90 arg1_tRNA + 63 asn1_tRNA + 99 asp1_tRNA + 9 cysT_tRNA + 9 fmet_tRNA + 36 gln1_tRNA + 18 gln2_tRNA + 180 glu1_tRNA + 90 gly1_tRNA + 9 glyU_tRNA + 2808 h + 18 hisR_tRNA + 126 ile1_tRNA + 72 leu1_tRNA + 18 leuZ_tRNA + 90 lys1_tRNA + 18 met1_tRNA + 7065 mg2 + 45 phe1_tRNA + 2808 pi + 18 pro1_tRNA + 18 pro2_tRNA + 9 proL_tRNA + 1 rib_70_elo2_b3181_9_cplx + 27 ser2_tRNA + 18 ser3_tRNA + 27 thr1_tRNA + 9 thr2_tRNA + 18 thr3_tRNA + 27 tyr1_tRNA + 81 val1_tRNA + 18 val2_tRNA + 27 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_elo_b3185_1_rib1	Translation elongation 1 b3185 1 ribosome(s)	84 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 5 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.leu1-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.serT-tRNA + 2 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val3-tRNA + 420 mg2 + 1 rib_ini_b3185_1 --> 1 rib_70_elo1_b3185_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	2.63E+01	26.25875
tl_elo_b3185_1_rib2	Translation elongation 2 b3185 1 ribosome(s)	83 h2o + 1 rib_70_elo1_b3185_1_cplx --> 83 EF-G.GDP + 83 EF-Tu.GDP + 9 ala1_tRNA + 8 arg1_tRNA + 3 asn1_tRNA + 3 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 1 gln2_tRNA + 4 glu1_tRNA + 13 gly1_tRNA + 166 h + 3 hisR_tRNA + 4 ile1_tRNA + 3 leu1_tRNA + 11 lys1_tRNA + 420 mg2 + 5 phe1_tRNA + 166 pi + 1 pro1_tRNA + 1 rib_70_elo2_b3185_1_cplx + 2 ser1_tRNA + 1 serT_tRNA + 2 serV_tRNA + 1 thr1_tRNA + 1 thr2_tRNA + 1 thrU_tRNA + 2 val1_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	2.63E+01	26.25875

tl_elo_b3185_2_rib1	Translation elongation 1 b3185 2 ribosome(s)	168 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 16 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 10 EF-Tu.GTP.glu1-tRNA + 26 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 22 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val3-tRNA + 840 mg2 + 1 rib_ini_b3185_2 --> 1 rib_70_elo1_b3185_2_cp	irreversible	Translation	0.00E+00	1.00E+09	0	5.51E+01	5.51E+01	0	4.14E+01	41.44	0	3.34E+01	33.439
tl_elo_b3185_2_rib2	Translation elongation 2 b3185 2 ribosome(s)	166 h2o + 1 rib_70_elo1_b3185_2_cplx --> 166 EF-G.GDP + 166 EF-Tu.GDP + 18 ala1_tRNA + 16 arg1_tRNA + 6 asn1_tRNA + 6 asp1_tRNA + 2 cysT_tRNA + 2 fmet_tRNA + 2 gln2_tRNA + 8 glu1_tRNA + 26 gly1_tRNA + 332 h + 6 hisR_tRNA + 8 ile1_tRNA + 6 leu1_tRNA + 22 lys1_tRNA + 840 mg2 + 10 phe1_tRNA + 332 pi + 2 pro1_tRNA + 1 rib_70_elo2_b3185_2_cplx + 4 ser1_tRNA + 2 serT_tRNA + 4 serV_tRNA + 2 thr1_tRNA + 2 thr2_tRNA + 2 thrU_tRNA + 4 val1_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.51E+01	5.51E+01	0	4.14E+01	41.44	0	3.34E+01	33.439
tl_elo_b3185_5_rib1	Translation elongation 1 b3185 5 ribosome(s)	420 EF-G.GTP + 45 EF-Tu.GTP.ala1-tRNA + 40 EF-Tu.GTP.arg1-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 25 EF-Tu.GTP.glu1-tRNA + 65 EF-Tu.GTP.gly1-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 55 EF-Tu.GTP.lys1-tRNA + 25 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.serT-tRNA + 10 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val3-tRNA + 2100 mg2 + 1 rib_ini_b3185_5 --> 1 rib_70_elo1_b3185_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3185_5_rib2	Translation elongation 2 b3185 5 ribosome(s)	415 h2o + 1 rib_70_elo1_b3185_5_cplx --> 415 EF-G.GDP + 415 EF-Tu.GDP + 45 ala1_tRNA + 40 arg1_tRNA + 15 asn1_tRNA + 15 asp1_tRNA + 5 cysT_tRNA + 5 fmet_tRNA + 5 gln2_tRNA + 20 glu1_tRNA + 65 gly1_tRNA + 830 h + 15 hisR_tRNA + 20 ile1_tRNA + 15 leu1_tRNA + 55 lys1_tRNA + 2100 mg2 + 25 phe1_tRNA + 830 pi + 5 pro1_tRNA + 1 rib_70_elo2_b3185_5_cplx + 10 ser1_tRNA + 5 serT_tRNA + 10 serV_tRNA + 5 thr1_tRNA + 5 thr2_tRNA + 5 thrU_tRNA + 10 val1_tRNA + 20 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3186_1_rib1	Translation elongation 1 b3186 1 ribosome(s)	102 EF-G.GTP + 6 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 9 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 510 mg2 + 1 rib_ini_b3186_1 --> 1 rib_70_elo1_b3186_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	3.71E+01	37.0548
tl_elo_b3186_1_rib2	Translation elongation 2 b3186 1 ribosome(s)	101 h2o + 1 rib_70_elo1_b3186_1_cplx --> 101 EF-G.GDP + 101 EF-Tu.GDP + 6 ala1_tRNA + 8 arg1_tRNA + 1 asn1_tRNA + 3 asp1_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 2 gln2_tRNA + 9 glu1_tRNA + 12 gly1_tRNA + 202 h + 4 hisR_tRNA + 7 ile1_tRNA + 3 leu1_tRNA + 10 lys1_tRNA + 1 met1_tRNA + 510 mg2 + 5 phe1_tRNA + 202 pi + 1 pro2_tRNA + 1 rib_70_elo2_b3186_1_cplx + 3 serV_tRNA + 1 thr1_tRNA + 4 thr2_tRNA + 1 trpT_tRNA + 2 tyr1_tRNA + 4 val1_tRNA + 1 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	3.71E+01	37.0548
tl_elo_b3186_3_rib1	Translation elongation 1 b3186 3 ribosome(s)	306 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 27 EF-Tu.GTP.glu1-tRNA + 36 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 30 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 27 EF-Tu.GTP.val3-tRNA + 1530 mg2 + 1 rib_ini_b3186_3 --> 1 rib_70_elo1_b3186_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3186_3_rib2	Translation elongation 2 b3186 3 ribosome(s)	303 h2o + 1 rib_70_elo1_b3186_3_cplx --> 303 EF-G.GDP + 303 EF-Tu.GDP + 18 ala1_tRNA + 24 arg1_tRNA + 3 asn1_tRNA + 9 asp1_tRNA + 3 fmet_tRNA + 12 gln1_tRNA + 6 gln2_tRNA + 27 glu1_tRNA + 36 gly1_tRNA + 606 h + 12 hisR_tRNA + 21 ile1_tRNA + 9 leu1_tRNA + 30 lys1_tRNA + 3 met1_tRNA + 1530 mg2 + 15 phe1_tRNA + 606 pi + 3 pro2_tRNA + 1 rib_70_elo2_b3186_3_cplx + 9 serV_tRNA + 3 thr1_tRNA + 12 thr2_tRNA + 3 trpT_tRNA + 6 tyr1_tRNA + 12 val1_tRNA + 3 val2_tRNA + 27 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3186_6_rib1	Translation elongation 1 b3186 6 ribosome(s)	612 EF-G.GTP + 36 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 48 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 54 EF-Tu.GTP.glu1-tRNA + 72 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.hisR-tRNA + 42 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 60 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 30 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 24 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 54 EF-Tu.GTP.val3-tRNA + 3060 mg2 + 1 rib_ini_b3186_6 --> 1 rib_70_elo1_b3186_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3186_6_rib2	Translation elongation 2 b3186 6 ribosome(s)	606 h2o + 1 rib_70_elo1_b3186_6_cplx --> 606 EF-G.GDP + 606 EF-Tu.GDP + 36 ala1_tRNA + 48 arg1_tRNA + 6 asn1_tRNA + 18 asp1_tRNA + 6 fmet_tRNA + 24 gln1_tRNA + 12 gln2_tRNA + 54 glu1_tRNA + 72 gly1_tRNA + 1212 h + 24 hisR_tRNA + 42 ile1_tRNA + 18 leu1_tRNA + 60 lys1_tRNA + 6 met1_tRNA + 3060 mg2 + 30 phe1_tRNA + 1212 pi + 6 pro2_tRNA + 1 rib_70_elo2_b3186_6_cplx + 18 serV_tRNA + 6 thr1_tRNA + 24 thr2_tRNA + 6 trpT_tRNA + 12 tyr1_tRNA + 24 val1_tRNA + 6 val2_tRNA + 54 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333

tl_elo_b3201_14_rib1	Translation elongation 1 b3201 14 ribosome(s)	3360 EF-G.GTP + 196 EF-Tu.GTP.ala1-tRNA + 84 EF-Tu.GTP.ala2-tRNA + 294 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.argU-tRNA + 112 EF-Tu.GTP.asn1-tRNA + 252 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.cysT-tRNA + 42 EF-Tu.GTP.gln1-tRNA + 42 EF-Tu.GTP.gln2-tRNA + 252 EF-Tu.GTP.glu1-tRNA + 168 EF-Tu.GTP.gly1-tRNA + 98 EF-Tu.GTP.glyU-tRNA + 112 EF-Tu.GTP.hisR-tRNA + 294 EF-Tu.GTP.ile1-tRNA + 238 EF-Tu.GTP.leu1-tRNA + 28 EF-Tu.GTP.leu2-tRNA + 84 EF-Tu.GTP.leuU-tRNA + 28 EF-Tu.GTP.leuZ-tRNA + 98 EF-Tu.GTP.lys1-tRNA + 56 EF-Tu.GTP.met1-tRNA + 84 EF-Tu.GTP.phe1-tRNA + 56 EF-Tu.GTP.pro1-tRNA + 28 EF-Tu.GTP.pro2-tRNA + 28 EF-Tu.GTP.proM-tRNA + 42 EF-Tu.GTP.ser1-tRNA + 14 EF-Tu.GTP.ser2-tRNA + 14 EF-Tu.GTP.ser3-tRNA + 14 EF-Tu.GTP.serT-tRNA + 84 EF-Tu.GTP.serV-tRNA + 42 EF-Tu.GTP.thr1-tRNA + 42 EF-Tu.GTP.thr2-tRNA + 14 EF-Tu.GTP.thr3-tRNA + 42 EF-Tu.GTP.thrU-tRNA + 84 EF-Tu.GTP.tyr1-tRNA + 126 EF-Tu.GTP.val1-tRNA + 56 EF-Tu.GTP.val2-tRNA + 84 EF-Tu.GTP.val3-tRNA + 16800 mg2 + 1 rib_ini_b3201_14 --> 1 rib_70_elo1_b3201_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007
tl_elo_b3201_14_rib2	Translation elongation 2 b3201 14 ribosome(s)	3346 h2o + 1 rib_70_elo1_b3201_14_cplx --> 3346 EF-G.GDP + 3346 EF-Tu.GDP + 196 ala1_tRNA + 84 ala2_tRNA + 294 arg1_tRNA + 14 argU_tRNA + 112 asn1_tRNA + 252 asp1_tRNA + 14 cysT_tRNA + 14 fmet_tRNA + 42 gln1_tRNA + 42 gln2_tRNA + 252 glu1_tRNA + 168 gly1_tRNA + 98 glyU_tRNA + 6692 h + 112 hisR_tRNA + 294 ile1_tRNA + 238 leu1_tRNA + 28 leu2_tRNA + 70 leuU_tRNA + 28 leuZ_tRNA + 98 lys1_tRNA + 56 met1_tRNA + 16800 mg2 + 84 phe1_tRNA + 6692 pi + 56 pro1_tRNA + 28 pro2_tRNA + 28 proM_tRNA + 1 rib_70_elo2_b3201_14_cplx + 42 ser1_tRNA + 14 ser2_tRNA + 14 ser3_tRNA + 14 serT_tRNA + 84 serV_tRNA + 42 thr1_tRNA + 42 thr2_tRNA + 14 thr3_tRNA + 42 thrU_tRNA + 84 tyr1_tRNA + 126 val1_tRNA + 56 val2_tRNA + 84 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007
tl_elo_b3201_1_rib1	Translation elongation 1 b3201 1 ribosome(s)	240 EF-G.GTP + 14 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 21 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 17 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1200 mg2 + 1 rib_ini_b3201_1 --> 1 rib_70_elo1_b3201_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007
tl_elo_b3201_1_rib2	Translation elongation 2 b3201 1 ribosome(s)	239 h2o + 1 rib_70_elo1_b3201_1_cplx --> 239 EF-G.GDP + 239 EF-Tu.GDP + 14 ala1_tRNA + 6 ala2_tRNA + 21 arg1_tRNA + 1 argU_tRNA + 8 asn1_tRNA + 18 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 3 gln2_tRNA + 18 glu1_tRNA + 12 gly1_tRNA + 7 glyU_tRNA + 478 h + 8 hisR_tRNA + 21 ile1_tRNA + 17 leu1_tRNA + 2 leu2_tRNA + 5 leuU_tRNA + 2 leuZ_tRNA + 7 lys1_tRNA + 4 met1_tRNA + 1200 mg2 + 6 phe1_tRNA + 478 pi + 4 pro1_tRNA + 2 pro2_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3201_1_cplx + 3 ser1_tRNA + 1 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 6 serV_tRNA + 3 thr1_tRNA + 3 thr2_tRNA + 1 thr3_tRNA + 3 thrU_tRNA + 6 tyr1_tRNA + 9 val1_tRNA + 4 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007
tl_elo_b3201_7_rib1	Translation elongation 1 b3201 7 ribosome(s)	1680 EF-G.GTP + 98 EF-Tu.GTP.ala1-tRNA + 42 EF-Tu.GTP.ala2-tRNA + 147 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argU-tRNA + 56 EF-Tu.GTP.asn1-tRNA + 126 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 21 EF-Tu.GTP.gln1-tRNA + 21 EF-Tu.GTP.gln2-tRNA + 126 EF-Tu.GTP.glu1-tRNA + 84 EF-Tu.GTP.gly1-tRNA + 49 EF-Tu.GTP.glyU-tRNA + 56 EF-Tu.GTP.hisR-tRNA + 147 EF-Tu.GTP.ile1-tRNA + 119 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leu2-tRNA + 42 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.leuZ-tRNA + 49 EF-Tu.GTP.lys1-tRNA + 28 EF-Tu.GTP.met1-tRNA + 42 EF-Tu.GTP.phe1-tRNA + 28 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proM-tRNA + 21 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.ser3-tRNA + 7 EF-Tu.GTP.serT-tRNA + 42 EF-Tu.GTP.serV-tRNA + 21 EF-Tu.GTP.thr1-tRNA + 21 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 21 EF-Tu.GTP.thrU-tRNA + 42 EF-Tu.GTP.tyr1-tRNA + 63 EF-Tu.GTP.val1-tRNA + 28 EF-Tu.GTP.val2-tRNA + 42 EF-Tu.GTP.val3-tRNA + 8400 mg2 + 1 rib_ini_b3201_7 --> 1 rib_70_elo1_b3201_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007
tl_elo_b3201_7_rib2	Translation elongation 2 b3201 7 ribosome(s)	1673 h2o + 1 rib_70_elo1_b3201_7_cplx --> 1673 EF-G.GDP + 1673 EF-Tu.GDP + 98 ala1_tRNA + 42 ala2_tRNA + 147 arg1_tRNA + 7 argU_tRNA + 56 asn1_tRNA + 126 asp1_tRNA + 7 cysT_tRNA + 7 fmet_tRNA + 21 gln1_tRNA + 21 gln2_tRNA + 126 glu1_tRNA + 84 gly1_tRNA + 49 glyU_tRNA + 3346 h + 56 hisR_tRNA + 147 ile1_tRNA + 119 leu1_tRNA + 14 leu2_tRNA + 35 leuU_tRNA + 14 leuZ_tRNA + 49 lys1_tRNA + 28 met1_tRNA + 8400 mg2 + 42 phe1_tRNA + 3346 pi + 28 pro1_tRNA + 14 pro2_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b3201_7_cplx + 21 ser1_tRNA + 7 ser2_tRNA + 7 ser3_tRNA + 7 serT_tRNA + 42 serV_tRNA + 21 thr1_tRNA + 21 thr2_tRNA + 7 thr3_tRNA + 21 thrU_tRNA + 42 tyr1_tRNA + 63 val1_tRNA + 28 val2_tRNA + 42 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007

tl_elo_b3202_14_rib1	Translation elongation 1 b3202 14 ribosome(s)	6664 EF-G.GTP + 266 EF-Tu.GTP.ala1-tRNA + 168 EF-Tu.GTP.ala2-tRNA + 308 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.argU-tRNA + 14 EF-Tu.GTP.argW-tRNA + 28 EF-Tu.GTP.argX-tRNA + 196 EF-Tu.GTP.asn1-tRNA + 504 EF-Tu.GTP.asp1-tRNA + 42 EF-Tu.GTP.cysT-tRNA + 294 EF-Tu.GTP.gln1-tRNA + 238 EF-Tu.GTP.gln2-tRNA + 588 EF-Tu.GTP.glu1-tRNA + 238 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyU-tRNA + 126 EF-Tu.GTP.hisR-tRNA + 392 EF-Tu.GTP.ile1-tRNA + 28 EF-Tu.GTP.ile2-tRNA + 434 EF-Tu.GTP.leu1-tRNA + 98 EF-Tu.GTP.leu2-tRNA + 196 EF-Tu.GTP.leuU-tRNA + 28 EF-Tu.GTP.leuW-tRNA + 70 EF-Tu.GTP.leuZ-tRNA + 266 EF-Tu.GTP.lys1-tRNA + 126 EF-Tu.GTP.met1-tRNA + 140 EF-Tu.GTP.phe1-tRNA + 196 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proL-tRNA + 70 EF-Tu.GTP.proM-tRNA + 98 EF-Tu.GTP.ser1-tRNA + 56 EF-Tu.GTP.ser2-tRNA + 84 EF-Tu.GTP.ser3-tRNA + 14 EF-Tu.GTP.serT-tRNA + 252 EF-Tu.GTP.serV-tRNA + 168 EF-Tu.GTP.thr1-tRNA + 84 EF-Tu.GTP.thr2-tRNA + 182 EF-Tu.GTP.thr3-tRNA + 28 EF-Tu.GTP.thrU-tRNA + 70 EF-Tu.GTP.trpT-tRNA + 154 EF-Tu.GTP.tyr1-tRNA + 140 EF-Tu.GTP.val1-tRNA + 140 EF-Tu.GTP.val2-tRNA + 84 EF-Tu.GTP.val3-tRNA + 33320 mg2	irreversible	Translation	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917
tl_elo_b3202_14_rib2	Translation elongation 2 b3202 14 ribosome(s)	6650 h2o + 1 rib_70_elo1_b3202_14_cplx --> 6650 EF-G.GDP + 6650 EF-Tu.GDP + 266 ala1_tRNA + 168 ala2_tRNA + 308 arg1_tRNA + 14 argU_tRNA + 14 argW_tRNA + 28 argX_tRNA + 196 asn1_tRNA + 504 asp1_tRNA + 42 cysT_tRNA + 14 fmet_tRNA + 294 gln1_tRNA + 238 gln2_tRNA + 588 glu1_tRNA + 238 gly1_tRNA + 14 glyU_tRNA + 13300 h + 126 hisR_tRNA + 392 ile1_tRNA + 28 ile2_tRNA + 434 leu1_tRNA + 98 leu2_tRNA + 196 leuU_tRNA + 28 leuW_tRNA + 70 leuZ_tRNA + 266 lys1_tRNA + 126 met1_tRNA + 33320 mg2 + 140 phe1_tRNA + 13300 pi + 196 pro1_tRNA + 14 pro2_tRNA + 14 proL_tRNA + 70 proM_tRNA + 1 rib_70_elo2_b3202_14_cplx + 98 ser1_tRNA + 56 ser2_tRNA + 84 ser3_tRNA + 14 serT_tRNA + 252 serV_tRNA + 168 thr1_tRNA + 84 thr2_tRNA + 182 thr3_tRNA + 28 thrU_tRNA + 70 trpT_tRNA + 154 tyr1_tRNA + 140 val1_tRNA + 140 val2_tRNA + 70 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917
tl_elo_b3202_1_rib1	Translation elongation 1 b3202 1 ribosome(s)	476 EF-G.GTP + 19 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 22 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argW-tRNA + 2 EF-Tu.GTP.argX-tRNA + 14 EF-Tu.GTP.asn1-tRNA + 36 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 21 EF-Tu.GTP.gln1-tRNA + 17 EF-Tu.GTP.gln2-tRNA + 42 EF-Tu.GTP.glu1-tRNA + 17 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 28 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 31 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 14 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 19 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 18 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 13 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 11 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 2380 mg2 + 1 rib_ini_b3202_1 -->	irreversible	Translation	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917
tl_elo_b3202_1_rib2	Translation elongation 2 b3202 1 ribosome(s)	475 h2o + 1 rib_70_elo1_b3202_1_cplx --> 475 EF-G.GDP + 475 EF-Tu.GDP + 19 ala1_tRNA + 12 ala2_tRNA + 22 arg1_tRNA + 1 argU_tRNA + 1 argW_tRNA + 2 argX_tRNA + 14 asn1_tRNA + 36 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 21 gln1_tRNA + 17 gln2_tRNA + 42 glu1_tRNA + 17 gly1_tRNA + 1 glyU_tRNA + 950 h + 9 hisR_tRNA + 28 ile1_tRNA + 2 ile2_tRNA + 31 leu1_tRNA + 7 leu2_tRNA + 14 leuU_tRNA + 2 leuW_tRNA + 5 leuZ_tRNA + 19 lys1_tRNA + 9 met1_tRNA + 2380 mg2 + 10 phe1_tRNA + 950 pi + 14 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b3202_1_cplx + 7 ser1_tRNA + 4 ser2_tRNA + 6 ser3_tRNA + 1 serT_tRNA + 18 serV_tRNA + 12 thr1_tRNA + 6 thr2_tRNA + 13 thr3_tRNA + 2 thrU_tRNA + 5 trpT_tRNA + 11 tyr1_tRNA + 10 val1_tRNA + 10 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917
tl_elo_b3202_28_rib1	Translation elongation 1 b3202 28 ribosome(s)	13328 EF-G.GTP + 532 EF-Tu.GTP.ala1-tRNA + 336 EF-Tu.GTP.ala2-tRNA + 616 EF-Tu.GTP.arg1-tRNA + 28 EF-Tu.GTP.argU-tRNA + 28 EF-Tu.GTP.argW-tRNA + 56 EF-Tu.GTP.argX-tRNA + 392 EF-Tu.GTP.asn1-tRNA + 1008 EF-Tu.GTP.asp1-tRNA + 84 EF-Tu.GTP.cysT-tRNA + 588 EF-Tu.GTP.gln1-tRNA + 476 EF-Tu.GTP.gln2-tRNA + 1176 EF-Tu.GTP.glu1-tRNA + 476 EF-Tu.GTP.gly1-tRNA + 28 EF-Tu.GTP.glyU-tRNA + 252 EF-Tu.GTP.hisR-tRNA + 784 EF-Tu.GTP.ile1-tRNA + 56 EF-Tu.GTP.ile2-tRNA + 868 EF-Tu.GTP.leu1-tRNA + 196 EF-Tu.GTP.leu2-tRNA + 392 EF-Tu.GTP.leuU-tRNA + 56 EF-Tu.GTP.leuW-tRNA + 140 EF-Tu.GTP.leuZ-tRNA + 532 EF-Tu.GTP.lys1-tRNA + 252 EF-Tu.GTP.met1-tRNA + 280 EF-Tu.GTP.phe1-tRNA + 392 EF-Tu.GTP.pro1-tRNA + 28 EF-Tu.GTP.pro2-tRNA + 28 EF-Tu.GTP.proL-tRNA + 140 EF-Tu.GTP.proM-tRNA + 196 EF-Tu.GTP.ser1-tRNA + 112 EF-Tu.GTP.ser2-tRNA + 168 EF-Tu.GTP.ser3-tRNA + 28 EF-Tu.GTP.serT-tRNA + 504 EF-Tu.GTP.serV-tRNA + 336 EF-Tu.GTP.thr1-tRNA + 168 EF-Tu.GTP.thr2-tRNA + 364 EF-Tu.GTP.thr3-tRNA + 56 EF-Tu.GTP.thrU-tRNA + 140 EF-Tu.GTP.trpT-tRNA + 308 EF-Tu.GTP.tyr1-tRNA + 280 EF-Tu.GTP.val1-tRNA + 280 EF-Tu.GTP.val2-tRNA + 168 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917
tl_elo_b3202_28_rib2	Translation elongation 2 b3202 28 ribosome(s)	13300 h2o + 1 rib_70_elo1_b3202_28_cplx --> 13300 EF-G.GDP + 13300 EF-Tu.GDP + 532 ala1_tRNA + 336 ala2_tRNA + 616 arg1_tRNA + 28 argU_tRNA + 28 argW_tRNA + 56 argX_tRNA + 392 asn1_tRNA + 1008 asp1_tRNA + 84 cysT_tRNA + 28 fmet_tRNA + 588 gln1_tRNA + 476 gln2_tRNA + 1176 glu1_tRNA + 476 gly1_tRNA + 28 glyU_tRNA + 26600 h + 252 hisR_tRNA + 784 ile1_tRNA + 56 ile2_tRNA + 868 leu1_tRNA + 196 leu2_tRNA + 392 leuU_tRNA + 56 leuW_tRNA + 140 leuZ_tRNA + 532 lys1_tRNA + 252 met1_tRNA + 66640 mg2 + 280 phe1_tRNA + 26600 pi + 392 pro1_tRNA + 28 pro2_tRNA + 28 proL_tRNA + 140 proM_tRNA + 1 rib_70_elo2_b3202_28_cplx + 196 ser1_tRNA + 112 ser2_tRNA + 168 ser3_tRNA + 28 serT_tRNA + 504 serV_tRNA + 336 thr1_tRNA + 168 thr2_tRNA + 364 thr3_tRNA + 56 thrU_tRNA + 140 trpT_tRNA + 308 tyr1_tRNA + 280 val1_tRNA + 280 val2_tRNA + 140 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917

tl_elo_b3203_1_rib1	Translation elongation 1 b3203 1 ribosome(s)	94 EF-G.GTP + 5 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 3 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 7 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.serT-tRNA + 1 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 470 mg2 + 1 rib_ini_b3203_1 --> 1 rib_70_elo1_b3203_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_elo_b3203_1_rib2	Translation elongation 2 b3203 1 ribosome(s)	93 h2o + 1 rib_70_elo1_b3203_1_cplx --> 93 EF-G.GDP + 93 EF-Tu.GDP + 5 ala1_tRNA + 4 ala2_tRNA + 3 arg1_tRNA + 5 asn1_tRNA + 6 asp1_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 2 gln2_tRNA + 7 glu1_tRNA + 4 gly1_tRNA + 1 glyT_tRNA + 186 h + 4 hisR_tRNA + 6 ile1_tRNA + 5 leu1_tRNA + 1 leu2_tRNA + 2 leuU_tRNA + 1 leuZ_tRNA + 9 lys1_tRNA + 1 met1_tRNA + 470 mg2 + 3 phe1_tRNA + 186 pi + 1 rib_70_elo2_b3203_1_cplx + 1 serT_tRNA + 1 serV_tRNA + 5 thr1_tRNA + 2 thrU_tRNA + 3 tyr1_tRNA + 2 val1_tRNA + 3 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_elo_b3203_2_rib1	Translation elongation 1 b3203 2 ribosome(s)	188 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 18 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.serT-tRNA + 2 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 940 mg2 + 1 rib_ini_b3203_2 --> 1 rib_70_elo1_b3203_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_elo_b3203_2_rib2	Translation elongation 2 b3203 2 ribosome(s)	186 h2o + 1 rib_70_elo1_b3203_2_cplx --> 186 EF-G.GDP + 186 EF-Tu.GDP + 10 ala1_tRNA + 8 ala2_tRNA + 6 arg1_tRNA + 10 asn1_tRNA + 12 asp1_tRNA + 2 fmet_tRNA + 8 gln1_tRNA + 4 gln2_tRNA + 14 glu1_tRNA + 8 gly1_tRNA + 2 glyT_tRNA + 372 h + 8 hisR_tRNA + 12 ile1_tRNA + 10 leu1_tRNA + 2 leu2_tRNA + 4 leuU_tRNA + 2 leuZ_tRNA + 18 lys1_tRNA + 2 met1_tRNA + 940 mg2 + 6 phe1_tRNA + 372 pi + 1 rib_70_elo2_b3203_2_cplx + 2 serT_tRNA + 2 serV_tRNA + 10 thr1_tRNA + 4 thrU_tRNA + 6 tyr1_tRNA + 4 val1_tRNA + 6 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_elo_b3203_5_rib1	Translation elongation 1 b3203 5 ribosome(s)	470 EF-G.GTP + 25 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 25 EF-Tu.GTP.asn1-tRNA + 30 EF-Tu.GTP.asp1-tRNA + 20 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 35 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 25 EF-Tu.GTP.hisR-tRNA + 30 EF-Tu.GTP.ile1-tRNA + 25 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 45 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 25 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thrU-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 15 EF-Tu.GTP.val2-tRNA + 15 EF-Tu.GTP.val3-tRNA + 2350 mg2 + 1 rib_ini_b3203_5 --> 1 rib_70_elo1_b3203_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_elo_b3203_5_rib2	Translation elongation 2 b3203 5 ribosome(s)	465 h2o + 1 rib_70_elo1_b3203_5_cplx --> 465 EF-G.GDP + 465 EF-Tu.GDP + 25 ala1_tRNA + 20 ala2_tRNA + 15 arg1_tRNA + 25 asn1_tRNA + 30 asp1_tRNA + 5 fmet_tRNA + 20 gln1_tRNA + 10 gln2_tRNA + 35 glu1_tRNA + 20 gly1_tRNA + 5 glyT_tRNA + 930 h + 20 hisR_tRNA + 30 ile1_tRNA + 25 leu1_tRNA + 5 leu2_tRNA + 10 leuU_tRNA + 5 leuZ_tRNA + 45 lys1_tRNA + 5 met1_tRNA + 2350 mg2 + 15 phe1_tRNA + 930 pi + 1 rib_70_elo2_b3203_5_cplx + 5 serT_tRNA + 5 serV_tRNA + 25 thr1_tRNA + 10 thrU_tRNA + 15 tyr1_tRNA + 10 val1_tRNA + 15 val2_tRNA + 15 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_elo_b3204_1_rib1	Translation elongation 1 b3204 1 ribosome(s)	162 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.argX-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 7 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 810 mg2 + 1 rib_ini_b3204_1 --> 1 rib_70_elo1_b3204_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607
tl_elo_b3204_1_rib2	Translation elongation 2 b3204 1 ribosome(s)	161 h2o + 1 rib_70_elo1_b3204_1_cplx --> 161 EF-G.GDP + 161 EF-Tu.GDP + 8 ala1_tRNA + 6 ala2_tRNA + 8 arg1_tRNA + 1 argW_tRNA + 1 argX_tRNA + 5 asn1_tRNA + 10 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 4 gln2_tRNA + 12 glu1_tRNA + 7 gly1_tRNA + 322 h + 4 hisR_tRNA + 10 ile1_tRNA + 1 ile2_tRNA + 13 leu1_tRNA + 5 leuU_tRNA + 1 leuW_tRNA + 2 leuZ_tRNA + 8 lys1_tRNA + 1 met1_tRNA + 810 mg2 + 4 phe1_tRNA + 322 pi + 5 pro1_tRNA + 2 pro2_tRNA + 1 rib_70_elo2_b3204_1_cplx + 1 ser3_tRNA + 8 serV_tRNA + 3 thr1_tRNA + 5 thr2_tRNA + 5 thr3_tRNA + 2 thrU_tRNA + 1 tyr1_tRNA + 4 val1_tRNA + 1 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607

tl_elo_b3204_4_rib1	Translation elongation 1 b3204 4 ribosome(s)	648 EF-G.GTP + 36 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 32 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argW-tRNA + 4 EF-Tu.GTP.argX-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 40 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 20 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.gln2-tRNA + 48 EF-Tu.GTP.glu1-tRNA + 28 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 40 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.ile2-tRNA + 52 EF-Tu.GTP.leu1-tRNA + 20 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuW-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 32 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 32 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr2-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 16 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 20 EF-Tu.GTP.val3-tRNA + 3240 mg2 + 1 rib_ini_b3204_4 --> 1 rib_70_elo1_b3204_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607
tl_elo_b3204_4_rib2	Translation elongation 2 b3204 4 ribosome(s)	644 h2o + 1 rib_70_elo1_b3204_4_cplx --> 644 EF-G.GDP + 644 EF-Tu.GDP + 32 ala1_tRNA + 24 ala2_tRNA + 32 arg1_tRNA + 4 argW_tRNA + 4 argX_tRNA + 20 asn1_tRNA + 40 asp1_tRNA + 12 cysT_tRNA + 4 fmet_tRNA + 20 gln1_tRNA + 16 gln2_tRNA + 48 glu1_tRNA + 28 gly1_tRNA + 1288 h + 16 hisR_tRNA + 40 ile1_tRNA + 4 ile2_tRNA + 52 leu1_tRNA + 20 leuU_tRNA + 4 leuW_tRNA + 8 leuZ_tRNA + 32 lys1_tRNA + 4 met1_tRNA + 3240 mg2 + 16 phe1_tRNA + 1288 pi + 20 pro1_tRNA + 8 pro2_tRNA + 1 rib_70_elo2_b3204_4_cplx + 4 ser3_tRNA + 32 serV_tRNA + 12 thr1_tRNA + 20 thr2_tRNA + 20 thr3_tRNA + 8 thrU_tRNA + 4 tyr1_tRNA + 16 val1_tRNA + 4 val2_tRNA + 20 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607
tl_elo_b3204_9_rib1	Translation elongation 1 b3204 9 ribosome(s)	1458 EF-G.GTP + 81 EF-Tu.GTP.ala1-tRNA + 54 EF-Tu.GTP.ala2-tRNA + 72 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argW-tRNA + 9 EF-Tu.GTP.argX-tRNA + 45 EF-Tu.GTP.asn1-tRNA + 90 EF-Tu.GTP.asp1-tRNA + 27 EF-Tu.GTP.cysT-tRNA + 45 EF-Tu.GTP.gln1-tRNA + 36 EF-Tu.GTP.gln2-tRNA + 108 EF-Tu.GTP.glu1-tRNA + 63 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.hisR-tRNA + 90 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.ile2-tRNA + 117 EF-Tu.GTP.leu1-tRNA + 45 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuW-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 72 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 36 EF-Tu.GTP.phe1-tRNA + 45 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.ser3-tRNA + 72 EF-Tu.GTP.serV-tRNA + 27 EF-Tu.GTP.thr1-tRNA + 45 EF-Tu.GTP.thr2-tRNA + 45 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 36 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 45 EF-Tu.GTP.val3-tRNA + 7290 mg2 + 1 rib_ini_b3204_9 --> 1 rib_70_elo1_b3204_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607
tl_elo_b3204_9_rib2	Translation elongation 2 b3204 9 ribosome(s)	1449 h2o + 1 rib_70_elo1_b3204_9_cplx --> 1449 EF-G.GDP + 1449 EF-Tu.GDP + 72 ala1_tRNA + 54 ala2_tRNA + 72 arg1_tRNA + 9 argW_tRNA + 9 argX_tRNA + 45 asn1_tRNA + 90 asp1_tRNA + 27 cysT_tRNA + 9 fmet_tRNA + 45 gln1_tRNA + 36 gln2_tRNA + 108 glu1_tRNA + 63 gly1_tRNA + 2898 h + 36 hisR_tRNA + 90 ile1_tRNA + 9 ile2_tRNA + 117 leu1_tRNA + 45 leuU_tRNA + 9 leuW_tRNA + 18 leuZ_tRNA + 72 lys1_tRNA + 9 met1_tRNA + 7290 mg2 + 36 phe1_tRNA + 2898 pi + 45 pro1_tRNA + 18 pro2_tRNA + 1 rib_70_elo2_b3204_9_cplx + 9 ser3_tRNA + 72 serV_tRNA + 27 thr1_tRNA + 45 thr2_tRNA + 45 thr3_tRNA + 18 thrU_tRNA + 9 tyr1_tRNA + 36 val1_tRNA + 9 val2_tRNA + 45 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607
tl_elo_b3205_16_rib1	Translation elongation 1 b3205 16 ribosome(s)	4528 EF-G.GTP + 176 EF-Tu.GTP.ala1-tRNA + 112 EF-Tu.GTP.ala2-tRNA + 432 EF-Tu.GTP.arg1-tRNA + 160 EF-Tu.GTP.asn1-tRNA + 320 EF-Tu.GTP.asp1-tRNA + 32 EF-Tu.GTP.cysT-tRNA + 48 EF-Tu.GTP.gln1-tRNA + 32 EF-Tu.GTP.gln2-tRNA + 304 EF-Tu.GTP.glu1-tRNA + 160 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 16 EF-Tu.GTP.glyU-tRNA + 128 EF-Tu.GTP.hisR-tRNA + 176 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.ile2-tRNA + 368 EF-Tu.GTP.leu1-tRNA + 64 EF-Tu.GTP.leu2-tRNA + 96 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuW-tRNA + 48 EF-Tu.GTP.leuZ-tRNA + 176 EF-Tu.GTP.lys1-tRNA + 144 EF-Tu.GTP.met1-tRNA + 192 EF-Tu.GTP.phe1-tRNA + 96 EF-Tu.GTP.pro1-tRNA + 80 EF-Tu.GTP.pro2-tRNA + 32 EF-Tu.GTP.proL-tRNA + 48 EF-Tu.GTP.proM-tRNA + 32 EF-Tu.GTP.ser1-tRNA + 48 EF-Tu.GTP.ser2-tRNA + 64 EF-Tu.GTP.ser3-tRNA + 96 EF-Tu.GTP.serT-tRNA + 144 EF-Tu.GTP.serV-tRNA + 112 EF-Tu.GTP.thr1-tRNA + 64 EF-Tu.GTP.thr3-tRNA + 32 EF-Tu.GTP.thrU-tRNA + 32 EF-Tu.GTP.trpT-tRNA + 128 EF-Tu.GTP.tyr1-tRNA + 112 EF-Tu.GTP.val1-tRNA + 144 EF-Tu.GTP.val2-tRNA + 32 EF-Tu.GTP.val3-tRNA + 22640 mg2 + 1 rib_ini_b3205_16 --> 1 rib_70_elo1_b3205_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087
tl_elo_b3205_16_rib2	Translation elongation 2 b3205 16 ribosome(s)	4512 h2o + 1 rib_70_elo1_b3205_16_cplx --> 4512 EF-G.GDP + 4512 EF-Tu.GDP + 176 ala1_tRNA + 112 ala2_tRNA + 432 arg1_tRNA + 160 asn1_tRNA + 320 asp1_tRNA + 32 cysT_tRNA + 16 fmet_tRNA + 48 gln1_tRNA + 32 gln2_tRNA + 304 glu1_tRNA + 160 gly1_tRNA + 16 glyT_tRNA + 16 glyU_tRNA + 9024 h + 128 hisR_tRNA + 176 ile1_tRNA + 16 ile2_tRNA + 368 leu1_tRNA + 64 leu2_tRNA + 96 leuU_tRNA + 16 leuW_tRNA + 48 leuZ_tRNA + 176 lys1_tRNA + 144 met1_tRNA + 22640 mg2 + 192 phe1_tRNA + 9024 pi + 96 pro1_tRNA + 80 pro2_tRNA + 32 proL_tRNA + 32 proM_tRNA + 1 rib_70_elo2_b3205_16_cplx + 32 ser1_tRNA + 48 ser2_tRNA + 64 ser3_tRNA + 96 serT_tRNA + 144 serV_tRNA + 112 thr1_tRNA + 64 thr3_tRNA + 32 thrU_tRNA + 32 trpT_tRNA + 128 tyr1_tRNA + 112 val1_tRNA + 144 val2_tRNA + 32 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087

tl_elo_b3205_1_rib1	Translation elongation 1 b3205 1 ribosome(s)	283 EF-G.GTP + 11 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 27 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 20 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 19 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 23 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serT-tRNA + 9 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 1415 mg2 + 1 rib_ini_b3205_1 --> 1 rib_70_elo1_b3205_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087
tl_elo_b3205_1_rib2	Translation elongation 2 b3205 1 ribosome(s)	282 h2o + 1 rib_70_elo1_b3205_1_cplx --> 282 EF-G.GDP + 282 EF-Tu.GDP + 11 ala1_tRNA + 7 ala2_tRNA + 27 arg1_tRNA + 10 asn1_tRNA + 20 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 2 gln2_tRNA + 19 glu1_tRNA + 10 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 564 h + 8 hisR_tRNA + 11 ile1_tRNA + 1 ile2_tRNA + 23 leu1_tRNA + 4 leu2_tRNA + 6 leuU_tRNA + 1 leuW_tRNA + 3 leuZ_tRNA + 11 lys1_tRNA + 9 met1_tRNA + 1415 mg2 + 12 phe1_tRNA + 564 pi + 6 pro1_tRNA + 5 pro2_tRNA + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3205_1_cplx + 2 ser1_tRNA + 3 ser2_tRNA + 4 ser3_tRNA + 6 serT_tRNA + 9 serV_tRNA + 7 thr1_tRNA + 4 thr3_tRNA + 2 thrU_tRNA + 2 trpT_tRNA + 8 tyr1_tRNA + 7 val1_tRNA + 9 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087
tl_elo_b3205_8_rib1	Translation elongation 1 b3205 8 ribosome(s)	2264 EF-G.GTP + 88 EF-Tu.GTP.ala1-tRNA + 56 EF-Tu.GTP.ala2-tRNA + 216 EF-Tu.GTP.arg1-tRNA + 80 EF-Tu.GTP.asn1-tRNA + 160 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.cysT-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.gln2-tRNA + 152 EF-Tu.GTP.glu1-tRNA + 80 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 64 EF-Tu.GTP.hisR-tRNA + 88 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.ile2-tRNA + 184 EF-Tu.GTP.leu1-tRNA + 32 EF-Tu.GTP.leu2-tRNA + 48 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuW-tRNA + 24 EF-Tu.GTP.leuZ-tRNA + 88 EF-Tu.GTP.lys1-tRNA + 72 EF-Tu.GTP.met1-tRNA + 96 EF-Tu.GTP.phe1-tRNA + 48 EF-Tu.GTP.pro1-tRNA + 40 EF-Tu.GTP.pro2-tRNA + 16 EF-Tu.GTP.proL-tRNA + 24 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 32 EF-Tu.GTP.ser3-tRNA + 48 EF-Tu.GTP.serT-tRNA + 72 EF-Tu.GTP.serV-tRNA + 56 EF-Tu.GTP.thr1-tRNA + 32 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 16 EF-Tu.GTP.trpT-tRNA + 64 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 72 EF-Tu.GTP.val2-tRNA + 16 EF-Tu.GTP.val3-tRNA + 11320 mg2 + 1 rib_ini_b3205_8 --> 1 rib_70_elo1_b3205_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087
tl_elo_b3205_8_rib2	Translation elongation 2 b3205 8 ribosome(s)	2256 h2o + 1 rib_70_elo1_b3205_8_cplx --> 2256 EF-G.GDP + 2256 EF-Tu.GDP + 88 ala1_tRNA + 56 ala2_tRNA + 216 arg1_tRNA + 80 asn1_tRNA + 160 asp1_tRNA + 16 cysT_tRNA + 8 fmet_tRNA + 24 gln1_tRNA + 16 gln2_tRNA + 152 glu1_tRNA + 80 gly1_tRNA + 8 glyT_tRNA + 8 glyU_tRNA + 4512 h + 64 hisR_tRNA + 88 ile1_tRNA + 8 ile2_tRNA + 184 leu1_tRNA + 32 leu2_tRNA + 48 leuU_tRNA + 8 leuW_tRNA + 24 leuZ_tRNA + 88 lys1_tRNA + 72 met1_tRNA + 11320 mg2 + 96 phe1_tRNA + 4512 pi + 48 pro1_tRNA + 40 pro2_tRNA + 16 proL_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b3205_8_cplx + 16 ser1_tRNA + 24 ser2_tRNA + 32 ser3_tRNA + 48 serT_tRNA + 72 serV_tRNA + 56 thr1_tRNA + 32 thr3_tRNA + 16 thrU_tRNA + 16 trpT_tRNA + 64 tyr1_tRNA + 56 val1_tRNA + 72 val2_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087
tl_elo_b3206_1_rib1	Translation elongation 1 b3206 1 ribosome(s)	89 EF-G.GTP + 6 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 1 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 445 mg2 + 1 rib_ini_b3206_1 --> 1 rib_70_elo1_b3206_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_elo_b3206_1_rib2	Translation elongation 2 b3206 1 ribosome(s)	88 h2o + 1 rib_70_elo1_b3206_1_cplx --> 88 EF-G.GDP + 88 EF-Tu.GDP + 6 ala1_tRNA + 6 ala2_tRNA + 1 arg1_tRNA + 2 argX_tRNA + 4 asn1_tRNA + 4 asp1_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 1 gln2_tRNA + 12 glu1_tRNA + 5 gly1_tRNA + 1 glyT_tRNA + 176 h + 1 hisR_tRNA + 4 ile1_tRNA + 5 leu1_tRNA + 1 leu2_tRNA + 2 leuU_tRNA + 2 leuZ_tRNA + 4 lys1_tRNA + 4 met1_tRNA + 445 mg2 + 4 phe1_tRNA + 176 pi + 1 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3206_1_cplx + 2 ser2_tRNA + 1 serV_tRNA + 3 thr1_tRNA + 1 thr2_tRNA + 1 thrU_tRNA + 1 val1_tRNA + 1 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_elo_b3206_2_rib1	Translation elongation 1 b3206 2 ribosome(s)	178 EF-G.GTP + 12 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 2 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argX-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 890 mg2 + 1 rib_ini_b3206_2 --> 1 rib_70_elo1_b3206_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007

tl_elo_b3206_2_rib2	Translation elongation 2 b3206 2 ribosome(s)	176 h2o + 1 rib_70_elo1_b3206_2_cplx --> 176 EF-G.GDP + 176 EF-Tu.GDP + 12 ala1_tRNA + 12 ala2_tRNA + 2 arg1_tRNA + 4 argX_tRNA + 8 asn1_tRNA + 8 asp1_tRNA + 2 fmet_tRNA + 6 gln1_tRNA + 2 gln2_tRNA + 24 glu1_tRNA + 10 gly1_tRNA + 2 glyT_tRNA + 352 h + 2 hisR_tRNA + 8 ile1_tRNA + 10 leu1_tRNA + 1 leu2_tRNA + 4 leuU_tRNA + 4 leuZ_tRNA + 8 lys1_tRNA + 8 met1_tRNA + 890 mg2 + 8 phe1_tRNA + 352 pi + 2 pro2_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3206_2_cplx + 4 ser2_tRNA + 2 serV_tRNA + 6 thr1_tRNA + 2 thr2_tRNA + 2 thrU_tRNA + 2 val1_tRNA + 2 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_elo_b3206_5_rib1	Translation elongation 1 b3206 5 ribosome(s)	445 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 30 EF-Tu.GTP.ala2-tRNA + 5 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argX-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 25 EF-Tu.GTP.asp1-tRNA + 15 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 60 EF-Tu.GTP.glu1-tRNA + 25 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 25 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 20 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proM-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 20 EF-Tu.GTP.val3-tRNA + 2225 mg2 + 1 rib_ini_b3206_5 --> 1 rib_70_elo1_b3206_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_elo_b3206_5_rib2	Translation elongation 2 b3206 5 ribosome(s)	440 h2o + 1 rib_70_elo1_b3206_5_cplx --> 440 EF-G.GDP + 440 EF-Tu.GDP + 30 ala1_tRNA + 30 ala2_tRNA + 5 arg1_tRNA + 10 argX_tRNA + 20 asn1_tRNA + 20 asp1_tRNA + 5 fmet_tRNA + 15 gln1_tRNA + 5 gln2_tRNA + 60 glu1_tRNA + 25 gly1_tRNA + 5 glyT_tRNA + 880 h + 5 hisR_tRNA + 20 ile1_tRNA + 25 leu1_tRNA + 5 leu2_tRNA + 10 leuU_tRNA + 10 leuZ_tRNA + 20 lys1_tRNA + 20 met1_tRNA + 2225 mg2 + 20 phe1_tRNA + 880 pi + 5 pro2_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b3206_5_cplx + 10 ser2_tRNA + 5 serV_tRNA + 15 thr1_tRNA + 5 thr2_tRNA + 5 thrU_tRNA + 5 val1_tRNA + 5 val2_tRNA + 20 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_elo_b3230_1_rib1	Translation elongation 1 b3230 1 ribosome(s)	129 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 19 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 4 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 9 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 645 mg2 + 1 rib_ini_b3230_1 --> 1 rib_70_elo1_b3230_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.88E+01	9.88E+01	0	8.29E+01	82.88	0	1.95E+01	19.46933
tl_elo_b3230_1_rib2	Translation elongation 2 b3230 1 ribosome(s)	128 h2o + 1 rib_70_elo1_b3230_1_cplx --> 128 EF-G.GDP + 128 EF-Tu.GDP + 9 ala1_tRNA + 1 ala2_tRNA + 18 arg1_tRNA + 3 asn1_tRNA + 4 asp1_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 2 gln2_tRNA + 9 glu1_tRNA + 13 gly1_tRNA + 256 h + 1 hisR_tRNA + 7 ile1_tRNA + 9 leu1_tRNA + 10 lys1_tRNA + 3 met1_tRNA + 645 mg2 + 4 phe1_tRNA + 256 pi + 3 pro1_tRNA + 1 rib_70_elo2_b3230_1_cplx + 3 ser1_tRNA + 3 ser2_tRNA + 1 serV_tRNA + 2 thr1_tRNA + 3 thr2_tRNA + 5 tyr1_tRNA + 2 val1_tRNA + 2 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.88E+01	9.88E+01	0	8.29E+01	82.88	0	1.95E+01	19.46933
tl_elo_b3230_3_rib1	Translation elongation 1 b3230 3 ribosome(s)	387 EF-G.GTP + 27 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 57 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 15 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 27 EF-Tu.GTP.glu1-tRNA + 39 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 27 EF-Tu.GTP.leu1-tRNA + 30 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 18 EF-Tu.GTP.val3-tRNA + 1935 mg2 + 1 rib_ini_b3230_3 --> 1 rib_70_elo1_b3230_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.68E+01	3.68E+01	0	2.76E+01	27.62667	0	2.56E+01	25.568
tl_elo_b3230_3_rib2	Translation elongation 2 b3230 3 ribosome(s)	384 h2o + 1 rib_70_elo1_b3230_3_cplx --> 384 EF-G.GDP + 384 EF-Tu.GDP + 27 ala1_tRNA + 3 ala2_tRNA + 54 arg1_tRNA + 9 asn1_tRNA + 12 asp1_tRNA + 3 fmet_tRNA + 15 gln1_tRNA + 6 gln2_tRNA + 27 glu1_tRNA + 39 gly1_tRNA + 768 h + 3 hisR_tRNA + 21 ile1_tRNA + 27 leu1_tRNA + 30 lys1_tRNA + 9 met1_tRNA + 193 mg2 + 12 phe1_tRNA + 768 pi + 9 pro1_tRNA + 1 rib_70_elo2_b3230_3_cplx + 9 ser1_tRNA + 9 ser2_tRNA + 3 serV_tRNA + 6 thr1_tRNA + 9 thr2_tRNA + 15 tyr1_tRNA + 6 val1_tRNA + 6 val2_tRNA + 18 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.68E+01	3.68E+01	0	2.76E+01	27.62667	0	2.56E+01	25.568
tl_elo_b3230_7_rib1	Translation elongation 1 b3230 7 ribosome(s)	903 EF-G.GTP + 63 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 133 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.asn1-tRNA + 28 EF-Tu.GTP.asp1-tRNA + 35 EF-Tu.GTP.gln1-tRNA + 14 EF-Tu.GTP.gln2-tRNA + 63 EF-Tu.GTP.glu1-tRNA + 91 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 49 EF-Tu.GTP.ile1-tRNA + 63 EF-Tu.GTP.leu1-tRNA + 70 EF-Tu.GTP.lys1-tRNA + 21 EF-Tu.GTP.met1-tRNA + 28 EF-Tu.GTP.phe1-tRNA + 21 EF-Tu.GTP.pro1-tRNA + 21 EF-Tu.GTP.ser1-tRNA + 21 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 21 EF-Tu.GTP.thr2-tRNA + 35 EF-Tu.GTP.tyr1-tRNA + 14 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 42 EF-Tu.GTP.val3-tRNA + 4515 mg2 + 1 rib_ini_b3230_7 --> 1 rib_70_elo1_b3230_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_elo_b3230_7_rib2	Translation elongation 2 b3230 7 ribosome(s)	896 h2o + 1 rib_70_elo1_b3230_7_cplx --> 896 EF-G.GDP + 896 EF-Tu.GDP + 63 ala1_tRNA + 7 ala2_tRNA + 126 arg1_tRNA + 21 asn1_tRNA + 28 asp1_tRNA + 7 fmet_tRNA + 35 gln1_tRNA + 14 gln2_tRNA + 63 glu1_tRNA + 91 gly1_tRNA + 1792 h + 7 hisR_tRNA + 49 ile1_tRNA + 63 leu1_tRNA + 70 lys1_tRNA + 21 met1_tRNA + 4515 mg2 + 28 phe1_tRNA + 1792 pi + 21 pro1_tRNA + 1 rib_70_elo2_b3230_7_cplx + 21 ser1_tRNA + 21 ser2_tRNA + 7 serV_tRNA + 14 thr1_tRNA + 21 thr2_tRNA + 35 tyr1_tRNA + 14 val1_tRNA + 14 val2_tRNA + 42 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84

tl_elo_b3231_1_rib1	Translation elongation 1 b3231 1 ribosome(s)	141 EF-G.GTP + 14 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 7 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val3-tRNA + 705 mg2 + 1 rib_ini_b3231_1 --> 1 rib_70_elo1_b3231_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.07E+01	60.68343
tl_elo_b3231_1_rib2	Translation elongation 2 b3231 1 ribosome(s)	140 h2o + 1 rib_70_elo1_b3231_1_cplx --> 140 EF-G.GDP + 140 EF-Tu.GDP + 14 ala1_tRNA + 11 arg1_tRNA + 4 asn1_tRNA + 7 asp1_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 3 gln2_tRNA + 8 glu1_tRNA + 12 gly1_tRNA + 280 h + 7 hisR_tRNA + 7 ile1_tRNA + 7 leu1_tRNA + 1 leu2_tRNA + 1 leuU_tRNA + 14 lys1_tRNA + 3 met1_tRNA + 705 mg2 + 3 phe1_tRNA + 280 pi + 3 pro1_tRNA + 1 pro2_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3231_1_cplx + 6 thr1_tRNA + 5 thr2_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 6 tyr1_tRNA + 5 val1_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.07E+01	60.68343
tl_elo_b3231_4_rib1	Translation elongation 1 b3231 4 ribosome(s)	564 EF-G.GTP + 56 EF-Tu.GTP.ala1-tRNA + 44 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.asn1-tRNA + 28 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 32 EF-Tu.GTP.glu1-tRNA + 48 EF-Tu.GTP.gly1-tRNA + 28 EF-Tu.GTP.hisR-tRNA + 32 EF-Tu.GTP.ile1-tRNA + 28 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 56 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proM-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 24 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 28 EF-Tu.GTP.val3-tRNA + 2820 mg2 + 1 rib_ini_b3231_4 --> 1 rib_70_elo1_b3231_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3231_4_rib2	Translation elongation 2 b3231 4 ribosome(s)	560 h2o + 1 rib_70_elo1_b3231_4_cplx --> 560 EF-G.GDP + 560 EF-Tu.GDP + 56 ala1_tRNA + 44 arg1_tRNA + 16 asn1_tRNA + 28 asp1_tRNA + 4 fmet_tRNA + 4 gln1_tRNA + 12 gln2_tRNA + 32 glu1_tRNA + 48 gly1_tRNA + 1120 h + 28 hisR_tRNA + 28 ile1_tRNA + 28 leu1_tRNA + 4 leu2_tRNA + 4 leuU_tRNA + 56 lys1_tRNA + 12 met1_tRNA + 2820 mg2 + 12 phe1_tRNA + 1120 pi + 12 pro1_tRNA + 4 pro2_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b3231_4_cplx + 24 thr1_tRNA + 20 thr2_tRNA + 4 thrU_tRNA + 4 trpT_tRNA + 24 tyr1_tRNA + 20 val1_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3231_8_rib1	Translation elongation 1 b3231 8 ribosome(s)	1128 EF-G.GTP + 112 EF-Tu.GTP.ala1-tRNA + 88 EF-Tu.GTP.arg1-tRNA + 32 EF-Tu.GTP.asn1-tRNA + 56 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 64 EF-Tu.GTP.glu1-tRNA + 96 EF-Tu.GTP.gly1-tRNA + 56 EF-Tu.GTP.hisR-tRNA + 64 EF-Tu.GTP.ile1-tRNA + 56 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 112 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 16 EF-Tu.GTP.proM-tRNA + 48 EF-Tu.GTP.thr1-tRNA + 40 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 48 EF-Tu.GTP.tyr1-tRNA + 40 EF-Tu.GTP.val1-tRNA + 56 EF-Tu.GTP.val3-tRNA + 5640 mg2 + 1 rib_ini_b3231_8 --> 1 rib_70_elo1_b3231_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_elo_b3231_8_rib2	Translation elongation 2 b3231 8 ribosome(s)	1120 h2o + 1 rib_70_elo1_b3231_8_cplx --> 1120 EF-G.GDP + 1120 EF-Tu.GDP + 112 ala1_tRNA + 88 arg1_tRNA + 32 asn1_tRNA + 56 asp1_tRNA + 8 fmet_tRNA + 8 gln1_tRNA + 24 gln2_tRNA + 64 glu1_tRNA + 96 gly1_tRNA + 2240 h + 56 hisR_tRNA + 56 ile1_tRNA + 56 leu1_tRNA + 8 leu2_tRNA + 8 leuU_tRNA + 112 lys1_tRNA + 24 met1_tRNA + 5640 mg2 + 24 phe1_tRNA + 2240 pi + 24 pro1_tRNA + 8 pro2_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b3231_8_cplx + 48 thr1_tRNA + 40 thr2_tRNA + 8 thrU_tRNA + 8 trpT_tRNA + 48 tyr1_tRNA + 40 val1_tRNA + 56 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_elo_b3247_14_rib1	Translation elongation 1 b3247 14 ribosome(s)	6832 EF-G.GTP + 434 EF-Tu.GTP.ala1-tRNA + 84 EF-Tu.GTP.ala2-tRNA + 546 EF-Tu.GTP.arg1-tRNA + 28 EF-Tu.GTP.argX-tRNA + 182 EF-Tu.GTP.asn1-tRNA + 378 EF-Tu.GTP.asp1-tRNA + 84 EF-Tu.GTP.cysT-tRNA + 238 EF-Tu.GTP.gln1-tRNA + 70 EF-Tu.GTP.gln2-tRNA + 672 EF-Tu.GTP.glu1-tRNA + 266 EF-Tu.GTP.gly1-tRNA + 56 EF-Tu.GTP.glyT-tRNA + 112 EF-Tu.GTP.glyU-tRNA + 182 EF-Tu.GTP.hisR-tRNA + 448 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.ile2-tRNA + 378 EF-Tu.GTP.leu1-tRNA + 56 EF-Tu.GTP.leu2-tRNA + 112 EF-Tu.GTP.leuU-tRNA + 42 EF-Tu.GTP.leuZ-tRNA + 294 EF-Tu.GTP.lys1-tRNA + 168 EF-Tu.GTP.met1-tRNA + 224 EF-Tu.GTP.phe1-tRNA + 98 EF-Tu.GTP.pro1-tRNA + 28 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proL-tRNA + 28 EF-Tu.GTP.proM-tRNA + 70 EF-Tu.GTP.ser1-tRNA + 42 EF-Tu.GTP.ser2-tRNA + 84 EF-Tu.GTP.ser3-tRNA + 42 EF-Tu.GTP.serT-tRNA + 84 EF-Tu.GTP.serV-tRNA + 238 EF-Tu.GTP.thr1-tRNA + 28 EF-Tu.GTP.thr2-tRNA + 126 EF-Tu.GTP.thr3-tRNA + 28 EF-Tu.GTP.thrU-tRNA + 14 EF-Tu.GTP.trpT-tRNA + 210 EF-Tu.GTP.tyr1-tRNA + 378 EF-Tu.GTP.val1-tRNA + 98 EF-Tu.GTP.val2-tRNA + 154 EF-Tu.GTP.val3-tRNA + 34160 mg2 + 1 rib_ini_b3247_14 --> 1 rib_70_elo1_b3247_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_elo_b3247_14_rib2	Translation elongation 2 b3247 14 ribosome(s)	6818 h2o + 1 rib_70_elo1_b3247_14_cplx --> 6818 EF-G.GDP + 6818 EF-Tu.GDP + 434 ala1_tRNA + 84 ala2_tRNA + 546 arg1_tRNA + 28 argX_tRNA + 182 asn1_tRNA + 378 asp1_tRNA + 84 cysT_tRNA + 14 fmet_tRNA + 238 gln1_tRNA + 70 gln2_tRNA + 672 glu1_tRNA + 266 gly1_tRNA + 56 glyT_tRNA + 112 glyU_tRNA + 13636 h + 182 hisR_tRNA + 448 ile1_tRNA + 14 ile2_tRNA + 378 leu1_tRNA + 56 leu2_tRNA + 112 leuU_tRNA + 42 leuZ_tRNA + 294 lys1_tRNA + 154 met1_tRNA + 34160 mg2 + 224 phe1_tRNA + 13636 pi + 98 pro1_tRNA + 28 pro2_tRNA + 14 proL_tRNA + 28 proM_tRNA + 1 rib_70_elo2_b3247_14_cplx + 70 ser1_tRNA + 42 ser2_tRNA + 84 ser3_tRNA + 42 serT_tRNA + 84 serV_tRNA + 238 thr1_tRNA + 28 thr2_tRNA + 126 thr3_tRNA + 28 thrU_tRNA + 14 trpT_tRNA + 210 tyr1_tRNA + 378 val1_tRNA + 98 val2_tRNA + 154 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774

tl_elo_b3247_1_rib1	Translation elongation 1 b3247 1 ribosome(s)	488 EF-G.GTP + 31 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 39 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 13 EF-Tu.GTP.asn1-tRNA + 27 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 17 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 48 EF-Tu.GTP.glu1-tRNA + 19 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 13 EF-Tu.GTP.hisR-tRNA + 32 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 27 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 21 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 17 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 27 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 11 EF-Tu.GTP.val3-tRNA + 2440 mg2 + 1 rib_ini_b3247_1 --> 1 rib_70_elo1_b3247_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_elo_b3247_1_rib2	Translation elongation 2 b3247 1 ribosome(s)	487 h2o + 1 rib_70_elo1_b3247_1_cplx --> 487 EF-G.GDP + 487 EF-Tu.GDP + 31 ala1_tRNA + 6 ala2_tRNA + 39 arg1_tRNA + 2 argX_tRNA + 13 asn1_tRNA + 27 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 17 gln1_tRNA + 5 gln2_tRNA + 48 glu1_tRNA + 19 gly1_tRNA + 4 glyT_tRNA + 8 glyU_tRNA + 974 h + 13 hisR_tRNA + 32 ile1_tRNA + 1 ile2_tRNA + 27 leu1_tRNA + 4 leu2_tRNA + 8 leuU_tRNA + 3 leuZ_tRNA + 21 lys1_tRNA + 11 met1_tRNA + 2440 mg2 + 16 phe1_tRNA + 974 pi + 7 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3247_1_cplx + 5 ser1_tRNA + 3 ser2_tRNA + 6 ser3_tRNA + 3 serT_tRNA + 6 serV_tRNA + 17 thr1_tRNA + 2 thr2_tRNA + 9 thr3_tRNA + 2 thrU_tRNA + 1 trpT_tRNA + 15 tyr1_tRNA + 27 val1_tRNA + 7 val2_tRNA + 11 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_elo_b3247_28_rib1	Translation elongation 1 b3247 28 ribosome(s)	13664 EF-G.GTP + 868 EF-Tu.GTP.ala1-tRNA + 168 EF-Tu.GTP.ala2-tRNA + 1092 EF-Tu.GTP.arg1-tRNA + 56 EF-Tu.GTP.argX-tRNA + 364 EF-Tu.GTP.asn1-tRNA + 756 EF-Tu.GTP.asp1-tRNA + 168 EF-Tu.GTP.cysT-tRNA + 476 EF-Tu.GTP.gln1-tRNA + 140 EF-Tu.GTP.gln2-tRNA + 1344 EF-Tu.GTP.glu1-tRNA + 532 EF-Tu.GTP.gly1-tRNA + 112 EF-Tu.GTP.glyT-tRNA + 224 EF-Tu.GTP.glyU-tRNA + 364 EF-Tu.GTP.hisR-tRNA + 896 EF-Tu.GTP.ile1-tRNA + 28 EF-Tu.GTP.ile2-tRNA + 756 EF-Tu.GTP.leu1-tRNA + 112 EF-Tu.GTP.leu2-tRNA + 224 EF-Tu.GTP.leuU-tRNA + 84 EF-Tu.GTP.leuZ-tRNA + 588 EF-Tu.GTP.lys1-tRNA + 336 EF-Tu.GTP.met1-tRNA + 448 EF-Tu.GTP.phe1-tRNA + 196 EF-Tu.GTP.pro1-tRNA + 56 EF-Tu.GTP.pro2-tRNA + 28 EF-Tu.GTP.proL-tRNA + 56 EF-Tu.GTP.proM-tRNA + 140 EF-Tu.GTP.ser1-tRNA + 84 EF-Tu.GTP.ser2-tRNA + 168 EF-Tu.GTP.ser3-tRNA + 84 EF-Tu.GTP.serT-tRNA + 168 EF-Tu.GTP.serV-tRNA + 476 EF-Tu.GTP.thr1-tRNA + 56 EF-Tu.GTP.thr2-tRNA + 252 EF-Tu.GTP.thr3-tRNA + 56 EF-Tu.GTP.thrU-tRNA + 28 EF-Tu.GTP.trpT-tRNA + 420 EF-Tu.GTP.tyr1-tRNA + 756 EF-Tu.GTP.val1-tRNA + 196 EF-Tu.GTP.val2-tRNA + 308 EF-Tu.GTP.val3-tRNA + 68320 mg2 + 1 rib	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_elo_b3247_28_rib2	Translation elongation 2 b3247 28 ribosome(s)	13636 h2o + 1 rib_70_elo1_b3247_28_cplx --> 13636 EF-G.GDP + 13636 EF-Tu.GDP + 868 ala1_tRNA + 168 ala2_tRNA + 1092 arg1_tRNA + 56 argX_tRNA + 364 asn1_tRNA + 756 asp1_tRNA + 168 cysT_tRNA + 28 fmet_tRNA + 476 gln1_tRNA + 140 gln2_tRNA + 1344 glu1_tRNA + 532 gly1_tRNA + 112 glyT_tRNA + 224 glyU_tRNA + 27272 h + 364 hisR_tRNA + 896 ile1_tRNA + 28 ile2_tRNA + 756 leu1_tRNA + 112 leu2_tRNA + 224 leuU_tRNA + 84 leuZ_tRNA + 588 lys1_tRNA + 308 met1_tRNA + 68320 mg2 + 448 phe1_tRNA + 27272 pi + 196 pro1_tRNA + 56 pro2_tRNA + 28 proL_tRNA + 56 proM_tRNA + 1 rib_70_elo2_b3247_28_cplx + 140 ser1_tRNA + 84 ser2_tRNA + 168 ser3_tRNA + 84 serT_tRNA + 168 serV_tRNA + 476 thr1_tRNA + 56 thr2_tRNA + 252 thr3_tRNA + 56 thrU_tRNA + 28 trpT_tRNA + 420 tyr1_tRNA + 756 val1_tRNA + 196 val2_tRNA + 308 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_elo_b3248_11_rib1	Translation elongation 1 b3248 11 ribosome(s)	2156 EF-G.GTP + 198 EF-Tu.GTP.ala1-tRNA + 33 EF-Tu.GTP.ala2-tRNA + 99 EF-Tu.GTP.arg1-tRNA + 11 EF-Tu.GTP.argU-tRNA + 22 EF-Tu.GTP.argW-tRNA + 11 EF-Tu.GTP.argX-tRNA + 44 EF-Tu.GTP.asn1-tRNA + 132 EF-Tu.GTP.asp1-tRNA + 22 EF-Tu.GTP.cysT-tRNA + 121 EF-Tu.GTP.gln1-tRNA + 22 EF-Tu.GTP.gln2-tRNA + 154 EF-Tu.GTP.glu1-tRNA + 154 EF-Tu.GTP.gly1-tRNA + 11 EF-Tu.GTP.glyT-tRNA + 11 EF-Tu.GTP.glyU-tRNA + 55 EF-Tu.GTP.hisR-tRNA + 77 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.ile2-tRNA + 99 EF-Tu.GTP.leu1-tRNA + 22 EF-Tu.GTP.leu2-tRNA + 44 EF-Tu.GTP.leuU-tRNA + 88 EF-Tu.GTP.leuZ-tRNA + 88 EF-Tu.GTP.lys1-tRNA + 22 EF-Tu.GTP.met1-tRNA + 44 EF-Tu.GTP.phe1-tRNA + 66 EF-Tu.GTP.pro1-tRNA + 11 EF-Tu.GTP.ser1-tRNA + 22 EF-Tu.GTP.ser2-tRNA + 11 EF-Tu.GTP.ser3-tRNA + 55 EF-Tu.GTP.serV-tRNA + 33 EF-Tu.GTP.thr1-tRNA + 33 EF-Tu.GTP.thr2-tRNA + 44 EF-Tu.GTP.thr3-tRNA + 22 EF-Tu.GTP.thrU-tRNA + 66 EF-Tu.GTP.tyr1-tRNA + 99 EF-Tu.GTP.val1-tRNA + 55 EF-Tu.GTP.val2-tRNA + 44 EF-Tu.GTP.val3-tRNA + 10780 mg2 + 1 rib_ini_b3248_11 --> 1 rib_70_elo1_b3248_11_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734
tl_elo_b3248_11_rib2	Translation elongation 2 b3248 11 ribosome(s)	2145 h2o + 1 rib_70_elo1_b3248_11_cplx --> 2145 EF-G.GDP + 2145 EF-Tu.GDP + 198 ala1_tRNA + 33 ala2_tRNA + 99 arg1_tRNA + 11 argU_tRNA + 22 argW_tRNA + 11 argX_tRNA + 44 asn1_tRNA + 132 asp1_tRNA + 22 cysT_tRNA + 11 fmet_tRNA + 121 gln1_tRNA + 22 gln2_tRNA + 154 glu1_tRNA + 143 gly1_tRNA + 11 glyT_tRNA + 11 glyU_tRNA + 4290 h + 55 hisR_tRNA + 77 ile1_tRNA + 11 ile2_tRNA + 99 leu1_tRNA + 22 leu2_tRNA + 44 leuU_tRNA + 88 leuZ_tRNA + 88 lys1_tRNA + 22 met1_tRNA + 10780 mg2 + 44 phe1_tRNA + 4290 pi + 66 pro1_tRNA + 1 rib_70_elo2_b3248_11_cplx + 11 ser1_tRNA + 22 ser2_tRNA + 11 ser3_tRNA + 55 serV_tRNA + 33 thr1_tRNA + 33 thr2_tRNA + 44 thr3_tRNA + 22 thrU_tRNA + 66 tyr1_tRNA + 99 val1_tRNA + 55 val2_tRNA + 44 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734

tl_elo_b3248_1_rib1	Translation elongation 1 b3248 1 ribosome(s)	196 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 9 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 2 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.argX-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 11 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 14 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 980 mg2 + 1 rib_ini_b3248_1 --> 1 rib_70_elo1_b3248_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734
tl_elo_b3248_1_rib2	Translation elongation 2 b3248 1 ribosome(s)	195 h2o + 1 rib_70_elo1_b3248_1_cplx --> 195 EF-G.GDP + 195 EF-Tu.GDP + 18 ala1_tRNA + 3 ala2_tRNA + 9 arg1_tRNA + 1 argU_tRNA + 2 argW_tRNA + 1 argX_tRNA + 4 asn1_tRNA + 12 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 11 gln1_tRNA + 2 gln2_tRNA + 14 glu1_tRNA + 13 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 390 h + 5 hisR_tRNA + 7 ile1_tRNA + 1 ile2_tRNA + 9 leu1_tRNA + 2 leu2_tRNA + 4 leuU_tRNA + 8 leuZ_tRNA + 8 lys1_tRNA + 2 met1_tRNA + 980 mg2 + 4 phe1_tRNA + 390 pi + 6 pro1_tRNA + 1 rib_70_elo2_b3248_1_cplx + 1 ser1_tRNA + 2 ser2_tRNA + 1 ser3_tRNA + 5 serV_tRNA + 3 thr1_tRNA + 3 thr2_tRNA + 4 thr3_tRNA + 2 thrU_tRNA + 6 tyr1_tRNA + 9 val1_tRNA + 5 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734
tl_elo_b3248_5_rib1	Translation elongation 1 b3248 5 ribosome(s)	980 EF-G.GTP + 90 EF-Tu.GTP.ala1-tRNA + 15 EF-Tu.GTP.ala2-tRNA + 45 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argU-tRNA + 10 EF-Tu.GTP.argW-tRNA + 5 EF-Tu.GTP.argX-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 60 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.cysT-tRNA + 55 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 70 EF-Tu.GTP.glu1-tRNA + 70 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 25 EF-Tu.GTP.hisR-tRNA + 35 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.ile2-tRNA + 45 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 20 EF-Tu.GTP.leuU-tRNA + 40 EF-Tu.GTP.leuZ-tRNA + 40 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 20 EF-Tu.GTP.phe1-tRNA + 30 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 25 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr1-tRNA + 15 EF-Tu.GTP.thr2-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.thrU-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 45 EF-Tu.GTP.val1-tRNA + 25 EF-Tu.GTP.val2-tRNA + 20 EF-Tu.GTP.val3-tRNA + 4900 mg2 + 1 rib_ini_b3248_5 --> 1 rib_70_elo1_b3248_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734
tl_elo_b3248_5_rib2	Translation elongation 2 b3248 5 ribosome(s)	975 h2o + 1 rib_70_elo1_b3248_5_cplx --> 975 EF-G.GDP + 975 EF-Tu.GDP + 90 ala1_tRNA + 15 ala2_tRNA + 45 arg1_tRNA + 5 argU_tRNA + 10 argW_tRNA + 5 argX_tRNA + 20 asn1_tRNA + 60 asp1_tRNA + 10 cysT_tRNA + 5 fmet_tRNA + 55 gln1_tRNA + 10 gln2_tRNA + 70 glu1_tRNA + 65 gly1_tRNA + 5 glyT_tRNA + 5 glyU_tRNA + 1950 h + 25 hisR_tRNA + 35 ile1_tRNA + 5 ile2_tRNA + 45 leu1_tRNA + 10 leu2_tRNA + 20 leuU_tRNA + 40 leuZ_tRNA + 40 lys1_tRNA + 10 met1_tRNA + 4900 mg2 + 20 phe1_tRNA + 1950 pi + 30 pro1_tRNA + 1 rib_70_elo2_b3248_5_cplx + 5 ser1_tRNA + 10 ser2_tRNA + 5 ser3_tRNA + 25 serV_tRNA + 15 thr1_tRNA + 15 thr2_tRNA + 20 thr3_tRNA + 10 thrU_tRNA + 30 tyr1_tRNA + 45 val1_tRNA + 25 val2_tRNA + 20 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734
tl_elo_b3249_1_rib1	Translation elongation 1 b3249 1 ribosome(s)	161 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argX-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 2 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 13 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 11 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 2 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 805 mg2 + 1 rib_ini_b3249_1 --> 1 rib_70_elo1_b3249_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_elo_b3249_1_rib2	Translation elongation 2 b3249 1 ribosome(s)	160 h2o + 1 rib_70_elo1_b3249_1_cplx --> 160 EF-G.GDP + 160 EF-Tu.GDP + 9 ala1_tRNA + 2 ala2_tRNA + 7 arg1_tRNA + 1 argU_tRNA + 1 argX_tRNA + 6 asn1_tRNA + 3 asp1_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 1 gln2_tRNA + 2 glu1_tRNA + 5 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 320 h + 1 hisR_tRNA + 13 ile1_tRNA + 1 ile2_tRNA + 11 leu1_tRNA + 7 leu2_tRNA + 8 leuU_tRNA + 3 leuZ_tRNA + 2 lys1_tRNA + 5 met1_tRNA + 805 mg2 + 10 phe1_tRNA + 320 pi + 3 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3249_1_cplx + 2 ser2_tRNA + 2 ser3_tRNA + 6 serV_tRNA + 1 thr3_tRNA + 1 thrU_tRNA + 10 trpT_tRNA + 4 tyr1_tRNA + 15 val1_tRNA + 5 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894

tl_elo_b3249_4_rib1	Translation elongation 1 b3249 4 ribosome(s)	644 EF-G.GTP + 36 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 28 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argU-tRNA + 4 EF-Tu.GTP.argX-tRNA + 24 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 52 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.ile2-tRNA + 44 EF-Tu.GTP.leu1-tRNA + 28 EF-Tu.GTP.leu2-tRNA + 32 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 40 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 40 EF-Tu.GTP.trpT-tRNA + 16 EF-Tu.GTP.tyr1-tRNA + 60 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 3220 mg2 + 1 rib_ini_b3249_4 --> 1 rib_70_elo1_b3249_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_elo_b3249_4_rib2	Translation elongation 2 b3249 4 ribosome(s)	640 h2o + 1 rib_70_elo1_b3249_4_cplx --> 640 EF-G.GDP + 640 EF-Tu.GDP + 36 ala1_tRNA + 8 ala2_tRNA + 28 arg1_tRNA + 4 argU_tRNA + 4 argX_tRNA + 24 asn1_tRNA + 12 asp1_tRNA + 4 fmet_tRNA + 24 gln1_tRNA + 4 gln2_tRNA + 8 glu1_tRNA + 20 gly1_tRNA + 4 glyT_tRNA + 4 glyU_tRNA + 1280 h + 4 hisR_tRNA + 52 ile1_tRNA + 4 ile2_tRNA + 44 leu1_tRNA + 28 leu2_tRNA + 32 leuU_tRNA + 12 leuZ_tRNA + 8 lys1_tRNA + 20 met1_tRNA + 3220 mg2 + 40 phe1_tRNA + 1280 pi + 12 pro1_tRNA + 4 pro2_tRNA + 4 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b3249_4_cplx + 8 ser2_tRNA + 8 ser3_tRNA + 24 serV_tRNA + 4 thr3_tRNA + 4 thrU_tRNA + 40 trpT_tRNA + 16 tyr1_tRNA + 60 val1_tRNA + 20 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_elo_b3249_9_rib1	Translation elongation 1 b3249 9 ribosome(s)	1449 EF-G.GTP + 81 EF-Tu.GTP.ala1-tRNA + 18 EF-Tu.GTP.ala2-tRNA + 63 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argU-tRNA + 9 EF-Tu.GTP.argX-tRNA + 54 EF-Tu.GTP.asn1-tRNA + 27 EF-Tu.GTP.asp1-tRNA + 54 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 45 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 9 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 117 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.ile2-tRNA + 99 EF-Tu.GTP.leu1-tRNA + 63 EF-Tu.GTP.leu2-tRNA + 72 EF-Tu.GTP.leuU-tRNA + 27 EF-Tu.GTP.leuZ-tRNA + 18 EF-Tu.GTP.lys1-tRNA + 45 EF-Tu.GTP.met1-tRNA + 90 EF-Tu.GTP.phe1-tRNA + 27 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.proL-tRNA + 9 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 54 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 90 EF-Tu.GTP.trpT-tRNA + 36 EF-Tu.GTP.tyr1-tRNA + 135 EF-Tu.GTP.val1-tRNA + 45 EF-Tu.GTP.val2-tRNA + 18 EF-Tu.GTP.val3-tRNA + 7245 mg2 + 1 rib_ini_b3249_9 --> 1 rib_70_elo1_b3249_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_elo_b3249_9_rib2	Translation elongation 2 b3249 9 ribosome(s)	1440 h2o + 1 rib_70_elo1_b3249_9_cplx --> 1440 EF-G.GDP + 1440 EF-Tu.GDP + 81 ala1_tRNA + 18 ala2_tRNA + 63 arg1_tRNA + 9 argU_tRNA + 9 argX_tRNA + 54 asn1_tRNA + 27 asp1_tRNA + 9 fmet_tRNA + 54 gln1_tRNA + 9 gln2_tRNA + 18 glu1_tRNA + 45 gly1_tRNA + 9 glyT_tRNA + 9 glyU_tRNA + 2880 h + 9 hisR_tRNA + 117 ile1_tRNA + 9 ile2_tRNA + 99 leu1_tRNA + 63 leu2_tRNA + 72 leuU_tRNA + 27 leuZ_tRNA + 18 lys1_tRNA + 45 met1_tRNA + 7245 mg2 + 90 phe1_tRNA + 2880 pi + 27 pro1_tRNA + 9 pro2_tRNA + 9 proL_tRNA + 9 proM_tRNA + 1 rib_70_elo2_b3249_9_cplx + 18 ser2_tRNA + 18 ser3_tRNA + 54 serV_tRNA + 9 thr3_tRNA + 9 thrU_tRNA + 90 trpT_tRNA + 36 tyr1_tRNA + 135 val1_tRNA + 45 val2_tRNA + 18 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_elo_b3250_10_rib1	Translation elongation 1 b3250 10 ribosome(s)	3660 EF-G.GTP + 320 EF-Tu.GTP.ala1-tRNA + 50 EF-Tu.GTP.ala2-tRNA + 240 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argW-tRNA + 10 EF-Tu.GTP.argX-tRNA + 140 EF-Tu.GTP.asn1-tRNA + 180 EF-Tu.GTP.asp1-tRNA + 20 EF-Tu.GTP.cysT-tRNA + 180 EF-Tu.GTP.gln1-tRNA + 100 EF-Tu.GTP.gln2-tRNA + 150 EF-Tu.GTP.glu1-tRNA + 180 EF-Tu.GTP.gly1-tRNA + 30 EF-Tu.GTP.glyT-tRNA + 60 EF-Tu.GTP.glyU-tRNA + 30 EF-Tu.GTP.hisR-tRNA + 170 EF-Tu.GTP.ile1-tRNA + 270 EF-Tu.GTP.leu1-tRNA + 50 EF-Tu.GTP.leu2-tRNA + 60 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuW-tRNA + 30 EF-Tu.GTP.leuZ-tRNA + 90 EF-Tu.GTP.lys1-tRNA + 80 EF-Tu.GTP.met1-tRNA + 50 EF-Tu.GTP.phe1-tRNA + 190 EF-Tu.GTP.pro1-tRNA + 80 EF-Tu.GTP.pro2-tRNA + 50 EF-Tu.GTP.proM-tRNA + 50 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 40 EF-Tu.GTP.ser3-tRNA + 100 EF-Tu.GTP.serV-tRNA + 40 EF-Tu.GTP.thr1-tRNA + 70 EF-Tu.GTP.thr2-tRNA + 80 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 80 EF-Tu.GTP.tyr1-tRNA + 150 EF-Tu.GTP.val1-tRNA + 50 EF-Tu.GTP.val2-tRNA + 120 EF-Tu.GTP.val3-tRNA + 18300 mg2 + 1 rib_ini_b3250_10 --> 1 rib_70_elo1_b3250_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404
tl_elo_b3250_10_rib2	Translation elongation 2 b3250 10 ribosome(s)	3650 h2o + 1 rib_70_elo1_b3250_10_cplx --> 3650 EF-G.GDP + 3650 EF-Tu.GDP + 320 ala1_tRNA + 50 ala2_tRNA + 240 arg1_tRNA + 10 argW_tRNA + 10 argX_tRNA + 140 asn1_tRNA + 180 asp1_tRNA + 20 cysT_tRNA + 10 fmet_tRNA + 180 gln1_tRNA + 90 gln2_tRNA + 150 glu1_tRNA + 180 gly1_tRNA + 30 glyT_tRNA + 60 glyU_tRNA + 7300 h + 30 hisR_tRNA + 170 ile1_tRNA + 270 leu1_tRNA + 50 leu2_tRNA + 60 leuU_tRNA + 10 leuW_tRNA + 30 leuZ_tRNA + 90 lys1_tRNA + 80 met1_tRNA + 18300 mg2 + 50 phe1_tRNA + 7300 pi + 190 pro1_tRNA + 80 pro2_tRNA + 50 proM_tRNA + 1 rib_70_elo2_b3250_10_cplx + 50 ser1_tRNA + 20 ser2_tRNA + 40 ser3_tRNA + 100 serV_tRNA + 40 thr1_tRNA + 70 thr2_tRNA + 80 thr3_tRNA + 20 thrU_tRNA + 10 trpT_tRNA + 80 tyr1_tRNA + 150 val1_tRNA + 50 val2_tRNA + 120 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404

tl_elo_b3250_1_rib1	Translation elongation 1 b3250 1 ribosome(s)	366 EF-G.GTP + 32 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.argX-tRNA + 14 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 18 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 15 EF-Tu.GTP.glu1-tRNA + 18 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 17 EF-Tu.GTP.ile1-tRNA + 27 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 19 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1830 mg2 + 1 rib_ini_b3250_1 --> 1 rib_70_elo1_b3250_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404
tl_elo_b3250_1_rib2	Translation elongation 2 b3250 1 ribosome(s)	365 h2o + 1 rib_70_elo1_b3250_1_cplx --> 365 EF-G.GDP + 365 EF-Tu.GDP + 32 ala1_tRNA + 5 ala2_tRNA + 24 arg1_tRNA + 1 argW_tRNA + 1 argX_tRNA + 14 asn1_tRNA + 18 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 18 gln1_tRNA + 9 gln2_tRNA + 15 glu1_tRNA + 18 gly1_tRNA + 3 glyT_tRNA + 6 glyU_tRNA + 730 h + 3 hisR_tRNA + 17 ile1_tRNA + 27 leu1_tRNA + 5 leu2_tRNA + 6 leuU_tRNA + 1 leuW_tRNA + 3 leuZ_tRNA + 9 lys1_tRNA + 8 met1_tRNA + 1830 mg2 + 5 phe1_tRNA + 730 pi + 19 pro1_tRNA + 8 pro2_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b3250_1_cplx + 5 ser1_tRNA + 2 ser2_tRNA + 4 ser3_tRNA + 10 serV_tRNA + 4 thr1_tRNA + 7 thr2_tRNA + 8 thr3_tRNA + 2 thrU_tRNA + 1 trpT_tRNA + 8 tyr1_tRNA + 15 val1_tRNA + 5 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404
tl_elo_b3250_21_rib1	Translation elongation 1 b3250 21 ribosome(s)	7686 EF-G.GTP + 672 EF-Tu.GTP.ala1-tRNA + 105 EF-Tu.GTP.ala2-tRNA + 504 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.argW-tRNA + 21 EF-Tu.GTP.argX-tRNA + 294 EF-Tu.GTP.asn1-tRNA + 378 EF-Tu.GTP.asp1-tRNA + 42 EF-Tu.GTP.cysT-tRNA + 378 EF-Tu.GTP.gln1-tRNA + 210 EF-Tu.GTP.gln2-tRNA + 315 EF-Tu.GTP.glu1-tRNA + 378 EF-Tu.GTP.gly1-tRNA + 63 EF-Tu.GTP.glyT-tRNA + 126 EF-Tu.GTP.glyU-tRNA + 63 EF-Tu.GTP.hisR-tRNA + 357 EF-Tu.GTP.ile1-tRNA + 567 EF-Tu.GTP.leu1-tRNA + 105 EF-Tu.GTP.leu2-tRNA + 126 EF-Tu.GTP.leuU-tRNA + 21 EF-Tu.GTP.leuW-tRNA + 63 EF-Tu.GTP.leuZ-tRNA + 189 EF-Tu.GTP.lys1-tRNA + 168 EF-Tu.GTP.met1-tRNA + 105 EF-Tu.GTP.phe1-tRNA + 399 EF-Tu.GTP.pro1-tRNA + 168 EF-Tu.GTP.pro2-tRNA + 105 EF-Tu.GTP.proM-tRNA + 105 EF-Tu.GTP.ser1-tRNA + 42 EF-Tu.GTP.ser2-tRNA + 84 EF-Tu.GTP.ser3-tRNA + 210 EF-Tu.GTP.serV-tRNA + 84 EF-Tu.GTP.thr1-tRNA + 147 EF-Tu.GTP.thr2-tRNA + 168 EF-Tu.GTP.thr3-tRNA + 42 EF-Tu.GTP.thrU-tRNA + 21 EF-Tu.GTP.trpT-tRNA + 168 EF-Tu.GTP.tyr1-tRNA + 315 EF-Tu.GTP.val1-tRNA + 105 EF-Tu.GTP.val2-tRNA + 252 EF-Tu.GTP.val3-tRNA + 38430 mg2 + 1 rib_ini_b3250_21 --> 1 rib_70_elo1_b3250_21_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404
tl_elo_b3250_21_rib2	Translation elongation 2 b3250 21 ribosome(s)	7665 h2o + 1 rib_70_elo1_b3250_21_cplx --> 7665 EF-G.GDP + 7665 EF-Tu.GDP + 672 ala1_tRNA + 105 ala2_tRNA + 504 arg1_tRNA + 21 argW_tRNA + 21 argX_tRNA + 294 asn1_tRNA + 378 asp1_tRNA + 42 cysT_tRNA + 21 fmet_tRNA + 378 gln1_tRNA + 189 gln2_tRNA + 315 glu1_tRNA + 378 gly1_tRNA + 63 glyT_tRNA + 126 glyU_tRNA + 15330 h + 63 hisR_tRNA + 357 ile1_tRNA + 567 leu1_tRNA + 105 leu2_tRNA + 126 leuU_tRNA + 21 leuW_tRNA + 63 leuZ_tRNA + 189 lys1_tRNA + 168 met1_tRNA + 38430 mg2 + 105 phe1_tRNA + 15330 pi + 399 pro1_tRNA + 168 pro2_tRNA + 105 proM_tRNA + 1 rib_70_elo2_b3250_21_cplx + 105 ser1_tRNA + 42 ser2_tRNA + 84 ser3_tRNA + 210 serV_tRNA + 84 thr1_tRNA + 147 thr2_tRNA + 168 thr3_tRNA + 42 thrU_tRNA + 21 trpT_tRNA + 168 tyr1_tRNA + 315 val1_tRNA + 105 val2_tRNA + 252 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404
tl_elo_b3251_10_rib1	Translation elongation 1 b3251 10 ribosome(s)	3460 EF-G.GTP + 260 EF-Tu.GTP.ala1-tRNA + 70 EF-Tu.GTP.ala2-tRNA + 240 EF-Tu.GTP.arg1-tRNA + 120 EF-Tu.GTP.asn1-tRNA + 150 EF-Tu.GTP.asp1-tRNA + 30 EF-Tu.GTP.cysT-tRNA + 70 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 290 EF-Tu.GTP.glu1-tRNA + 380 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 50 EF-Tu.GTP.hisR-tRNA + 250 EF-Tu.GTP.ile1-tRNA + 170 EF-Tu.GTP.leu1-tRNA + 50 EF-Tu.GTP.leu2-tRNA + 50 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 100 EF-Tu.GTP.lys1-tRNA + 120 EF-Tu.GTP.met1-tRNA + 100 EF-Tu.GTP.phe1-tRNA + 110 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 40 EF-Tu.GTP.proM-tRNA + 90 EF-Tu.GTP.ser1-tRNA + 50 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serT-tRNA + 60 EF-Tu.GTP.serV-tRNA + 100 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 50 EF-Tu.GTP.tyr1-tRNA + 170 EF-Tu.GTP.val1-tRNA + 30 EF-Tu.GTP.val2-tRNA + 150 EF-Tu.GTP.val3-tRNA + 17300 mg2 + 1 rib_ini_b3251_10 --> 1 rib_70_elo1_b3251_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_elo_b3251_10_rib2	Translation elongation 2 b3251 10 ribosome(s)	3450 h2o + 1 rib_70_elo1_b3251_10_cplx --> 3450 EF-G.GDP + 3450 EF-Tu.GDP + 260 ala1_tRNA + 70 ala2_tRNA + 240 arg1_tRNA + 120 asn1_tRNA + 150 asp1_tRNA + 30 cysT_tRNA + 10 fmet_tRNA + 70 gln1_tRNA + 20 gln2_tRNA + 280 glu1_tRNA + 380 gly1_tRNA + 10 glyT_tRNA + 6900 h + 50 hisR_tRNA + 250 ile1_tRNA + 170 leu1_tRNA + 50 leu2_tRNA + 50 leuU_tRNA + 10 leuZ_tRNA + 100 lys1_tRNA + 120 met1_tRNA + 17300 mg2 + 100 phe1_tRNA + 6900 pi + 110 pro1_tRNA + 10 pro2_tRNA + 40 proM_tRNA + 1 rib_70_elo2_b3251_10_cplx + 90 ser1_tRNA + 50 ser2_tRNA + 10 ser3_tRNA + 10 serT_tRNA + 60 serV_tRNA + 100 thr1_tRNA + 30 thr2_tRNA + 10 thr3_tRNA + 50 tyr1_tRNA + 170 val1_tRNA + 30 val2_tRNA + 150 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744

tl_elo_b3251_1_rib1	Translation elongation 1 b3251 1 ribosome(s)	346 EF-G.GTP + 26 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 29 EF-Tu.GTP.glu1-tRNA + 38 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 25 EF-Tu.GTP.ile1-tRNA + 17 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proM-tRNA + 9 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 17 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 15 EF-Tu.GTP.val3-tRNA + 1730 mg2 + 1 rib_ini_b3251_1 --> 1 rib_70_elo1_b3251_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_elo_b3251_1_rib2	Translation elongation 2 b3251 1 ribosome(s)	345 h2o + 1 rib_70_elo1_b3251_1_cplx --> 345 EF-G.GDP + 345 EF-Tu.GDP + 26 ala1_tRNA + 7 ala2_tRNA + 24 arg1_tRNA + 12 asn1_tRNA + 15 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 2 gln2_tRNA + 28 glu1_tRNA + 38 gly1_tRNA + 1 glyT_tRNA + 690 h + 5 hisR_tRNA + 25 ile1_tRNA + 17 leu1_tRNA + 5 leu2_tRNA + 5 leuU_tRNA + 1 leuZ_tRNA + 10 lys1_tRNA + 12 met1_tRNA + 1730 mg2 + 10 phe1_tRNA + 690 pi + 11 pro1_tRNA + 1 pro2_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b3251_1_cplx + 9 ser1_tRNA + 5 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 6 serV_tRNA + 10 thr1_tRNA + 3 thr2_tRNA + 1 thr3_tRNA + 5 tyr1_tRNA + 17 val1_tRNA + 3 val2_tRNA + 15 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_elo_b3251_20_rib1	Translation elongation 1 b3251 20 ribosome(s)	6920 EF-G.GTP + 520 EF-Tu.GTP.ala1-tRNA + 140 EF-Tu.GTP.ala2-tRNA + 480 EF-Tu.GTP.arg1-tRNA + 240 EF-Tu.GTP.asn1-tRNA + 300 EF-Tu.GTP.asp1-tRNA + 60 EF-Tu.GTP.cysT-tRNA + 140 EF-Tu.GTP.gln1-tRNA + 40 EF-Tu.GTP.gln2-tRNA + 580 EF-Tu.GTP.glu1-tRNA + 760 EF-Tu.GTP.gly1-tRNA + 20 EF-Tu.GTP.glyT-tRNA + 100 EF-Tu.GTP.hisR-tRNA + 500 EF-Tu.GTP.ile1-tRNA + 340 EF-Tu.GTP.leu1-tRNA + 100 EF-Tu.GTP.leu2-tRNA + 100 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 200 EF-Tu.GTP.lys1-tRNA + 240 EF-Tu.GTP.met1-tRNA + 200 EF-Tu.GTP.phe1-tRNA + 220 EF-Tu.GTP.pro1-tRNA + 20 EF-Tu.GTP.pro2-tRNA + 80 EF-Tu.GTP.proM-tRNA + 180 EF-Tu.GTP.ser1-tRNA + 100 EF-Tu.GTP.ser2-tRNA + 20 EF-Tu.GTP.ser3-tRNA + 20 EF-Tu.GTP.serT-tRNA + 120 EF-Tu.GTP.serV-tRNA + 200 EF-Tu.GTP.thr1-tRNA + 60 EF-Tu.GTP.thr2-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 100 EF-Tu.GTP.tyr1-tRNA + 340 EF-Tu.GTP.val1-tRNA + 60 EF-Tu.GTP.val2-tRNA + 300 EF-Tu.GTP.val3-tRNA + 34600 mg2 + 1 rib_ini_b3251_20 --> 1 rib_70_elo1_b3251_20_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_elo_b3251_20_rib2	Translation elongation 2 b3251 20 ribosome(s)	6900 h2o + 1 rib_70_elo1_b3251_20_cplx --> 6900 EF-G.GDP + 6900 EF-Tu.GDP + 520 ala1_tRNA + 140 ala2_tRNA + 480 arg1_tRNA + 240 asn1_tRNA + 300 asp1_tRNA + 60 cysT_tRNA + 20 fmet_tRNA + 140 gln1_tRNA + 40 gln2_tRNA + 560 glu1_tRNA + 760 gly1_tRNA + 20 glyT_tRNA + 13800 h + 100 hisR_tRNA + 500 ile1_tRNA + 340 leu1_tRNA + 100 leu2_tRNA + 100 leuU_tRNA + 20 leuZ_tRNA + 200 lys1_tRNA + 240 met1_tRNA + 34600 mg2 + 200 phe1_tRNA + 13800 pi + 220 pro1_tRNA + 20 pro2_tRNA + 80 proM_tRNA + 1 rib_70_elo2_b3251_20_cplx + 180 ser1_tRNA + 100 ser2_tRNA + 20 ser3_tRNA + 20 serT_tRNA + 120 serV_tRNA + 200 thr1_tRNA + 60 thr2_tRNA + 20 thr3_tRNA + 100 tyr1_tRNA + 340 val1_tRNA + 60 val2_tRNA + 300 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_elo_b3257_1_rib1	Translation elongation 1 b3257 1 ribosome(s)	79 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 4 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.glu1-tRNA + 3 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 2 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val3-tRNA + 395 mg2 + 1 rib_ini_b3257_1 --> 1 rib_70_elo1_b3257_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996
tl_elo_b3257_1_rib2	Translation elongation 2 b3257 1 ribosome(s)	78 h2o + 1 rib_70_elo1_b3257_1_cplx --> 78 EF-G.GDP + 78 EF-Tu.GDP + 6 ala1_tRNA + 4 ala2_tRNA + 4 arg1_tRNA + 5 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 3 glu1_tRNA + 3 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 156 h + 1 hisR_tRNA + 4 ile1_tRNA + 8 leu1_tRNA + 1 leu2_tRNA + 1 leuU_tRNA + 2 leuZ_tRNA + 2 lys1_tRNA + 2 met1_tRNA + 395 mg2 + 6 phe1_tRNA + 156 pi + 2 pro1_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3257_1_cplx + 1 ser2_tRNA + 2 thr1_tRNA + 1 thr2_tRNA + 1 thr3_tRNA + 4 trpT_tRNA + 3 tyr1_tRNA + 2 val1_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996
tl_elo_b3257_2_rib1	Translation elongation 1 b3257 2 ribosome(s)	158 EF-G.GTP + 14 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val3-tRNA + 790 mg2 + 1 rib_ini_b3257_2 --> 1 rib_70_elo1_b3257_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996

tl_elo_b3257_2_rib2	Translation elongation 2 b3257 2 ribosome(s)	156 h2o + 1 rib_70_elo1_b3257_2_cplx --> 156 EF-G.GDP + 156 EF-Tu.GDP + 12 ala1_tRNA + 8 ala2_tRNA + 8 arg1_tRNA + 10 asp1_tRNA + 4 cysT_tRNA + 2 fmet_tRNA + 2 gln1_tRNA + 6 glu1_tRNA + 6 gly1_tRNA + 2 glyT_tRNA + 2 glyU_tRNA + 312 h + 2 hisR_tRNA + 8 ile1_tRNA + 16 leu1_tRNA + 2 leu2_tRNA + 2 leuU_tRNA + 4 leuZ_tRNA + 4 lys1_tRNA + 4 met1_tRNA + 790 mg2 + 12 phe1_tRNA + 312 pi + 4 pro1_tRNA + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3257_2_cplx + 2 ser2_tRNA + 4 thr1_tRNA + 2 thr2_tRNA + 2 thr3_tRNA + 8 trpT_tRNA + 6 tyr1_tRNA + 4 val1_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996
tl_elo_b3257_4_rib1	Translation elongation 1 b3257 4 ribosome(s)	316 EF-G.GTP + 28 EF-Tu.GTP.ala1-tRNA + 16 EF-Tu.GTP.ala2-tRNA + 16 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 32 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1580 mg2 + 1 rib_ini_b3257_4 --> 1 rib_70_elo1_b3257_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996
tl_elo_b3257_4_rib2	Translation elongation 2 b3257 4 ribosome(s)	312 h2o + 1 rib_70_elo1_b3257_4_cplx --> 312 EF-G.GDP + 312 EF-Tu.GDP + 24 ala1_tRNA + 16 ala2_tRNA + 16 arg1_tRNA + 20 asp1_tRNA + 8 cysT_tRNA + 4 fmet_tRNA + 4 gln1_tRNA + 12 glu1_tRNA + 12 gly1_tRNA + 4 glyT_tRNA + 4 glyU_tRNA + 624 h + 4 hisR_tRNA + 16 ile1_tRNA + 32 leu1_tRNA + 4 leu2_tRNA + 4 leuU_tRNA + 8 leuZ_tRNA + 8 lys1_tRNA + 8 met1_tRNA + 1580 mg2 + 24 phe1_tRNA + 624 pi + 8 pro1_tRNA + 4 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b3257_4_cplx + 4 ser2_tRNA + 8 thr1_tRNA + 4 thr2_tRNA + 4 thr3_tRNA + 16 trpT_tRNA + 12 tyr1_tRNA + 8 val1_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996
tl_elo_b3258_14_rib1	Translation elongation 1 b3258 14 ribosome(s)	6748 EF-G.GTP + 518 EF-Tu.GTP.ala1-tRNA + 252 EF-Tu.GTP.ala2-tRNA + 182 EF-Tu.GTP.arg1-tRNA + 56 EF-Tu.GTP.argX-tRNA + 168 EF-Tu.GTP.asn1-tRNA + 154 EF-Tu.GTP.asp1-tRNA + 28 EF-Tu.GTP.cysT-tRNA + 84 EF-Tu.GTP.gln1-tRNA + 126 EF-Tu.GTP.gln2-tRNA + 112 EF-Tu.GTP.glu1-tRNA + 476 EF-Tu.GTP.gly1-tRNA + 42 EF-Tu.GTP.glyT-tRNA + 98 EF-Tu.GTP.glyU-tRNA + 70 EF-Tu.GTP.hisR-tRNA + 532 EF-Tu.GTP.ile1-tRNA + 588 EF-Tu.GTP.leu1-tRNA + 126 EF-Tu.GTP.leu2-tRNA + 252 EF-Tu.GTP.leuU-tRNA + 56 EF-Tu.GTP.leuW-tRNA + 84 EF-Tu.GTP.leuZ-tRNA + 168 EF-Tu.GTP.lys1-tRNA + 252 EF-Tu.GTP.met1-tRNA + 308 EF-Tu.GTP.phe1-tRNA + 140 EF-Tu.GTP.pro1-tRNA + 56 EF-Tu.GTP.pro2-tRNA + 28 EF-Tu.GTP.proL-tRNA + 70 EF-Tu.GTP.proM-tRNA + 28 EF-Tu.GTP.ser1-tRNA + 28 EF-Tu.GTP.ser2-tRNA + 98 EF-Tu.GTP.ser3-tRNA + 14 EF-Tu.GTP.serT-tRNA + 196 EF-Tu.GTP.serV-tRNA + 196 EF-Tu.GTP.thr1-tRNA + 42 EF-Tu.GTP.thr2-tRNA + 140 EF-Tu.GTP.thr3-tRNA + 28 EF-Tu.GTP.thrU-tRNA + 112 EF-Tu.GTP.trpT-tRNA + 210 EF-Tu.GTP.tyr1-tRNA + 434 EF-Tu.GTP.val1-tRNA + 70 EF-Tu.GTP.val2-tRNA + 126 EF-Tu.GTP.val3-tRNA + 33740 mg2 + 1 rib_ini_b3258_14 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_elo_b3258_14_rib2	Translation elongation 2 b3258 14 ribosome(s)	6734 h2o + 1 rib_70_elo1_b3258_14_cplx --> 6734 EF-G.GDP + 6734 EF-Tu.GDP + 518 ala1_tRNA + 252 ala2_tRNA + 182 arg1_tRNA + 56 argX_tRNA + 168 asn1_tRNA + 154 asp1_tRNA + 28 cysT_tRNA + 14 fmet_tRNA + 84 gln1_tRNA + 126 gln2_tRNA + 112 glu1_tRNA + 476 gly1_tRNA + 42 glyT_tRNA + 98 glyU_tRNA + 13468 h + 70 hisR_tRNA + 532 ile1_tRNA + 588 leu1_tRNA + 126 leu2_tRNA + 252 leuU_tRNA + 56 leuW_tRNA + 84 leuZ_tRNA + 154 lys1_tRNA + 252 met1_tRNA + 33740 mg2 + 308 phe1_tRNA + 13468 pi + 140 pro1_tRNA + 56 pro2_tRNA + 28 proL_tRNA + 70 proM_tRNA + 1 rib_70_elo2_b3258_14_cplx + 28 ser1_tRNA + 28 ser2_tRNA + 98 ser3_tRNA + 14 serT_tRNA + 196 serV_tRNA + 196 thr1_tRNA + 42 thr2_tRNA + 140 thr3_tRNA + 28 thrU_tRNA + 112 trpT_tRNA + 210 tyr1_tRNA + 434 val1_tRNA + 70 val2_tRNA + 126 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_elo_b3258_1_rib1	Translation elongation 1 b3258 1 ribosome(s)	482 EF-G.GTP + 37 EF-Tu.GTP.ala1-tRNA + 18 EF-Tu.GTP.ala2-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argX-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 11 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 9 EF-Tu.GTP.gln2-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 34 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 38 EF-Tu.GTP.ile1-tRNA + 42 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 18 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuW-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 22 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 14 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 31 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 2410 mg2 + 1 rib_ini_b3258_1 --> 1 rib_70_elo1_b3258_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_elo_b3258_1_rib2	Translation elongation 2 b3258 1 ribosome(s)	481 h2o + 1 rib_70_elo1_b3258_1_cplx --> 481 EF-G.GDP + 481 EF-Tu.GDP + 37 ala1_tRNA + 18 ala2_tRNA + 13 arg1_tRNA + 4 argX_tRNA + 12 asn1_tRNA + 11 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 9 gln2_tRNA + 8 glu1_tRNA + 34 gly1_tRNA + 3 glyT_tRNA + 7 glyU_tRNA + 962 h + 5 hisR_tRNA + 38 ile1_tRNA + 42 leu1_tRNA + 9 leu2_tRNA + 18 leuU_tRNA + 4 leuW_tRNA + 6 leuZ_tRNA + 11 lys1_tRNA + 18 met1_tRNA + 2410 mg2 + 22 phe1_tRNA + 962 pi + 10 pro1_tRNA + 4 pro2_tRNA + 2 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b3258_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 7 ser3_tRNA + 1 serT_tRNA + 14 serV_tRNA + 14 thr1_tRNA + 3 thr2_tRNA + 10 thr3_tRNA + 2 thrU_tRNA + 8 trpT_tRNA + 15 tyr1_tRNA + 31 val1_tRNA + 5 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476

tl_elo_b3258_28_rib1	Translation elongation 1 b3258 28 ribosome(s)	13496 EF-G.GTP + 1036 EF-Tu.GTP.ala1-tRNA + 504 EF-Tu.GTP.ala2-tRNA + 364 EF-Tu.GTP.arg1-tRNA + 112 EF-Tu.GTP.argX-tRNA + 336 EF-Tu.GTP.asn1-tRNA + 308 EF-Tu.GTP.asp1-tRNA + 56 EF-Tu.GTP.cysT-tRNA + 168 EF-Tu.GTP.gln1-tRNA + 252 EF-Tu.GTP.gln2-tRNA + 224 EF-Tu.GTP.glu1-tRNA + 952 EF-Tu.GTP.gly1-tRNA + 84 EF-Tu.GTP.glyT-tRNA + 196 EF-Tu.GTP.glyU-tRNA + 140 EF-Tu.GTP.hisR-tRNA + 1064 EF-Tu.GTP.ile1-tRNA + 1176 EF-Tu.GTP.leu1-tRNA + 252 EF-Tu.GTP.leu2-tRNA + 504 EF-Tu.GTP.leuU-tRNA + 112 EF-Tu.GTP.leuW-tRNA + 168 EF-Tu.GTP.leuZ-tRNA + 336 EF-Tu.GTP.lys1-tRNA + 504 EF-Tu.GTP.met1-tRNA + 616 EF-Tu.GTP.phe1-tRNA + 280 EF-Tu.GTP.pro1-tRNA + 112 EF-Tu.GTP.pro2-tRNA + 56 EF-Tu.GTP.proL-tRNA + 140 EF-Tu.GTP.proM-tRNA + 56 EF-Tu.GTP.ser1-tRNA + 56 EF-Tu.GTP.ser2-tRNA + 196 EF-Tu.GTP.ser3-tRNA + 28 EF-Tu.GTP.serT-tRNA + 392 EF-Tu.GTP.serV-tRNA + 392 EF-Tu.GTP.thr1-tRNA + 84 EF-Tu.GTP.thr2-tRNA + 280 EF-Tu.GTP.thr3-tRNA + 56 EF-Tu.GTP.thrU-tRNA + 224 EF-Tu.GTP.trpT-tRNA + 420 EF-Tu.GTP.tyr1-tRNA + 868 EF-Tu.GTP.val1-tRNA + 140 EF-Tu.GTP.val2-tRNA + 252 EF-Tu.GTP.val3-tRNA + 67480 mg2 + 1 rib	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_elo_b3258_28_rib2	Translation elongation 2 b3258 28 ribosome(s)	13468 h2o + 1 rib_70_elo1_b3258_28_cplx --> 13468 EF-G.GDP + 13468 EF-Tu.GDP + 1036 ala1_tRNA + 504 ala2_tRNA + 364 arg1_tRNA + 112 argX_tRNA + 336 asn1_tRNA + 308 asp1_tRNA + 56 cysT_tRNA + 28 fmet_tRNA + 168 gln1_tRNA + 252 gln2_tRNA + 224 glu1_tRNA + 952 gly1_tRNA + 84 glyT_tRNA + 196 glyU_tRNA + 26936 h + 140 hisR_tRNA + 1064 ile1_tRNA + 1176 leu1_tRNA + 252 leu2_tRNA + 504 leuU_tRNA + 112 leuW_tRNA + 168 leuZ_tRNA + 308 lys1_tRNA + 504 met1_tRNA + 67480 mg2 + 616 phe1_tRNA + 26936 pi + 280 pro1_tRNA + 112 pro2_tRNA + 56 proL_tRNA + 140 proM_tRNA + 1 rib_70_elo2_b3258_28_cplx + 56 ser1_tRNA + 56 ser2_tRNA + 196 ser3_tRNA + 28 serT_tRNA + 392 serV_tRNA + 392 thr1_tRNA + 84 thr2_tRNA + 280 thr3_tRNA + 56 thrU_tRNA + 224 trpT_tRNA + 420 tyr1_tRNA + 868 val1_tRNA + 140 val2_tRNA + 252 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_elo_b3259_17_rib1	Translation elongation 1 b3259 17 ribosome(s)	4964 EF-G.GTP + 374 EF-Tu.GTP.ala1-tRNA + 119 EF-Tu.GTP.ala2-tRNA + 187 EF-Tu.GTP.arg1-tRNA + 187 EF-Tu.GTP.asn1-tRNA + 442 EF-Tu.GTP.asp1-tRNA + 85 EF-Tu.GTP.cysT-tRNA + 85 EF-Tu.GTP.gln1-tRNA + 51 EF-Tu.GTP.gln2-tRNA + 374 EF-Tu.GTP.glu1-tRNA + 391 EF-Tu.GTP.gly1-tRNA + 17 EF-Tu.GTP.glyU-tRNA + 85 EF-Tu.GTP.hisR-tRNA + 289 EF-Tu.GTP.ile1-tRNA + 357 EF-Tu.GTP.leu1-tRNA + 17 EF-Tu.GTP.leu2-tRNA + 119 EF-Tu.GTP.leuU-tRNA + 17 EF-Tu.GTP.leuW-tRNA + 85 EF-Tu.GTP.leuZ-tRNA + 170 EF-Tu.GTP.lys1-tRNA + 102 EF-Tu.GTP.met1-tRNA + 153 EF-Tu.GTP.phe1-tRNA + 170 EF-Tu.GTP.pro1-tRNA + 34 EF-Tu.GTP.pro2-tRNA + 85 EF-Tu.GTP.proM-tRNA + 34 EF-Tu.GTP.ser1-tRNA + 51 EF-Tu.GTP.ser2-tRNA + 17 EF-Tu.GTP.serT-tRNA + 136 EF-Tu.GTP.serV-tRNA + 170 EF-Tu.GTP.thr1-tRNA + 17 EF-Tu.GTP.thr2-tRNA + 51 EF-Tu.GTP.thr3-tRNA + 17 EF-Tu.GTP.thrU-tRNA + 136 EF-Tu.GTP.trpT-tRNA + 34 EF-Tu.GTP.tyr1-tRNA + 153 EF-Tu.GTP.val1-tRNA + 85 EF-Tu.GTP.val2-tRNA + 68 EF-Tu.GTP.val3-tRNA + 24820 mg2 + 1 rib_ini_b3259_17 --> 1 rib_70_elo1_b3259_17_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_elo_b3259_17_rib2	Translation elongation 2 b3259 17 ribosome(s)	4947 h2o + 1 rib_70_elo1_b3259_17_cplx --> 4947 EF-G.GDP + 4947 EF-Tu.GDP + 374 ala1_tRNA + 119 ala2_tRNA + 187 arg1_tRNA + 170 asn1_tRNA + 442 asp1_tRNA + 85 cysT_tRNA + 17 fmet_tRNA + 85 gln1_tRNA + 51 gln2_tRNA + 374 glu1_tRNA + 391 gly1_tRNA + 17 glyU_tRNA + 9894 h + 85 hisR_tRNA + 289 ile1_tRNA + 357 leu1_tRNA + 17 leu2_tRNA + 119 leuU_tRNA + 17 leuW_tRNA + 85 leuZ_tRNA + 170 lys1_tRNA + 102 met1_tRNA + 24820 mg2 + 153 phe1_tRNA + 9894 pi + 170 pro1_tRNA + 34 pro2_tRNA + 85 proM_tRNA + 1 rib_70_elo2_b3259_17_cplx + 34 ser1_tRNA + 51 ser2_tRNA + 17 serT_tRNA + 136 serV_tRNA + 170 thr1_tRNA + 17 thr2_tRNA + 51 thr3_tRNA + 17 thrU_tRNA + 136 trpT_tRNA + 34 tyr1_tRNA + 153 val1_tRNA + 85 val2_tRNA + 68 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_elo_b3259_1_rib1	Translation elongation 1 b3259 1 ribosome(s)	292 EF-G.GTP + 22 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 11 EF-Tu.GTP.asn1-tRNA + 26 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 22 EF-Tu.GTP.glu1-tRNA + 23 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 17 EF-Tu.GTP.ile1-tRNA + 21 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 8 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1460 mg2 + 1 rib_ini_b3259_1 --> 1 rib_70_elo1_b3259_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_elo_b3259_1_rib2	Translation elongation 2 b3259 1 ribosome(s)	291 h2o + 1 rib_70_elo1_b3259_1_cplx --> 291 EF-G.GDP + 291 EF-Tu.GDP + 22 ala1_tRNA + 7 ala2_tRNA + 11 arg1_tRNA + 10 asn1_tRNA + 26 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 3 gln2_tRNA + 22 glu1_tRNA + 23 gly1_tRNA + 1 glyU_tRNA + 582 h + 5 hisR_tRNA + 17 ile1_tRNA + 21 leu1_tRNA + 1 leu2_tRNA + 7 leuU_tRNA + 1 leuW_tRNA + 5 leuZ_tRNA + 10 lys1_tRNA + 6 met1_tRNA + 1460 mg2 + 9 phe1_tRNA + 582 pi + 10 pro1_tRNA + 2 pro2_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b3259_1_cplx + 2 ser1_tRNA + 3 ser2_tRNA + 1 serT_tRNA + 8 serV_tRNA + 10 thr1_tRNA + 1 thr2_tRNA + 3 thr3_tRNA + 1 thrU_tRNA + 8 trpT_tRNA + 2 tyr1_tRNA + 9 val1_tRNA + 5 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606

tl_elo_b3259_8_rib1	Translation elongation 1 b3259 8 ribosome(s)	2336 EF-G.GTP + 176 EF-Tu.GTP.ala1-tRNA + 56 EF-Tu.GTP.ala2-tRNA + 88 EF-Tu.GTP.arg1-tRNA + 88 EF-Tu.GTP.asn1-tRNA + 208 EF-Tu.GTP.asp1-tRNA + 40 EF-Tu.GTP.cysT-tRNA + 40 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 176 EF-Tu.GTP.glu1-tRNA + 184 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 40 EF-Tu.GTP.hisR-tRNA + 136 EF-Tu.GTP.ile1-tRNA + 168 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 56 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuW-tRNA + 40 EF-Tu.GTP.leuZ-tRNA + 80 EF-Tu.GTP.lys1-tRNA + 48 EF-Tu.GTP.met1-tRNA + 72 EF-Tu.GTP.phe1-tRNA + 80 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.pro2-tRNA + 40 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.serT-tRNA + 64 EF-Tu.GTP.serV-tRNA + 80 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 24 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 64 EF-Tu.GTP.trpT-tRNA + 16 EF-Tu.GTP.tyr1-tRNA + 72 EF-Tu.GTP.val1-tRNA + 40 EF-Tu.GTP.val2-tRNA + 32 EF-Tu.GTP.val3-tRNA + 11680 mg2 + 1 rib_ini_b3259_8 --> 1 rib_70_elo1_b3259_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_elo_b3259_8_rib2	Translation elongation 2 b3259 8 ribosome(s)	2328 h2o + 1 rib_70_elo1_b3259_8_cplx --> 2328 EF-G.GDP + 2328 EF-Tu.GDP + 176 ala1_tRNA + 56 ala2_tRNA + 88 arg1_tRNA + 80 asn1_tRNA + 208 asp1_tRNA + 40 cysT_tRNA + 8 fmet_tRNA + 40 gln1_tRNA + 24 gln2_tRNA + 176 glu1_tRNA + 184 gly1_tRNA + 8 glyU_tRNA + 4656 h + 40 hisR_tRNA + 136 ile1_tRNA + 168 leu1_tRNA + 8 leu2_tRNA + 56 leuU_tRNA + 8 leuW_tRNA + 40 leuZ_tRNA + 80 lys1_tRNA + 48 met1_tRNA + 11680 mg2 + 72 phe1_tRNA + 4656 pi + 80 pro1_tRNA + 16 pro2_tRNA + 40 proM_tRNA + 1 rib_70_elo2_b3259_8_cplx + 16 ser1_tRNA + 24 ser2_tRNA + 8 serT_tRNA + 64 serV_tRNA + 80 thr1_tRNA + 8 thr2_tRNA + 24 thr3_tRNA + 8 thrU_tRNA + 64 trpT_tRNA + 16 tyr1_tRNA + 72 val1_tRNA + 40 val2_tRNA + 32 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_elo_b3260_18_rib1	Translation elongation 1 b3260 18 ribosome(s)	5760 EF-G.GTP + 504 EF-Tu.GTP.ala1-tRNA + 162 EF-Tu.GTP.ala2-tRNA + 270 EF-Tu.GTP.arg1-tRNA + 72 EF-Tu.GTP.argU-tRNA + 108 EF-Tu.GTP.argX-tRNA + 216 EF-Tu.GTP.asn1-tRNA + 324 EF-Tu.GTP.asp1-tRNA + 108 EF-Tu.GTP.cysT-tRNA + 198 EF-Tu.GTP.gln1-tRNA + 54 EF-Tu.GTP.gln2-tRNA + 414 EF-Tu.GTP.glu1-tRNA + 216 EF-Tu.GTP.gly1-tRNA + 90 EF-Tu.GTP.glyT-tRNA + 54 EF-Tu.GTP.glyU-tRNA + 144 EF-Tu.GTP.hisR-tRNA + 414 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.ile2-tRNA + 180 EF-Tu.GTP.leu1-tRNA + 144 EF-Tu.GTP.leu2-tRNA + 144 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 234 EF-Tu.GTP.lys1-tRNA + 144 EF-Tu.GTP.met1-tRNA + 144 EF-Tu.GTP.phe1-tRNA + 144 EF-Tu.GTP.pro1-tRNA + 54 EF-Tu.GTP.pro2-tRNA + 72 EF-Tu.GTP.proL-tRNA + 36 EF-Tu.GTP.proM-tRNA + 54 EF-Tu.GTP.ser1-tRNA + 54 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serT-tRNA + 90 EF-Tu.GTP.serV-tRNA + 90 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.thr3-tRNA + 90 EF-Tu.GTP.thrU-tRNA + 72 EF-Tu.GTP.trpT-tRNA + 180 EF-Tu.GTP.tyr1-tRNA + 126 EF-Tu.GTP.val1-tRNA + 54 EF-Tu.GTP.val2-tRNA + 180 EF-Tu.GTP.val3-tRNA + 28800 mg2 + 1 rib_ini_b3260_18 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_elo_b3260_18_rib2	Translation elongation 2 b3260 18 ribosome(s)	5742 h2o + 1 rib_70_elo1_b3260_18_cplx --> 5742 EF-G.GDP + 5742 EF-Tu.GDP + 486 ala1_tRNA + 162 ala2_tRNA + 270 arg1_tRNA + 72 argU_tRNA + 108 argX_tRNA + 216 asn1_tRNA + 324 asp1_tRNA + 108 cysT_tRNA + 18 fmet_tRNA + 198 gln1_tRNA + 54 gln2_tRNA + 414 glu1_tRNA + 216 gly1_tRNA + 90 glyT_tRNA + 54 glyU_tRNA + 11484 h + 144 hisR_tRNA + 414 ile1_tRNA + 18 ile2_tRNA + 180 leu1_tRNA + 144 leu2_tRNA + 144 leuU_tRNA + 18 leuZ_tRNA + 234 lys1_tRNA + 144 met1_tRNA + 28800 mg2 + 144 phe1_tRNA + 11484 pi + 144 pro1_tRNA + 54 pro2_tRNA + 72 proL_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b3260_18_cplx + 54 ser1_tRNA + 54 ser2_tRNA + 18 ser3_tRNA + 18 serT_tRNA + 90 serV_tRNA + 90 thr1_tRNA + 36 thr2_tRNA + 18 thr3_tRNA + 90 thrU_tRNA + 72 trpT_tRNA + 180 tyr1_tRNA + 126 val1_tRNA + 54 val2_tRNA + 180 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_elo_b3260_1_rib1	Translation elongation 1 b3260 1 ribosome(s)	320 EF-G.GTP + 28 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argU-tRNA + 6 EF-Tu.GTP.argX-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 11 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 23 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 23 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 1600 mg2 + 1 rib_ini_b3260_1 --> 1 rib_70_elo1_b3260_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_elo_b3260_1_rib2	Translation elongation 2 b3260 1 ribosome(s)	319 h2o + 1 rib_70_elo1_b3260_1_cplx --> 319 EF-G.GDP + 319 EF-Tu.GDP + 27 ala1_tRNA + 9 ala2_tRNA + 15 arg1_tRNA + 4 argU_tRNA + 6 argX_tRNA + 12 asn1_tRNA + 18 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 11 gln1_tRNA + 3 gln2_tRNA + 23 glu1_tRNA + 12 gly1_tRNA + 5 glyT_tRNA + 3 glyU_tRNA + 638 h + 8 hisR_tRNA + 23 ile1_tRNA + 1 ile2_tRNA + 10 leu1_tRNA + 8 leu2_tRNA + 8 leuU_tRNA + 1 leuZ_tRNA + 13 lys1_tRNA + 8 met1_tRNA + 1600 mg2 + 8 phe1_tRNA + 638 pi + 8 pro1_tRNA + 3 pro2_tRNA + 4 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3260_1_cplx + 3 ser1_tRNA + 3 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 5 serV_tRNA + 5 thr1_tRNA + 2 thr2_tRNA + 1 thr3_tRNA + 5 thrU_tRNA + 4 trpT_tRNA + 10 tyr1_tRNA + 7 val1_tRNA + 3 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618

tl_elo_b3260_9_rib1	Translation elongation 1 b3260 9 ribosome(s)	2880 EF-G.GTP + 252 EF-Tu.GTP.ala1-tRNA + 81 EF-Tu.GTP.ala2-tRNA + 135 EF-Tu.GTP.arg1-tRNA + 36 EF-Tu.GTP.argU-tRNA + 54 EF-Tu.GTP.argX-tRNA + 108 EF-Tu.GTP.asn1-tRNA + 162 EF-Tu.GTP.asp1-tRNA + 54 EF-Tu.GTP.cysT-tRNA + 99 EF-Tu.GTP.gln1-tRNA + 27 EF-Tu.GTP.gln2-tRNA + 207 EF-Tu.GTP.glu1-tRNA + 108 EF-Tu.GTP.gly1-tRNA + 45 EF-Tu.GTP.glyT-tRNA + 27 EF-Tu.GTP.glyU-tRNA + 72 EF-Tu.GTP.hisR-tRNA + 207 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.ile2-tRNA + 90 EF-Tu.GTP.leu1-tRNA + 72 EF-Tu.GTP.leu2-tRNA + 72 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuZ-tRNA + 117 EF-Tu.GTP.lys1-tRNA + 72 EF-Tu.GTP.met1-tRNA + 72 EF-Tu.GTP.phe1-tRNA + 72 EF-Tu.GTP.pro1-tRNA + 27 EF-Tu.GTP.pro2-tRNA + 36 EF-Tu.GTP.proL-tRNA + 18 EF-Tu.GTP.proM-tRNA + 27 EF-Tu.GTP.ser1-tRNA + 27 EF-Tu.GTP.ser2-tRNA + 9 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serT-tRNA + 45 EF-Tu.GTP.serV-tRNA + 45 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 45 EF-Tu.GTP.thrU-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 90 EF-Tu.GTP.tyr1-tRNA + 63 EF-Tu.GTP.val1-tRNA + 27 EF-Tu.GTP.val2-tRNA + 90 EF-Tu.GTP.val3-tRNA + 14400 mg2 + 1 rib_ini_b3260_9 --> 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_elo_b3260_9_rib2	Translation elongation 2 b3260 9 ribosome(s)	2871 h2o + 1 rib_70_elo1_b3260_9_cplx --> 2871 EF-G.GDP + 2871 EF-Tu.GDP + 243 ala1_tRNA + 81 ala2_tRNA + 135 arg1_tRNA + 36 argU_tRNA + 54 argX_tRNA + 108 asn1_tRNA + 162 asp1_tRNA + 54 cysT_tRNA + 9 fmet_tRNA + 99 gln1_tRNA + 27 gln2_tRNA + 207 glu1_tRNA + 108 gly1_tRNA + 45 glyT_tRNA + 27 glyU_tRNA + 5742 h + 72 hisR_tRNA + 207 ile1_tRNA + 9 ile2_tRNA + 90 leu1_tRNA + 72 leu2_tRNA + 72 leuU_tRNA + 9 leuZ_tRNA + 117 lys1_tRNA + 72 met1_tRNA + 14400 mg2 + 72 phe1_tRNA + 5742 pi + 72 pro1_tRNA + 27 pro2_tRNA + 36 proL_tRNA + 18 proM_tRNA + 1 rib_70_elo2_b3260_9_cplx + 27 ser1_tRNA + 27 ser2_tRNA + 9 ser3_tRNA + 9 serT_tRNA + 45 serV_tRNA + 45 thr1_tRNA + 18 thr2_tRNA + 9 thr3_tRNA + 45 thrU_tRNA + 36 trpT_tRNA + 90 tyr1_tRNA + 63 val1_tRNA + 27 val2_tRNA + 90 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_elo_b3261_1_rib1	Translation elongation 1 b3261 1 ribosome(s)	97 EF-G.GTP + 5 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 4 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val3-tRNA + 485 mg2 + 1 rib_ini_b3261_1 --> 1 rib_70_elo1_b3261_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_elo_b3261_1_rib2	Translation elongation 2 b3261 1 ribosome(s)	96 h2o + 1 rib_70_elo1_b3261_1_cplx --> 96 EF-G.GDP + 96 EF-Tu.GDP + 5 ala1_tRNA + 6 arg1_tRNA + 7 asn1_tRNA + 6 asp1_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 4 gln2_tRNA + 4 glu1_tRNA + 5 gly1_tRNA + 192 h + 1 ile1_tRNA + 9 leu1_tRNA + 2 leu2_tRNA + 1 leuU_tRNA + 7 lys1_tRNA + 5 met1_tRNA + 485 mg2 + 2 phe1_tRNA + 192 pi + 2 proL_tRNA + 1 rib_70_elo2_b3261_1_cplx + 3 ser2_tRNA + 1 ser3_tRNA + 5 thr1_tRNA + 1 thr3_tRNA + 4 tyr1_tRNA + 7 val1_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_elo_b3261_2_rib1	Translation elongation 1 b3261 2 ribosome(s)	194 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 14 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val3-tRNA + 970 mg2 + 1 rib_ini_b3261_2 --> 1 rib_70_elo1_b3261_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_elo_b3261_2_rib2	Translation elongation 2 b3261 2 ribosome(s)	192 h2o + 1 rib_70_elo1_b3261_2_cplx --> 192 EF-G.GDP + 192 EF-Tu.GDP + 10 ala1_tRNA + 12 arg1_tRNA + 14 asn1_tRNA + 12 asp1_tRNA + 2 fmet_tRNA + 12 gln1_tRNA + 8 gln2_tRNA + 8 glu1_tRNA + 10 gly1_tRNA + 384 h + 2 ile1_tRNA + 18 leu1_tRNA + 4 leu2_tRNA + 2 leuU_tRNA + 14 lys1_tRNA + 10 met1_tRNA + 970 mg2 + 4 phe1_tRNA + 384 pi + 4 proL_tRNA + 1 rib_70_elo2_b3261_2_cplx + 6 ser2_tRNA + 2 ser3_tRNA + 10 thr1_tRNA + 2 thr3_tRNA + 8 tyr1_tRNA + 14 val1_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_elo_b3261_5_rib1	Translation elongation 1 b3261 5 ribosome(s)	485 EF-G.GTP + 25 EF-Tu.GTP.ala1-tRNA + 30 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 30 EF-Tu.GTP.asp1-tRNA + 30 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 25 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.ile1-tRNA + 45 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 35 EF-Tu.GTP.lys1-tRNA + 25 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.proL-tRNA + 15 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 25 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.tyr1-tRNA + 35 EF-Tu.GTP.val1-tRNA + 15 EF-Tu.GTP.val3-tRNA + 2425 mg2 + 1 rib_ini_b3261_5 --> 1 rib_70_elo1_b3261_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_elo_b3261_5_rib2	Translation elongation 2 b3261 5 ribosome(s)	480 h2o + 1 rib_70_elo1_b3261_5_cplx --> 480 EF-G.GDP + 480 EF-Tu.GDP + 25 ala1_tRNA + 30 arg1_tRNA + 35 asn1_tRNA + 30 asp1_tRNA + 5 fmet_tRNA + 30 gln1_tRNA + 20 gln2_tRNA + 20 glu1_tRNA + 25 gly1_tRNA + 960 h + 5 ile1_tRNA + 45 leu1_tRNA + 10 leu2_tRNA + 5 leuU_tRNA + 35 lys1_tRNA + 25 met1_tRNA + 2425 mg2 + 10 phe1_tRNA + 960 pi + 10 proL_tRNA + 1 rib_70_elo2_b3261_5_cplx + 15 ser2_tRNA + 5 ser3_tRNA + 25 thr1_tRNA + 5 thr3_tRNA + 20 tyr1_tRNA + 35 val1_tRNA + 15 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828

tl_elo_b3280_1_rib1	Translation elongation 1 b3280 1 ribosome(s)	84 EF-G.GTP + 5 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 3 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 11 EF-Tu.GTP.glu1-tRNA + 3 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 3 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 2 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 420 mg2 + 1 rib_ini_b3280_1 --> 1 rib_70_elo1_b3280_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_elo_b3280_1_rib2	Translation elongation 2 b3280 1 ribosome(s)	83 h2o + 1 rib_70_elo1_b3280_1_cplx --> 83 EF-G.GDP + 83 EF-Tu.GDP + 5 ala1_tRNA + 1 ala2_tRNA + 3 arg1_tRNA + 1 argW_tRNA + 4 asn1_tRNA + 6 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 3 gln2_tRNA + 11 glu1_tRNA + 3 gly1_tRNA + 1 glyT_tRNA + 166 h + 1 hisR_tRNA + 3 ile1_tRNA + 3 leu1_tRNA + 1 leuU_tRNA + 3 leuZ_tRNA + 2 lys1_tRNA + 1 met1_tRNA + 420 mg2 + 4 phe1_tRNA + 166 pi + 1 pro1_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3280_1_cplx + 1 ser2_tRNA + 3 serV_tRNA + 1 thr2_tRNA + 1 thr3_tRNA + 1 thrU_tRNA + 5 trpT_tRNA + 1 tyr1_tRNA + 2 val1_tRNA + 1 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_elo_b3280_2_rib1	Translation elongation 1 b3280 2 ribosome(s)	168 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argW-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 22 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 840 mg2 + 1 rib_ini_b3280_2 --> 1 rib_70_elo1_b3280_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_elo_b3280_2_rib2	Translation elongation 2 b3280 2 ribosome(s)	166 h2o + 1 rib_70_elo1_b3280_2_cplx --> 166 EF-G.GDP + 166 EF-Tu.GDP + 10 ala1_tRNA + 2 ala2_tRNA + 6 arg1_tRNA + 2 argW_tRNA + 8 asn1_tRNA + 12 asp1_tRNA + 6 cysT_tRNA + 2 fmet_tRNA + 10 gln1_tRNA + 6 gln2_tRNA + 22 glu1_tRNA + 6 gly1_tRNA + 2 glyT_tRNA + 332 h + 2 hisR_tRNA + 6 ile1_tRNA + 6 leu1_tRNA + 2 leuU_tRNA + 6 leuZ_tRNA + 4 lys1_tRNA + 2 met1_tRNA + 840 mg2 + 8 phe1_tRNA + 332 pi + 2 pro1_tRNA + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3280_2_cplx + 2 ser2_tRNA + 6 serV_tRNA + 2 thr2_tRNA + 2 thr3_tRNA + 2 thrU_tRNA + 10 trpT_tRNA + 2 tyr1_tRNA + 4 val1_tRNA + 2 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_elo_b3280_5_rib1	Translation elongation 1 b3280 5 ribosome(s)	420 EF-G.GTP + 25 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argW-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 30 EF-Tu.GTP.asp1-tRNA + 15 EF-Tu.GTP.cysT-tRNA + 25 EF-Tu.GTP.gln1-tRNA + 15 EF-Tu.GTP.gln2-tRNA + 55 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 15 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 20 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 15 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 25 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 2100 mg2 + 1 rib_ini_b3280_5 --> 1 rib_70_elo1_b3280_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_elo_b3280_5_rib2	Translation elongation 2 b3280 5 ribosome(s)	415 h2o + 1 rib_70_elo1_b3280_5_cplx --> 415 EF-G.GDP + 415 EF-Tu.GDP + 25 ala1_tRNA + 5 ala2_tRNA + 15 arg1_tRNA + 5 argW_tRNA + 20 asn1_tRNA + 30 asp1_tRNA + 15 cysT_tRNA + 5 fmet_tRNA + 25 gln1_tRNA + 15 gln2_tRNA + 55 glu1_tRNA + 15 gly1_tRNA + 5 glyT_tRNA + 830 h + 5 hisR_tRNA + 15 ile1_tRNA + 15 leu1_tRNA + 5 leuU_tRNA + 15 leuZ_tRNA + 10 lys1_tRNA + 5 met1_tRNA + 2100 mg2 + 20 phe1_tRNA + 830 pi + 5 pro1_tRNA + 5 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b3280_5_cplx + 5 ser2_tRNA + 15 serV_tRNA + 5 thr2_tRNA + 5 thr3_tRNA + 5 thrU_tRNA + 25 trpT_tRNA + 5 tyr1_tRNA + 10 val1_tRNA + 5 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_elo_b3281_16_rib1	Translation elongation 1 b3281 16 ribosome(s)	4336 EF-G.GTP + 432 EF-Tu.GTP.ala1-tRNA + 48 EF-Tu.GTP.ala2-tRNA + 144 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.argU-tRNA + 48 EF-Tu.GTP.argX-tRNA + 176 EF-Tu.GTP.asn1-tRNA + 208 EF-Tu.GTP.asp1-tRNA + 48 EF-Tu.GTP.cysT-tRNA + 112 EF-Tu.GTP.gln1-tRNA + 48 EF-Tu.GTP.gln2-tRNA + 272 EF-Tu.GTP.glu1-tRNA + 320 EF-Tu.GTP.gly1-tRNA + 64 EF-Tu.GTP.glyT-tRNA + 16 EF-Tu.GTP.glyU-tRNA + 128 EF-Tu.GTP.hisR-tRNA + 240 EF-Tu.GTP.ile1-tRNA + 48 EF-Tu.GTP.ile2-tRNA + 208 EF-Tu.GTP.leu1-tRNA + 128 EF-Tu.GTP.leu2-tRNA + 144 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuW-tRNA + 64 EF-Tu.GTP.leuZ-tRNA + 128 EF-Tu.GTP.lys1-tRNA + 64 EF-Tu.GTP.met1-tRNA + 224 EF-Tu.GTP.phe1-tRNA + 48 EF-Tu.GTP.pro1-tRNA + 64 EF-Tu.GTP.pro2-tRNA + 32 EF-Tu.GTP.proL-tRNA + 64 EF-Tu.GTP.proM-tRNA + 64 EF-Tu.GTP.ser1-tRNA + 32 EF-Tu.GTP.ser2-tRNA + 32 EF-Tu.GTP.ser3-tRNA + 32 EF-Tu.GTP.serT-tRNA + 112 EF-Tu.GTP.serV-tRNA + 48 EF-Tu.GTP.thr1-tRNA + 64 EF-Tu.GTP.thr2-tRNA + 32 EF-Tu.GTP.thr3-tRNA + 48 EF-Tu.GTP.thrU-tRNA + 32 EF-Tu.GTP.trpT-tRNA + 80 EF-Tu.GTP.tyr1-tRNA + 144 EF-Tu.GTP.val1-tRNA + 64 EF-Tu.GTP.val3-tRNA + 21680 mg2 + 1 rib_ini_b3281_16 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582

tl_elo_b3281_16_rib2	Translation elongation 2 b3281 16 ribosome(s)	4320 h2o + 1 rib_70_elo1_b3281_16_cplx --> 4320 EF-G.GDP + 4320 EF-Tu.GDP + 416 ala1_tRNA + 48 ala2_tRNA + 144 arg1_tRNA + 16 argU_tRNA + 48 argX_tRNA + 176 asn1_tRNA + 208 asp1_tRNA + 48 cysT_tRNA + 16 fmet_tRNA + 112 gln1_tRNA + 48 gln2_tRNA + 272 glu1_tRNA + 320 gly1_tRNA + 64 glyT_tRNA + 16 glyU_tRNA + 8640 h + 128 hisR_tRNA + 240 ile1_tRNA + 48 ile2_tRNA + 208 leu1_tRNA + 128 leu2_tRNA + 144 leuU_tRNA + 16 leuW_tRNA + 64 leuZ_tRNA + 128 lys1_tRNA + 64 met1_tRNA + 21680 mg2 + 224 phe1_tRNA + 8640 pi + 48 pro1_tRNA + 64 pro2_tRNA + 32 proL_tRNA + 64 proM_tRNA + 1 rib_70_elo2_b3281_16_cplx + 64 ser1_tRNA + 32 ser2_tRNA + 32 ser3_tRNA + 32 serT_tRNA + 112 serV_tRNA + 48 thr1_tRNA + 64 thr2_tRNA + 32 thr3_tRNA + 48 thrU_tRNA + 32 trpT_tRNA + 80 tyr1_tRNA + 144 val1_tRNA + 64 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582
tl_elo_b3281_1_rib1	Translation elongation 1 b3281 1 ribosome(s)	271 EF-G.GTP + 27 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 9 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 3 EF-Tu.GTP.argX-tRNA + 11 EF-Tu.GTP.asn1-tRNA + 13 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 17 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 14 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1355 mg2 + 1 rib_ini_b3281_1 --> 1 rib_70_elo1_b3281_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582
tl_elo_b3281_1_rib2	Translation elongation 2 b3281 1 ribosome(s)	270 h2o + 1 rib_70_elo1_b3281_1_cplx --> 270 EF-G.GDP + 270 EF-Tu.GDP + 26 ala1_tRNA + 3 ala2_tRNA + 9 arg1_tRNA + 1 argU_tRNA + 3 argX_tRNA + 11 asn1_tRNA + 13 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 3 gln2_tRNA + 17 glu1_tRNA + 20 gly1_tRNA + 4 glyT_tRNA + 1 glyU_tRNA + 540 h + 8 hisR_tRNA + 15 ile1_tRNA + 3 ile2_tRNA + 13 leu1_tRNA + 8 leu2_tRNA + 9 leuU_tRNA + 1 leuW_tRNA + 4 leuZ_tRNA + 8 lys1_tRNA + 4 met1_tRNA + 1355 mg2 + 14 phe1_tRNA + 540 pi + 3 pro1_tRNA + 4 pro2_tRNA + 2 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b3281_1_cplx + 4 ser1_tRNA + 2 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 7 serV_tRNA + 3 thr1_tRNA + 4 thr2_tRNA + 2 thr3_tRNA + 3 thrU_tRNA + 2 trpT_tRNA + 5 tyr1_tRNA + 9 val1_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582
tl_elo_b3281_8_rib1	Translation elongation 1 b3281 8 ribosome(s)	2168 EF-G.GTP + 216 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 72 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.argU-tRNA + 24 EF-Tu.GTP.argX-tRNA + 88 EF-Tu.GTP.asn1-tRNA + 104 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.cysT-tRNA + 56 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 136 EF-Tu.GTP.glu1-tRNA + 160 EF-Tu.GTP.gly1-tRNA + 32 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 64 EF-Tu.GTP.hisR-tRNA + 120 EF-Tu.GTP.ile1-tRNA + 24 EF-Tu.GTP.ile2-tRNA + 104 EF-Tu.GTP.leu1-tRNA + 64 EF-Tu.GTP.leu2-tRNA + 72 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuW-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 64 EF-Tu.GTP.lys1-tRNA + 32 EF-Tu.GTP.met1-tRNA + 112 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 32 EF-Tu.GTP.pro2-tRNA + 16 EF-Tu.GTP.proL-tRNA + 32 EF-Tu.GTP.proM-tRNA + 32 EF-Tu.GTP.ser1-tRNA + 16 EF-Tu.GTP.ser2-tRNA + 16 EF-Tu.GTP.ser3-tRNA + 16 EF-Tu.GTP.serT-tRNA + 56 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 32 EF-Tu.GTP.thr2-tRNA + 16 EF-Tu.GTP.thr3-tRNA + 24 EF-Tu.GTP.thrU-tRNA + 16 EF-Tu.GTP.trpT-tRNA + 40 EF-Tu.GTP.tyr1-tRNA + 72 EF-Tu.GTP.val1-tRNA + 32 EF-Tu.GTP.val3-tRNA + 10840 mg2 + 1 rib_	irreversible	Translation	0.00E+00	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582
tl_elo_b3281_8_rib2	Translation elongation 2 b3281 8 ribosome(s)	2160 h2o + 1 rib_70_elo1_b3281_8_cplx --> 2160 EF-G.GDP + 2160 EF-Tu.GDP + 208 ala1_tRNA + 24 ala2_tRNA + 72 arg1_tRNA + 8 argU_tRNA + 24 argX_tRNA + 88 asn1_tRNA + 104 asp1_tRNA + 24 cysT_tRNA + 8 fmet_tRNA + 56 gln1_tRNA + 24 gln2_tRNA + 136 glu1_tRNA + 160 gly1_tRNA + 32 glyT_tRNA + 8 glyU_tRNA + 4320 h + 64 hisR_tRNA + 120 ile1_tRNA + 24 ile2_tRNA + 104 leu1_tRNA + 64 leu2_tRNA + 72 leuU_tRNA + 8 leuW_tRNA + 32 leuZ_tRNA + 64 lys1_tRNA + 32 met1_tRNA + 10840 mg2 + 112 phe1_tRNA + 4320 pi + 24 pro1_tRNA + 32 pro2_tRNA + 16 proL_tRNA + 32 proM_tRNA + 1 rib_70_elo2_b3281_8_cplx + 32 ser1_tRNA + 16 ser2_tRNA + 16 ser3_tRNA + 16 serT_tRNA + 56 serV_tRNA + 24 thr1_tRNA + 32 thr2_tRNA + 16 thr3_tRNA + 24 thrU_tRNA + 16 trpT_tRNA + 40 tyr1_tRNA + 72 val1_tRNA + 32 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582
tl_elo_b3282_11_rib1	Translation elongation 1 b3282 11 ribosome(s)	2079 EF-G.GTP + 165 EF-Tu.GTP.ala1-tRNA + 44 EF-Tu.GTP.ala2-tRNA + 143 EF-Tu.GTP.arg1-tRNA + 11 EF-Tu.GTP.argU-tRNA + 77 EF-Tu.GTP.asn1-tRNA + 132 EF-Tu.GTP.asp1-tRNA + 33 EF-Tu.GTP.cysT-tRNA + 55 EF-Tu.GTP.gln1-tRNA + 22 EF-Tu.GTP.gln2-tRNA + 121 EF-Tu.GTP.glu1-tRNA + 77 EF-Tu.GTP.gly1-tRNA + 11 EF-Tu.GTP.glyT-tRNA + 55 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 77 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.ile2-tRNA + 66 EF-Tu.GTP.leu1-tRNA + 77 EF-Tu.GTP.leu2-tRNA + 33 EF-Tu.GTP.leuU-tRNA + 33 EF-Tu.GTP.leuZ-tRNA + 44 EF-Tu.GTP.lys1-tRNA + 22 EF-Tu.GTP.met1-tRNA + 88 EF-Tu.GTP.phe1-tRNA + 55 EF-Tu.GTP.pro1-tRNA + 66 EF-Tu.GTP.pro2-tRNA + 22 EF-Tu.GTP.proL-tRNA + 33 EF-Tu.GTP.proM-tRNA + 11 EF-Tu.GTP.ser1-tRNA + 11 EF-Tu.GTP.ser2-tRNA + 11 EF-Tu.GTP.ser3-tRNA + 11 EF-Tu.GTP.serT-tRNA + 33 EF-Tu.GTP.serV-tRNA + 55 EF-Tu.GTP.thr1-tRNA + 11 EF-Tu.GTP.thr2-tRNA + 44 EF-Tu.GTP.thr3-tRNA + 44 EF-Tu.GTP.thrU-tRNA + 22 EF-Tu.GTP.trpT-tRNA + 44 EF-Tu.GTP.tyr1-tRNA + 66 EF-Tu.GTP.val1-tRNA + 44 EF-Tu.GTP.val2-tRNA + 88 EF-Tu.GTP.val3-tRNA + 10395 mg2 + 1 rib_ini_b3282_11 --> 1 rib_70_elo1_b3282_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462

tl_elo_b3282_11_rib2	Translation elongation 2 b3282 11 ribosome(s)	2068 h2o + 1 rib_70_elo1_b3282_11_cplx --> 2068 EF-G.GDP + 2068 EF-Tu.GDP + 165 ala1_tRNA + 44 ala2_tRNA + 143 arg1_tRNA + 11 argU_tRNA + 77 asn1_tRNA + 132 asp1_tRNA + 33 cysT_tRNA + 11 fmet_tRNA + 55 gln1_tRNA + 22 gln2_tRNA + 121 glu1_tRNA + 77 gly1_tRNA + 11 glyT_tRNA + 44 glyU_tRNA + 4136 h + 11 hisR_tRNA + 77 ile1_tRNA + 11 ile2_tRNA + 66 leu1_tRNA + 77 leu2_tRNA + 33 leuU_tRNA + 33 leuZ_tRNA + 44 lys1_tRNA + 22 met1_tRNA + 10395 mg2 + 88 phe1_tRNA + 4136 pi + 55 pro1_tRNA + 66 pro2_tRNA + 22 proL_tRNA + 33 proM_tRNA + 1 rib_70_elo2_b3282_11_cplx + 11 ser1_tRNA + 11 ser2_tRNA + 11 ser3_tRNA + 11 serT_tRNA + 33 serV_tRNA + 55 thr1_tRNA + 11 thr2_tRNA + 44 thr3_tRNA + 44 thrU_tRNA + 22 trpT_tRNA + 44 tyr1_tRNA + 66 val1_tRNA + 44 val2_tRNA + 88 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_elo_b3282_1_rib1	Translation elongation 1 b3282 1 ribosome(s)	189 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 11 EF-Tu.GTP.glu1-tRNA + 7 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 945 mg2 + 1 rib_ini_b3282_1 --> 1 rib_70_elo1_b3282_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_elo_b3282_1_rib2	Translation elongation 2 b3282 1 ribosome(s)	188 h2o + 1 rib_70_elo1_b3282_1_cplx --> 188 EF-G.GDP + 188 EF-Tu.GDP + 15 ala1_tRNA + 4 ala2_tRNA + 13 arg1_tRNA + 1 argU_tRNA + 7 asn1_tRNA + 12 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 2 gln2_tRNA + 11 glu1_tRNA + 7 gly1_tRNA + 1 glyT_tRNA + 4 glyU_tRNA + 376 h + 1 hisR_tRNA + 7 ile1_tRNA + 1 ile2_tRNA + 6 leu1_tRNA + 7 leu2_tRNA + 3 leuU_tRNA + 3 leuZ_tRNA + 4 lys1_tRNA + 2 met1_tRNA + 945 mg2 + 8 phe1_tRNA + 376 pi + 5 pro1_tRNA + 6 pro2_tRNA + 2 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3282_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 3 serV_tRNA + 5 thr1_tRNA + 1 thr2_tRNA + 4 thr3_tRNA + 4 thrU_tRNA + 2 trpT_tRNA + 4 tyr1_tRNA + 6 val1_tRNA + 4 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_elo_b3282_5_rib1	Translation elongation 1 b3282 5 ribosome(s)	945 EF-G.GTP + 75 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 65 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argU-tRNA + 35 EF-Tu.GTP.asn1-tRNA + 60 EF-Tu.GTP.asp1-tRNA + 15 EF-Tu.GTP.cysT-tRNA + 25 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 55 EF-Tu.GTP.glu1-tRNA + 35 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 25 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 35 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.ile2-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 35 EF-Tu.GTP.leu2-tRNA + 15 EF-Tu.GTP.leuU-tRNA + 15 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 40 EF-Tu.GTP.phe1-tRNA + 25 EF-Tu.GTP.pro1-tRNA + 30 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proL-tRNA + 15 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serT-tRNA + 15 EF-Tu.GTP.serV-tRNA + 25 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 20 EF-Tu.GTP.tyr1-tRNA + 30 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 40 EF-Tu.GTP.val3-tRNA + 4725 mg2 + 1 rib_ini_b3282_5 --> 1 rib_70_elo1_b3282_5_c	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_elo_b3282_5_rib2	Translation elongation 2 b3282 5 ribosome(s)	940 h2o + 1 rib_70_elo1_b3282_5_cplx --> 940 EF-G.GDP + 940 EF-Tu.GDP + 75 ala1_tRNA + 20 ala2_tRNA + 65 arg1_tRNA + 5 argU_tRNA + 35 asn1_tRNA + 60 asp1_tRNA + 15 cysT_tRNA + 5 fmet_tRNA + 25 gln1_tRNA + 10 gln2_tRNA + 55 glu1_tRNA + 35 gly1_tRNA + 5 glyT_tRNA + 20 glyU_tRNA + 1880 h + 5 hisR_tRNA + 35 ile1_tRNA + 5 ile2_tRNA + 30 leu1_tRNA + 35 leu2_tRNA + 15 leuU_tRNA + 15 leuZ_tRNA + 20 lys1_tRNA + 10 met1_tRNA + 4725 mg2 + 40 phe1_tRNA + 1880 pi + 25 pro1_tRNA + 30 pro2_tRNA + 10 proL_tRNA + 15 proM_tRNA + 1 rib_70_elo2_b3282_5_cplx + 5 ser1_tRNA + 5 ser2_tRNA + 5 ser3_tRNA + 5 serT_tRNA + 15 serV_tRNA + 25 thr1_tRNA + 5 thr2_tRNA + 20 thr3_tRNA + 20 thrU_tRNA + 10 trpT_tRNA + 20 tyr1_tRNA + 30 val1_tRNA + 20 val2_tRNA + 40 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_elo_b3283_10_rib1	Translation elongation 1 b3283 10 ribosome(s)	1790 EF-G.GTP + 110 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 90 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argX-tRNA + 50 EF-Tu.GTP.asn1-tRNA + 50 EF-Tu.GTP.asp1-tRNA + 160 EF-Tu.GTP.cysT-tRNA + 50 EF-Tu.GTP.gln1-tRNA + 30 EF-Tu.GTP.gln2-tRNA + 120 EF-Tu.GTP.glu1-tRNA + 70 EF-Tu.GTP.gly1-tRNA + 50 EF-Tu.GTP.glyT-tRNA + 30 EF-Tu.GTP.glyU-tRNA + 70 EF-Tu.GTP.hisR-tRNA + 80 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.ile2-tRNA + 60 EF-Tu.GTP.leu1-tRNA + 30 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuW-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 130 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 80 EF-Tu.GTP.phe1-tRNA + 60 EF-Tu.GTP.pro1-tRNA + 40 EF-Tu.GTP.pro2-tRNA + 20 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.proM-tRNA + 30 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.ser3-tRNA + 30 EF-Tu.GTP.serT-tRNA + 10 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 30 EF-Tu.GTP.thrU-tRNA + 60 EF-Tu.GTP.tyr1-tRNA + 30 EF-Tu.GTP.val1-tRNA + 30 EF-Tu.GTP.val2-tRNA + 40 EF-Tu.GTP.val3-tRNA + 8950 mg2 + 1 rib_ini_b3283_10 --> 1 rib_70_elo1_b3283_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412

tl_elo_b3283_10_rib2	Translation elongation 2 b3283 10 ribosome(s)	1780 h2o + 1 rib_70_elo1_b3283_10_cplx --> 1780 EF-G.GDP + 1780 EF-Tu.GDP + 110 ala1_tRNA + 20 ala2_tRNA + 90 arg1_tRNA + 10 argX_tRNA + 50 asn1_tRNA + 50 asp1_tRNA + 160 cysT_tRNA + 10 fmet_tRNA + 50 gln1_tRNA + 30 gln2_tRNA + 110 glu1_tRNA + 70 gly1_tRNA + 50 glyT_tRNA + 30 glyU_tRNA + 3560 h + 70 hisR_tRNA + 80 ile1_tRNA + 10 ile2_tRNA + 60 leu1_tRNA + 30 leuU_tRNA + 10 leuW_tRNA + 10 leuZ_tRNA + 130 lys1_tRNA + 10 met1_tRNA + 8950 mg2 + 80 phe1_tRNA + 3560 pi + 60 pro1_tRNA + 40 pro2_tRNA + 20 proL_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b3283_10_cplx + 30 ser1_tRNA + 20 ser2_tRNA + 10 ser3_tRNA + 30 serT_tRNA + 10 serV_tRNA + 20 thr1_tRNA + 20 thr3_tRNA + 30 thrU_tRNA + 60 tyr1_tRNA + 30 val1_tRNA + 30 val2_tRNA + 40 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_elo_b3283_1_rib1	Translation elongation 1 b3283 1 ribosome(s)	179 EF-G.GTP + 11 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 9 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 7 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 1 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 895 mg2 + 1 rib_ini_b3283_1 --> 1 rib_70_elo1_b3283_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_elo_b3283_1_rib2	Translation elongation 2 b3283 1 ribosome(s)	178 h2o + 1 rib_70_elo1_b3283_1_cplx --> 178 EF-G.GDP + 178 EF-Tu.GDP + 11 ala1_tRNA + 2 ala2_tRNA + 9 arg1_tRNA + 1 argX_tRNA + 5 asn1_tRNA + 5 asp1_tRNA + 16 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 3 gln2_tRNA + 11 glu1_tRNA + 7 gly1_tRNA + 5 glyT_tRNA + 3 glyU_tRNA + 356 h + 7 hisR_tRNA + 8 ile1_tRNA + 1 ile2_tRNA + 6 leu1_tRNA + 3 leuU_tRNA + 1 leuW_tRNA + 1 leuZ_tRNA + 13 lys1_tRNA + 1 met1_tRNA + 895 mg2 + 8 phe1_tRNA + 356 pi + 6 pro1_tRNA + 4 pro2_tRNA + 2 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3283_1_cplx + 3 ser1_tRNA + 2 ser2_tRNA + 1 ser3_tRNA + 3 serT_tRNA + 1 serV_tRNA + 2 thr1_tRNA + 2 thr3_tRNA + 3 thrU_tRNA + 6 tyr1_tRNA + 3 val1_tRNA + 3 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_elo_b3283_5_rib1	Translation elongation 1 b3283 5 ribosome(s)	895 EF-G.GTP + 55 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 45 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argX-tRNA + 25 EF-Tu.GTP.asn1-tRNA + 25 EF-Tu.GTP.asp1-tRNA + 80 EF-Tu.GTP.cysT-tRNA + 25 EF-Tu.GTP.gln1-tRNA + 15 EF-Tu.GTP.gln2-tRNA + 60 EF-Tu.GTP.glu1-tRNA + 35 EF-Tu.GTP.gly1-tRNA + 25 EF-Tu.GTP.glyT-tRNA + 15 EF-Tu.GTP.glyU-tRNA + 35 EF-Tu.GTP.hisR-tRNA + 40 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.ile2-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 15 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 65 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 40 EF-Tu.GTP.phe1-tRNA + 30 EF-Tu.GTP.pro1-tRNA + 20 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 15 EF-Tu.GTP.ser1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 15 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 15 EF-Tu.GTP.thrU-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 15 EF-Tu.GTP.val2-tRNA + 20 EF-Tu.GTP.val3-tRNA + 4475 mg2 + 1 rib_ini_b3283_5 --> 1 rib_70_elo1_b3283_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_elo_b3283_5_rib2	Translation elongation 2 b3283 5 ribosome(s)	890 h2o + 1 rib_70_elo1_b3283_5_cplx --> 890 EF-G.GDP + 890 EF-Tu.GDP + 55 ala1_tRNA + 10 ala2_tRNA + 45 arg1_tRNA + 5 argX_tRNA + 25 asn1_tRNA + 25 asp1_tRNA + 80 cysT_tRNA + 5 fmet_tRNA + 25 gln1_tRNA + 15 gln2_tRNA + 55 glu1_tRNA + 35 gly1_tRNA + 25 glyT_tRNA + 15 glyU_tRNA + 1780 h + 35 hisR_tRNA + 40 ile1_tRNA + 5 ile2_tRNA + 30 leu1_tRNA + 15 leuU_tRNA + 5 leuW_tRNA + 5 leuZ_tRNA + 65 lys1_tRNA + 5 met1_tRNA + 4475 mg2 + 40 phe1_tRNA + 1780 pi + 30 pro1_tRNA + 20 pro2_tRNA + 10 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b3283_5_cplx + 15 ser1_tRNA + 10 ser2_tRNA + 5 ser3_tRNA + 15 serT_tRNA + 5 serV_tRNA + 10 thr1_tRNA + 10 thr3_tRNA + 15 thrU_tRNA + 30 tyr1_tRNA + 15 val1_tRNA + 15 val2_tRNA + 20 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_elo_b3287_1_rib1	Translation elongation 1 b3287 1 ribosome(s)	168 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argX-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 1 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 840 mg2 + 1 rib_ini_b3287_1 --> 1 rib_70_elo1_b3287_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_elo_b3287_1_rib2	Translation elongation 2 b3287 1 ribosome(s)	167 h2o + 1 rib_70_elo1_b3287_1_cplx --> 167 EF-G.GDP + 167 EF-Tu.GDP + 8 ala1_tRNA + 3 ala2_tRNA + 11 arg1_tRNA + 3 argX_tRNA + 3 asn1_tRNA + 12 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 5 gln2_tRNA + 20 glu1_tRNA + 8 gly1_tRNA + 334 h + 4 hisR_tRNA + 15 ile1_tRNA + 10 leu1_tRNA + 1 leu2_tRNA + 3 leuU_tRNA + 1 leuW_tRNA + 5 leuZ_tRNA + 11 lys1_tRNA + 4 met1_tRNA + 840 mg2 + 3 phe1_tRNA + 334 pi + 4 pro1_tRNA + 1 pro2_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3287_1_cplx + 2 ser3_tRNA + 2 serT_tRNA + 1 serV_tRNA + 1 thr1_tRNA + 1 thr3_tRNA + 1 thrU_tRNA + 2 tyr1_tRNA + 5 val1_tRNA + 2 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384

tl_elo_b3287_4_rib1	Translation elongation 1 b3287 4 ribosome(s)	672 EF-G.GTP + 36 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 44 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argX-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 48 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 80 EF-Tu.GTP.glu1-tRNA + 32 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 60 EF-Tu.GTP.ile1-tRNA + 40 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuW-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 44 EF-Tu.GTP.lys1-tRNA + 16 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 16 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 28 EF-Tu.GTP.val3-tRNA + 3360 mg2 + 1 rib_ini_b3287_4 --> 1 rib_70_elo1_b3287_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_elo_b3287_4_rib2	Translation elongation 2 b3287 4 ribosome(s)	668 h2o + 1 rib_70_elo1_b3287_4_cplx --> 668 EF-G.GDP + 668 EF-Tu.GDP + 32 ala1_tRNA + 12 ala2_tRNA + 44 arg1_tRNA + 12 argX_tRNA + 12 asn1_tRNA + 48 asp1_tRNA + 8 cysT_tRNA + 4 fmet_tRNA + 16 gln1_tRNA + 20 gln2_tRNA + 80 glu1_tRNA + 32 gly1_tRNA + 1336 h + 16 hisR_tRNA + 60 ile1_tRNA + 40 leu1_tRNA + 4 leu2_tRNA + 12 leuU_tRNA + 4 leuW_tRNA + 20 leuZ_tRNA + 44 lys1_tRNA + 16 met1_tRNA + 3360 mg2 + 12 phe1_tRNA + 1336 pi + 16 pro1_tRNA + 4 pro2_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b3287_4_cplx + 8 ser3_tRNA + 8 serT_tRNA + 4 serV_tRNA + 4 thr1_tRNA + 4 thr3_tRNA + 4 thrU_tRNA + 8 tyr1_tRNA + 20 val1_tRNA + 8 val2_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_elo_b3287_9_rib1	Translation elongation 1 b3287 9 ribosome(s)	1512 EF-G.GTP + 81 EF-Tu.GTP.ala1-tRNA + 27 EF-Tu.GTP.ala2-tRNA + 99 EF-Tu.GTP.arg1-tRNA + 27 EF-Tu.GTP.argX-tRNA + 27 EF-Tu.GTP.asn1-tRNA + 108 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.cysT-tRNA + 36 EF-Tu.GTP.gln1-tRNA + 45 EF-Tu.GTP.gln2-tRNA + 180 EF-Tu.GTP.glu1-tRNA + 72 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.hisR-tRNA + 135 EF-Tu.GTP.ile1-tRNA + 90 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 27 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuW-tRNA + 45 EF-Tu.GTP.leuZ-tRNA + 99 EF-Tu.GTP.lys1-tRNA + 36 EF-Tu.GTP.met1-tRNA + 27 EF-Tu.GTP.phe1-tRNA + 36 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serT-tRNA + 9 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 45 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 63 EF-Tu.GTP.val3-tRNA + 7560 mg2 + 1 rib_ini_b3287_9 --> 1 rib_70_elo1_b3287_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_elo_b3287_9_rib2	Translation elongation 2 b3287 9 ribosome(s)	1503 h2o + 1 rib_70_elo1_b3287_9_cplx --> 1503 EF-G.GDP + 1503 EF-Tu.GDP + 72 ala1_tRNA + 27 ala2_tRNA + 99 arg1_tRNA + 27 argX_tRNA + 27 asn1_tRNA + 108 asp1_tRNA + 18 cysT_tRNA + 9 fmet_tRNA + 36 gln1_tRNA + 45 gln2_tRNA + 180 glu1_tRNA + 72 gly1_tRNA + 3006 h + 36 hisR_tRNA + 135 ile1_tRNA + 90 leu1_tRNA + 9 leu2_tRNA + 27 leuU_tRNA + 9 leuW_tRNA + 45 leuZ_tRNA + 99 lys1_tRNA + 36 met1_tRNA + 7560 mg2 + 27 phe1_tRNA + 3006 pi + 36 pro1_tRNA + 9 pro2_tRNA + 18 proM_tRNA + 1 rib_70_elo2_b3287_9_cplx + 18 ser3_tRNA + 18 serT_tRNA + 9 serV_tRNA + 9 thr1_tRNA + 9 thr3_tRNA + 9 thrU_tRNA + 18 tyr1_tRNA + 45 val1_tRNA + 18 val2_tRNA + 63 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_elo_b3288_18_rib1	Translation elongation 1 b3288 18 ribosome(s)	5652 EF-G.GTP + 504 EF-Tu.GTP.ala1-tRNA + 72 EF-Tu.GTP.ala2-tRNA + 252 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argX-tRNA + 162 EF-Tu.GTP.asn1-tRNA + 288 EF-Tu.GTP.asp1-tRNA + 54 EF-Tu.GTP.cysT-tRNA + 126 EF-Tu.GTP.gln1-tRNA + 180 EF-Tu.GTP.gln2-tRNA + 342 EF-Tu.GTP.glu1-tRNA + 378 EF-Tu.GTP.gly1-tRNA + 54 EF-Tu.GTP.glyT-tRNA + 18 EF-Tu.GTP.glyU-tRNA + 54 EF-Tu.GTP.hisR-tRNA + 270 EF-Tu.GTP.ile1-tRNA + 342 EF-Tu.GTP.leu1-tRNA + 54 EF-Tu.GTP.leu2-tRNA + 216 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuW-tRNA + 54 EF-Tu.GTP.leuZ-tRNA + 288 EF-Tu.GTP.lys1-tRNA + 144 EF-Tu.GTP.met1-tRNA + 108 EF-Tu.GTP.phe1-tRNA + 126 EF-Tu.GTP.pro1-tRNA + 54 EF-Tu.GTP.pro2-tRNA + 36 EF-Tu.GTP.proL-tRNA + 162 EF-Tu.GTP.proM-tRNA + 36 EF-Tu.GTP.ser1-tRNA + 54 EF-Tu.GTP.ser2-tRNA + 54 EF-Tu.GTP.ser3-tRNA + 90 EF-Tu.GTP.serT-tRNA + 90 EF-Tu.GTP.serV-tRNA + 108 EF-Tu.GTP.thr1-tRNA + 90 EF-Tu.GTP.thr2-tRNA + 90 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 126 EF-Tu.GTP.trpT-tRNA + 72 EF-Tu.GTP.tyr1-tRNA + 54 EF-Tu.GTP.val1-tRNA + 180 EF-Tu.GTP.val2-tRNA + 198 EF-Tu.GTP.val3-tRNA + 28260 mg2 + 1 rib_ini_b3288_18 --> 1 rib_70_elo1_b3288_18_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724
tl_elo_b3288_18_rib2	Translation elongation 2 b3288 18 ribosome(s)	5634 h2o + 1 rib_70_elo1_b3288_18_cplx --> 5634 EF-G.GDP + 5634 EF-Tu.GDP + 504 ala1_tRNA + 72 ala2_tRNA + 252 arg1_tRNA + 18 argX_tRNA + 162 asn1_tRNA + 288 asp1_tRNA + 54 cysT_tRNA + 18 fmet_tRNA + 126 gln1_tRNA + 180 gln2_tRNA + 342 glu1_tRNA + 378 gly1_tRNA + 54 glyT_tRNA + 18 glyU_tRNA + 11268 h + 54 hisR_tRNA + 270 ile1_tRNA + 342 leu1_tRNA + 54 leu2_tRNA + 216 leuU_tRNA + 36 leuW_tRNA + 54 leuZ_tRNA + 288 lys1_tRNA + 144 met1_tRNA + 28260 mg2 + 108 phe1_tRNA + 11268 pi + 126 pro1_tRNA + 54 pro2_tRNA + 36 proL_tRNA + 162 proM_tRNA + 1 rib_70_elo2_b3288_18_cplx + 36 ser1_tRNA + 54 ser2_tRNA + 54 ser3_tRNA + 90 serT_tRNA + 90 serV_tRNA + 108 thr1_tRNA + 90 thr2_tRNA + 90 thr3_tRNA + 18 thrU_tRNA + 126 trpT_tRNA + 72 tyr1_tRNA + 54 val1_tRNA + 162 val2_tRNA + 198 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724

tl_elo_b3288_1_rib1	Translation elongation 1 b3288 1 ribosome(s)	314 EF-G.GTP + 28 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 16 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 19 EF-Tu.GTP.glu1-tRNA + 21 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 19 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 9 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 11 EF-Tu.GTP.val3-tRNA + 1570 mg2 + 1 rib_ini_b3288_1 --> 1 rib_70_elo1_b3288_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724
tl_elo_b3288_1_rib2	Translation elongation 2 b3288 1 ribosome(s)	313 h2o + 1 rib_70_elo1_b3288_1_cplx --> 313 EF-G.GDP + 313 EF-Tu.GDP + 28 ala1_tRNA + 4 ala2_tRNA + 14 arg1_tRNA + 1 argX_tRNA + 9 asn1_tRNA + 16 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 10 gln2_tRNA + 19 glu1_tRNA + 21 gly1_tRNA + 3 glyT_tRNA + 1 glyU_tRNA + 626 h + 3 hisR_tRNA + 15 ile1_tRNA + 19 leu1_tRNA + 3 leu2_tRNA + 12 leuU_tRNA + 2 leuW_tRNA + 3 leuZ_tRNA + 16 lys1_tRNA + 8 met1_tRNA + 1570 mg2 + 6 phe1_tRNA + 626 pi + 7 pro1_tRNA + 3 pro2_tRNA + 2 proL_tRNA + 9 proM_tRNA + 1 rib_70_elo2_b3288_1_cplx + 2 ser1_tRNA + 3 ser2_tRNA + 3 ser3_tRNA + 5 serT_tRNA + 5 serV_tRNA + 6 thr1_tRNA + 5 thr2_tRNA + 5 thr3_tRNA + 1 thrU_tRNA + 7 trpT_tRNA + 4 tyr1_tRNA + 3 val1_tRNA + 9 val2_tRNA + 11 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724
tl_elo_b3288_9_rib1	Translation elongation 1 b3288 9 ribosome(s)	2826 EF-G.GTP + 252 EF-Tu.GTP.ala1-tRNA + 36 EF-Tu.GTP.ala2-tRNA + 126 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argX-tRNA + 81 EF-Tu.GTP.asn1-tRNA + 144 EF-Tu.GTP.asp1-tRNA + 27 EF-Tu.GTP.cysT-tRNA + 63 EF-Tu.GTP.gln1-tRNA + 90 EF-Tu.GTP.gln2-tRNA + 171 EF-Tu.GTP.glu1-tRNA + 189 EF-Tu.GTP.gly1-tRNA + 27 EF-Tu.GTP.glyT-tRNA + 9 EF-Tu.GTP.glyU-tRNA + 27 EF-Tu.GTP.hisR-tRNA + 135 EF-Tu.GTP.ile1-tRNA + 171 EF-Tu.GTP.leu1-tRNA + 27 EF-Tu.GTP.leu2-tRNA + 108 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuW-tRNA + 27 EF-Tu.GTP.leuZ-tRNA + 144 EF-Tu.GTP.lys1-tRNA + 72 EF-Tu.GTP.met1-tRNA + 54 EF-Tu.GTP.phe1-tRNA + 63 EF-Tu.GTP.pro1-tRNA + 27 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proL-tRNA + 81 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 27 EF-Tu.GTP.ser2-tRNA + 27 EF-Tu.GTP.ser3-tRNA + 45 EF-Tu.GTP.serT-tRNA + 45 EF-Tu.GTP.serV-tRNA + 54 EF-Tu.GTP.thr1-tRNA + 45 EF-Tu.GTP.thr2-tRNA + 45 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 63 EF-Tu.GTP.trpT-tRNA + 36 EF-Tu.GTP.tyr1-tRNA + 27 EF-Tu.GTP.val1-tRNA + 90 EF-Tu.GTP.val2-tRNA + 99 EF-Tu.GTP.val3-tRNA + 14130 mg2 + 1 rib_ini_b3288_9 --> 1 rib_70_elo1_b3288_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724
tl_elo_b3288_9_rib2	Translation elongation 2 b3288 9 ribosome(s)	2817 h2o + 1 rib_70_elo1_b3288_9_cplx --> 2817 EF-G.GDP + 2817 EF-Tu.GDP + 252 ala1_tRNA + 36 ala2_tRNA + 126 arg1_tRNA + 9 argX_tRNA + 81 asn1_tRNA + 144 asp1_tRNA + 27 cysT_tRNA + 9 fmet_tRNA + 63 gln1_tRNA + 90 gln2_tRNA + 171 glu1_tRNA + 189 gly1_tRNA + 27 glyT_tRNA + 9 glyU_tRNA + 5634 h + 27 hisR_tRNA + 135 ile1_tRNA + 171 leu1_tRNA + 27 leu2_tRNA + 108 leuU_tRNA + 18 leuW_tRNA + 27 leuZ_tRNA + 144 lys1_tRNA + 72 met1_tRNA + 14130 mg2 + 54 phe1_tRNA + 5634 pi + 63 pro1_tRNA + 27 pro2_tRNA + 18 proL_tRNA + 81 proM_tRNA + 1 rib_70_elo2_b3288_9_cplx + 18 ser1_tRNA + 27 ser2_tRNA + 27 ser3_tRNA + 45 serT_tRNA + 45 serV_tRNA + 54 thr1_tRNA + 45 thr2_tRNA + 45 thr3_tRNA + 9 thrU_tRNA + 63 trpT_tRNA + 36 tyr1_tRNA + 27 val1_tRNA + 81 val2_tRNA + 99 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724
tl_elo_b3289_12_rib1	Translation elongation 1 b3289 12 ribosome(s)	5136 EF-G.GTP + 324 EF-Tu.GTP.ala1-tRNA + 156 EF-Tu.GTP.ala2-tRNA + 300 EF-Tu.GTP.arg1-tRNA + 24 EF-Tu.GTP.argX-tRNA + 144 EF-Tu.GTP.asn1-tRNA + 276 EF-Tu.GTP.asp1-tRNA + 84 EF-Tu.GTP.cysT-tRNA + 180 EF-Tu.GTP.gln1-tRNA + 240 EF-Tu.GTP.gln2-tRNA + 324 EF-Tu.GTP.glu1-tRNA + 252 EF-Tu.GTP.gly1-tRNA + 48 EF-Tu.GTP.glyT-tRNA + 24 EF-Tu.GTP.glyU-tRNA + 132 EF-Tu.GTP.hisR-tRNA + 228 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.ile2-tRNA + 168 EF-Tu.GTP.leu1-tRNA + 96 EF-Tu.GTP.leu2-tRNA + 180 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuW-tRNA + 156 EF-Tu.GTP.leuZ-tRNA + 276 EF-Tu.GTP.lys1-tRNA + 96 EF-Tu.GTP.met1-tRNA + 108 EF-Tu.GTP.phe1-tRNA + 108 EF-Tu.GTP.pro1-tRNA + 108 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proL-tRNA + 96 EF-Tu.GTP.proM-tRNA + 48 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 36 EF-Tu.GTP.serT-tRNA + 60 EF-Tu.GTP.serV-tRNA + 120 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 48 EF-Tu.GTP.thr3-tRNA + 48 EF-Tu.GTP.thrU-tRNA + 120 EF-Tu.GTP.trpT-tRNA + 120 EF-Tu.GTP.tyr1-tRNA + 96 EF-Tu.GTP.val1-tRNA + 48 EF-Tu.GTP.val2-tRNA + 132 EF-Tu.GTP.val3-tRNA + 25680 mg2 + 1 rib	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147
tl_elo_b3289_12_rib2	Translation elongation 2 b3289 12 ribosome(s)	5124 h2o + 1 rib_70_elo1_b3289_12_cplx --> 5124 EF-G.GDP + 5124 EF-Tu.GDP + 324 ala1_tRNA + 156 ala2_tRNA + 300 arg1_tRNA + 24 argX_tRNA + 144 asn1_tRNA + 276 asp1_tRNA + 84 cysT_tRNA + 12 fmet_tRNA + 180 gln1_tRNA + 240 gln2_tRNA + 324 glu1_tRNA + 252 gly1_tRNA + 48 glyT_tRNA + 24 glyU_tRNA + 10248 h + 132 hisR_tRNA + 228 ile1_tRNA + 12 ile2_tRNA + 168 leu1_tRNA + 96 leu2_tRNA + 180 leuU_tRNA + 36 leuW_tRNA + 156 leuZ_tRNA + 264 lys1_tRNA + 96 met1_tRNA + 25680 mg2 + 108 phe1_tRNA + 10248 pi + 108 pro1_tRNA + 108 pro2_tRNA + 12 proL_tRNA + 96 proM_tRNA + 1 rib_70_elo2_b3289_12_cplx + 48 ser1_tRNA + 36 ser2_tRNA + 24 ser3_tRNA + 36 serT_tRNA + 60 serV_tRNA + 120 thr1_tRNA + 12 thr2_tRNA + 48 thr3_tRNA + 48 thrU_tRNA + 120 trpT_tRNA + 120 tyr1_tRNA + 96 val1_tRNA + 48 val2_tRNA + 132 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147

tl_elo_b3289_1_rib1	Translation elongation 1 b3289 1 ribosome(s)	428 EF-G.GTP + 27 EF-Tu.GTP.ala1-tRNA + 13 EF-Tu.GTP.ala2-tRNA + 25 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 23 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 15 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 27 EF-Tu.GTP.glu1-tRNA + 21 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 19 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 14 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 15 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuW-tRNA + 13 EF-Tu.GTP.leuZ-tRNA + 23 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 8 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 11 EF-Tu.GTP.val3-tRNA + 2140 mg2 + 1 rib_ini_b3289_1 --> 1 rib_70_elo1_b3289_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147
tl_elo_b3289_1_rib2	Translation elongation 2 b3289 1 ribosome(s)	427 h2o + 1 rib_70_elo1_b3289_1_cplx --> 427 EF-G.GDP + 427 EF-Tu.GDP + 27 ala1_tRNA + 13 ala2_tRNA + 25 arg1_tRNA + 2 argX_tRNA + 12 asn1_tRNA + 23 asp1_tRNA + 7 cysT_tRNA + 1 fmet_tRNA + 15 gln1_tRNA + 20 gln2_tRNA + 27 glu1_tRNA + 21 gly1_tRNA + 4 glyT_tRNA + 2 glyU_tRNA + 854 h + 11 hisR_tRNA + 19 ile1_tRNA + 1 ile2_tRNA + 14 leu1_tRNA + 8 leu2_tRNA + 15 leuU_tRNA + 3 leuW_tRNA + 13 leuZ_tRNA + 22 lys1_tRNA + 8 met1_tRNA + 2140 mg2 + 9 phe1_tRNA + 854 pi + 9 pro1_tRNA + 9 pro2_tRNA + 1 proL_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b3289_1_cplx + 4 ser1_tRNA + 3 ser2_tRNA + 2 ser3_tRNA + 3 serT_tRNA + 5 serV_tRNA + 10 thr1_tRNA + 1 thr2_tRNA + 4 thr3_tRNA + 4 thrU_tRNA + 10 trpT_tRNA + 10 tyr1_tRNA + 8 val1_tRNA + 4 val2_tRNA + 11 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147
tl_elo_b3289_25_rib1	Translation elongation 1 b3289 25 ribosome(s)	10700 EF-G.GTP + 675 EF-Tu.GTP.ala1-tRNA + 325 EF-Tu.GTP.ala2-tRNA + 625 EF-Tu.GTP.arg1-tRNA + 50 EF-Tu.GTP.argX-tRNA + 300 EF-Tu.GTP.asn1-tRNA + 575 EF-Tu.GTP.asp1-tRNA + 175 EF-Tu.GTP.cysT-tRNA + 375 EF-Tu.GTP.gln1-tRNA + 500 EF-Tu.GTP.gln2-tRNA + 675 EF-Tu.GTP.glu1-tRNA + 525 EF-Tu.GTP.gly1-tRNA + 100 EF-Tu.GTP.glyT-tRNA + 50 EF-Tu.GTP.glyU-tRNA + 275 EF-Tu.GTP.hisR-tRNA + 475 EF-Tu.GTP.ile1-tRNA + 25 EF-Tu.GTP.ile2-tRNA + 350 EF-Tu.GTP.leu1-tRNA + 200 EF-Tu.GTP.leu2-tRNA + 375 EF-Tu.GTP.leuU-tRNA + 75 EF-Tu.GTP.leuW-tRNA + 325 EF-Tu.GTP.leuZ-tRNA + 575 EF-Tu.GTP.lys1-tRNA + 200 EF-Tu.GTP.met1-tRNA + 225 EF-Tu.GTP.phe1-tRNA + 225 EF-Tu.GTP.pro1-tRNA + 225 EF-Tu.GTP.pro2-tRNA + 25 EF-Tu.GTP.proL-tRNA + 200 EF-Tu.GTP.proM-tRNA + 100 EF-Tu.GTP.ser1-tRNA + 75 EF-Tu.GTP.ser2-tRNA + 50 EF-Tu.GTP.ser3-tRNA + 75 EF-Tu.GTP.serT-tRNA + 125 EF-Tu.GTP.serV-tRNA + 250 EF-Tu.GTP.thr1-tRNA + 25 EF-Tu.GTP.thr2-tRNA + 100 EF-Tu.GTP.thr3-tRNA + 100 EF-Tu.GTP.thrU-tRNA + 250 EF-Tu.GTP.trpT-tRNA + 250 EF-Tu.GTP.tyr1-tRNA + 200 EF-Tu.GTP.val1-tRNA + 100 EF-Tu.GTP.val2-tRNA + 275 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147
tl_elo_b3289_25_rib2	Translation elongation 2 b3289 25 ribosome(s)	10675 h2o + 1 rib_70_elo1_b3289_25_cplx --> 10675 EF-G.GDP + 10675 EF-Tu.GDP + 675 ala1_tRNA + 325 ala2_tRNA + 625 arg1_tRNA + 50 argX_tRNA + 300 asn1_tRNA + 575 asp1_tRNA + 175 cysT_tRNA + 25 fmet_tRNA + 375 gln1_tRNA + 500 gln2_tRNA + 675 glu1_tRNA + 525 gly1_tRNA + 100 glyT_tRNA + 50 glyU_tRNA + 21350 h + 275 hisR_tRNA + 475 ile1_tRNA + 25 ile2_tRNA + 350 leu1_tRNA + 200 leu2_tRNA + 375 leuU_tRNA + 75 leuW_tRNA + 325 leuZ_tRNA + 550 lys1_tRNA + 200 met1_tRNA + 53500 mg2 + 225 phe1_tRNA + 21350 pi + 225 pro1_tRNA + 225 pro2_tRNA + 25 proL_tRNA + 200 proM_tRNA + 1 rib_70_elo2_b3289_25_cplx + 100 ser1_tRNA + 75 ser2_tRNA + 50 ser3_tRNA + 75 serT_tRNA + 125 serV_tRNA + 250 thr1_tRNA + 25 thr2_tRNA + 100 thr3_tRNA + 100 thrU_tRNA + 250 trpT_tRNA + 250 tyr1_tRNA + 200 val1_tRNA + 100 val2_tRNA + 275 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147
tl_elo_b3294_1_rib1	Translation elongation 1 b3294 1 ribosome(s)	126 EF-G.GTP + 14 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 4 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 9 EF-Tu.GTP.glu1-tRNA + 7 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val3-tRNA + 630 mg2 + 1 rib_ini_b3294_1 --> 1 rib_70_elo1_b3294_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.08E+01	8.08E+01	0	8.24E+01	82.41571	0	3.12E+01	31.17567
tl_elo_b3294_1_rib2	Translation elongation 2 b3294 1 ribosome(s)	125 h2o + 1 rib_70_elo1_b3294_1_cplx --> 125 EF-G.GDP + 125 EF-Tu.GDP + 14 ala1_tRNA + 3 ala2_tRNA + 18 arg1_tRNA + 7 asn1_tRNA + 4 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 1 gln2_tRNA + 8 glu1_tRNA + 7 gly1_tRNA + 250 h + 3 hisR_tRNA + 6 ile1_tRNA + 10 leu1_tRNA + 1 leuU_tRNA + 8 lys1_tRNA + 3 met1_tRNA + 630 mg2 + 5 phe1_tRNA + 250 pi + 3 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b3294_1_cplx + 2 serT_tRNA + 5 serV_tRNA + 5 thr2_tRNA + 1 thr3_tRNA + 2 tyr1_tRNA + 2 val1_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.08E+01	8.08E+01	0	8.24E+01	82.41571	0	3.12E+01	31.17567
tl_elo_b3294_3_rib1	Translation elongation 1 b3294 3 ribosome(s)	378 EF-G.GTP + 42 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 54 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 27 EF-Tu.GTP.glu1-tRNA + 21 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 24 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.serT-tRNA + 15 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1890 mg2 + 1 rib_ini_b3294_3 --> 1 rib_70_elo1_b3294_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667

tl_elo_b3294_3_rib2	Translation elongation 2 b3294 3 ribosome(s)	375 h2o + 1 rib_70_elo1_b3294_3_cplx --> 375 EF-G.GDP + 375 EF-Tu.GDP + 42 ala1_tRNA + 9 ala2_tRNA + 54 arg1_tRNA + 21 asn1_tRNA + 12 asp1_tRNA + 3 cysT_tRNA + 3 fmet_tRNA + 3 gln1_tRNA + 3 gln2_tRNA + 24 glu1_tRNA + 21 gly1_tRNA + 750 h + 9 hisR_tRNA + 18 ile1_tRNA + 30 leu1_tRNA + 3 leuU_tRNA + 24 lys1_tRNA + 9 met1_tRNA + 1890 mg2 + 15 phe1_tRNA + 750 pi + 9 pro1_tRNA + 3 pro2_tRNA + 1 rib_70_elo2_b3294_3_cplx + 6 serT_tRNA + 15 serV_tRNA + 15 thr2_tRNA + 3 thr3_tRNA + 6 tyr1_tRNA + 6 val1_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3294_7_rib1	Translation elongation 1 b3294 7 ribosome(s)	882 EF-G.GTP + 98 EF-Tu.GTP.ala1-tRNA + 21 EF-Tu.GTP.ala2-tRNA + 126 EF-Tu.GTP.arg1-tRNA + 49 EF-Tu.GTP.asn1-tRNA + 28 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 63 EF-Tu.GTP.glu1-tRNA + 49 EF-Tu.GTP.gly1-tRNA + 21 EF-Tu.GTP.hisR-tRNA + 42 EF-Tu.GTP.ile1-tRNA + 70 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 56 EF-Tu.GTP.lys1-tRNA + 21 EF-Tu.GTP.met1-tRNA + 35 EF-Tu.GTP.phe1-tRNA + 21 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.serT-tRNA + 35 EF-Tu.GTP.serV-tRNA + 35 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.tyr1-tRNA + 14 EF-Tu.GTP.val1-tRNA + 28 EF-Tu.GTP.val3-tRNA + 4410 mg2 + 1 rib_ini_b3294_7 --> 1 rib_70_elo1_b3294_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_elo_b3294_7_rib2	Translation elongation 2 b3294 7 ribosome(s)	875 h2o + 1 rib_70_elo1_b3294_7_cplx --> 875 EF-G.GDP + 875 EF-Tu.GDP + 98 ala1_tRNA + 21 ala2_tRNA + 126 arg1_tRNA + 49 asn1_tRNA + 28 asp1_tRNA + 7 cysT_tRNA + 7 fmet_tRNA + 7 gln1_tRNA + 7 gln2_tRNA + 56 glu1_tRNA + 49 gly1_tRNA + 1750 h + 21 hisR_tRNA + 42 ile1_tRNA + 70 leu1_tRNA + 7 leuU_tRNA + 56 lys1_tRNA + 21 met1_tRNA + 4410 mg2 + 35 phe1_tRNA + 1750 pi + 21 pro1_tRNA + 7 pro2_tRNA + 1 rib_70_elo2_b3294_7_cplx + 14 serT_tRNA + 35 serV_tRNA + 35 thr2_tRNA + 7 thr3_tRNA + 14 tyr1_tRNA + 14 val1_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_elo_b3295_19_rib1	Translation elongation 1 b3295 19 ribosome(s)	6232 EF-G.GTP + 380 EF-Tu.GTP.ala1-tRNA + 57 EF-Tu.GTP.ala2-tRNA + 418 EF-Tu.GTP.arg1-tRNA + 19 EF-Tu.GTP.argU-tRNA + 171 EF-Tu.GTP.asn1-tRNA + 399 EF-Tu.GTP.asp1-tRNA + 76 EF-Tu.GTP.cysT-tRNA + 152 EF-Tu.GTP.gln1-tRNA + 38 EF-Tu.GTP.gln2-tRNA + 684 EF-Tu.GTP.glu1-tRNA + 342 EF-Tu.GTP.gly1-tRNA + 19 EF-Tu.GTP.glyT-tRNA + 19 EF-Tu.GTP.glyU-tRNA + 152 EF-Tu.GTP.hisR-tRNA + 456 EF-Tu.GTP.ile1-tRNA + 437 EF-Tu.GTP.leu1-tRNA + 38 EF-Tu.GTP.leu2-tRNA + 171 EF-Tu.GTP.leuU-tRNA + 38 EF-Tu.GTP.leuW-tRNA + 38 EF-Tu.GTP.leuZ-tRNA + 304 EF-Tu.GTP.lys1-tRNA + 76 EF-Tu.GTP.met1-tRNA + 76 EF-Tu.GTP.phe1-tRNA + 114 EF-Tu.GTP.pro1-tRNA + 133 EF-Tu.GTP.pro2-tRNA + 57 EF-Tu.GTP.proM-tRNA + 19 EF-Tu.GTP.ser1-tRNA + 133 EF-Tu.GTP.ser2-tRNA + 57 EF-Tu.GTP.ser3-tRNA + 19 EF-Tu.GTP.serT-tRNA + 95 EF-Tu.GTP.serV-tRNA + 209 EF-Tu.GTP.thr1-tRNA + 76 EF-Tu.GTP.thr2-tRNA + 38 EF-Tu.GTP.thr3-tRNA + 38 EF-Tu.GTP.thrU-tRNA + 19 EF-Tu.GTP.trpT-tRNA + 95 EF-Tu.GTP.tyr1-tRNA + 285 EF-Tu.GTP.val1-tRNA + 95 EF-Tu.GTP.val2-tRNA + 190 EF-Tu.GTP.val3-tRNA + 31160 mg2 + 1 rib_ini_b3295_19 --> 1 rib_70_elo1_b3295_19_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.08E+01	5.08E+01	0	6.85E+01	68.48818	0	1.08E+01	10.78084
tl_elo_b3295_19_rib2	Translation elongation 2 b3295 19 ribosome(s)	6213 h2o + 1 rib_70_elo1_b3295_19_cplx --> 6213 EF-G.GDP + 6213 EF-Tu.GDP + 380 ala1_tRNA + 57 ala2_tRNA + 418 arg1_tRNA + 19 argU_tRNA + 171 asn1_tRNA + 399 asp1_tRNA + 76 cysT_tRNA + 19 fmet_tRNA + 152 gln1_tRNA + 38 gln2_tRNA + 665 glu1_tRNA + 342 gly1_tRNA + 19 glyT_tRNA + 19 glyU_tRNA + 12426 h + 152 hisR_tRNA + 456 ile1_tRNA + 437 leu1_tRNA + 38 leu2_tRNA + 171 leuU_tRNA + 38 leuW_tRNA + 38 leuZ_tRNA + 304 lys1_tRNA + 76 met1_tRNA + 31160 mg2 + 76 phe1_tRNA + 12426 pi + 114 pro1_tRNA + 133 pro2_tRNA + 57 proM_tRNA + 1 rib_70_elo2_b3295_19_cplx + 19 ser1_tRNA + 133 ser2_tRNA + 57 ser3_tRNA + 19 serT_tRNA + 95 serV_tRNA + 209 thr1_tRNA + 76 thr2_tRNA + 38 thr3_tRNA + 38 thrU_tRNA + 19 trpT_tRNA + 95 tyr1_tRNA + 285 val1_tRNA + 95 val2_tRNA + 190 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.08E+01	5.08E+01	0	6.85E+01	68.48818	0	1.08E+01	10.78084
tl_elo_b3295_1_rib1	Translation elongation 1 b3295 1 ribosome(s)	328 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 22 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 21 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 36 EF-Tu.GTP.glu1-tRNA + 18 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 24 EF-Tu.GTP.ile1-tRNA + 23 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 1640 mg2 + 1 rib_ini_b3295_1 --> 1 rib_70_elo1_b3295_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.57E+01	6.57E+01	0	8.90E+01	89.02961	0	2.00E+01	20.002
tl_elo_b3295_1_rib2	Translation elongation 2 b3295 1 ribosome(s)	327 h2o + 1 rib_70_elo1_b3295_1_cplx --> 327 EF-G.GDP + 327 EF-Tu.GDP + 20 ala1_tRNA + 3 ala2_tRNA + 22 arg1_tRNA + 1 argU_tRNA + 9 asn1_tRNA + 21 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 2 gln2_tRNA + 35 glu1_tRNA + 18 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 654 h + 8 hisR_tRNA + 24 ile1_tRNA + 23 leu1_tRNA + 2 leu2_tRNA + 9 leuU_tRNA + 2 leuW_tRNA + 2 leuZ_tRNA + 16 lys1_tRNA + 4 met1_tRNA + 1640 mg2 + 4 phe1_tRNA + 654 pi + 6 pro1_tRNA + 7 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3295_1_cplx + 1 ser1_tRNA + 7 ser2_tRNA + 3 ser3_tRNA + 1 serT_tRNA + 5 serV_tRNA + 11 thr1_tRNA + 4 thr2_tRNA + 2 thr3_tRNA + 2 thrU_tRNA + 1 trpT_tRNA + 5 tyr1_tRNA + 15 val1_tRNA + 5 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.57E+01	6.57E+01	0	8.90E+01	89.02961	0	2.00E+01	20.002

tl_elo_b3295_9_rib1	Translation elongation 1 b3295 9 ribosome(s)	2952 EF-G.GTP + 180 EF-Tu.GTP.ala1-tRNA + 27 EF-Tu.GTP.ala2-tRNA + 198 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argU-tRNA + 81 EF-Tu.GTP.asn1-tRNA + 189 EF-Tu.GTP.asp1-tRNA + 36 EF-Tu.GTP.cysT-tRNA + 72 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 324 EF-Tu.GTP.glu1-tRNA + 162 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 9 EF-Tu.GTP.glyU-tRNA + 72 EF-Tu.GTP.hisR-tRNA + 216 EF-Tu.GTP.ile1-tRNA + 207 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.leu2-tRNA + 81 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuW-tRNA + 18 EF-Tu.GTP.leuZ-tRNA + 144 EF-Tu.GTP.lys1-tRNA + 36 EF-Tu.GTP.met1-tRNA + 36 EF-Tu.GTP.phe1-tRNA + 54 EF-Tu.GTP.pro1-tRNA + 63 EF-Tu.GTP.pro2-tRNA + 27 EF-Tu.GTP.proM-tRNA + 9 EF-Tu.GTP.ser1-tRNA + 63 EF-Tu.GTP.ser2-tRNA + 27 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serT-tRNA + 45 EF-Tu.GTP.serV-tRNA + 99 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 9 EF-Tu.GTP.trpT-tRNA + 45 EF-Tu.GTP.tyr1-tRNA + 135 EF-Tu.GTP.val1-tRNA + 45 EF-Tu.GTP.val2-tRNA + 90 EF-Tu.GTP.val3-tRNA + 14760 mg2 + 1 rib_ini_b3295_9 --> 1 rib_70_elo1_b3295_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.90E+01	5.90E+01	0	8.48E+01	84.82002	0	2.00E+01	20.002
tl_elo_b3295_9_rib2	Translation elongation 2 b3295 9 ribosome(s)	2943 h2o + 1 rib_70_elo1_b3295_9_cplx --> 2943 EF-G.GDP + 2943 EF-Tu.GDP + 180 ala1_tRNA + 27 ala2_tRNA + 198 arg1_tRNA + 9 argU_tRNA + 81 asn1_tRNA + 189 asp1_tRNA + 36 cysT_tRNA + 9 fmet_tRNA + 72 gln1_tRNA + 18 gln2_tRNA + 315 glu1_tRNA + 162 gly1_tRNA + 9 glyT_tRNA + 9 glyU_tRNA + 5886 h + 72 hisR_tRNA + 216 ile1_tRNA + 207 leu1_tRNA + 18 leu2_tRNA + 81 leuU_tRNA + 18 leuW_tRNA + 18 leuZ_tRNA + 144 lys1_tRNA + 36 met1_tRNA + 14760 mg2 + 36 phe1_tRNA + 5886 pi + 54 pro1_tRNA + 63 pro2_tRNA + 27 proM_tRNA + 1 rib_70_elo2_b3295_9_cplx + 9 ser1_tRNA + 63 ser2_tRNA + 27 ser3_tRNA + 9 serT_tRNA + 45 serV_tRNA + 99 thr1_tRNA + 36 thr2_tRNA + 18 thr3_tRNA + 18 thrU_tRNA + 9 trpT_tRNA + 45 tyr1_tRNA + 135 val1_tRNA + 45 val2_tRNA + 90 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.90E+01	5.90E+01	0	8.48E+01	84.82002	0	2.00E+01	20.002
tl_elo_b3296_12_rib1	Translation elongation 1 b3296 12 ribosome(s)	2460 EF-G.GTP + 192 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 252 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argU-tRNA + 96 EF-Tu.GTP.asn1-tRNA + 96 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 84 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 204 EF-Tu.GTP.glu1-tRNA + 180 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.hisR-tRNA + 96 EF-Tu.GTP.ile1-tRNA + 168 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 36 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 240 EF-Tu.GTP.lys1-tRNA + 36 EF-Tu.GTP.met1-tRNA + 48 EF-Tu.GTP.phe1-tRNA + 36 EF-Tu.GTP.pro1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 72 EF-Tu.GTP.ser2-tRNA + 48 EF-Tu.GTP.serV-tRNA + 48 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 96 EF-Tu.GTP.tyr1-tRNA + 72 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 108 EF-Tu.GTP.val3-tRNA + 12300 mg2 + 1 rib_ini_b3296_12 --> 1 rib_70_elo1_b3296_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.38E+00	9.38E+00	0	6.91E+00	6.906667	0	6.91E+00	6.906667
tl_elo_b3296_12_rib2	Translation elongation 2 b3296 12 ribosome(s)	2448 h2o + 1 rib_70_elo1_b3296_12_cplx --> 2448 EF-G.GDP + 2448 EF-Tu.GDP + 192 ala1_tRNA + 24 ala2_tRNA + 252 arg1_tRNA + 12 argU_tRNA + 96 asn1_tRNA + 96 asp1_tRNA + 12 cysT_tRNA + 12 fmet_tRNA + 84 gln1_tRNA + 24 gln2_tRNA + 204 glu1_tRNA + 180 gly1_tRNA + 4896 h + 36 hisR_tRNA + 96 ile1_tRNA + 168 leu1_tRNA + 36 leu2_tRNA + 36 leuU_tRNA + 12 leuZ_tRNA + 228 lys1_tRNA + 36 met1_tRNA + 12300 mg2 + 48 phe1_tRNA + 4896 pi + 36 pro1_tRNA + 24 pro2_tRNA + 12 proM_tRNA + 1 rib_70_elo2_b3296_12_cplx + 12 ser1_tRNA + 72 ser2_tRNA + 48 serV_tRNA + 48 thr1_tRNA + 12 thr2_tRNA + 12 thr3_tRNA + 12 trpT_tRNA + 96 tyr1_tRNA + 72 val1_tRNA + 12 val2_tRNA + 108 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.38E+00	9.38E+00	0	6.91E+00	6.906667	0	6.91E+00	6.906667
tl_elo_b3296_1_rib1	Translation elongation 1 b3296 1 ribosome(s)	205 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 21 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 17 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 1025 mg2 + 1 rib_ini_b3296_1 --> 1 rib_70_elo1_b3296_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	8.18E+01	81.79139	0	3.13E+01	31.33309
tl_elo_b3296_1_rib2	Translation elongation 2 b3296 1 ribosome(s)	204 h2o + 1 rib_70_elo1_b3296_1_cplx --> 204 EF-G.GDP + 204 EF-Tu.GDP + 16 ala1_tRNA + 2 ala2_tRNA + 21 arg1_tRNA + 1 argU_tRNA + 8 asn1_tRNA + 8 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 2 gln2_tRNA + 17 glu1_tRNA + 15 gly1_tRNA + 408 h + 3 hisR_tRNA + 8 ile1_tRNA + 14 leu1_tRNA + 3 leu2_tRNA + 3 leuU_tRNA + 1 leuZ_tRNA + 19 lys1_tRNA + 3 met1_tRNA + 1025 mg2 + 4 phe1_tRNA + 408 pi + 3 pro1_tRNA + 2 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3296_1_cplx + 1 ser1_tRNA + 6 ser2_tRNA + 4 serV_tRNA + 4 thr1_tRNA + 1 thr2_tRNA + 1 thr3_tRNA + 1 trpT_tRNA + 8 tyr1_tRNA + 6 val1_tRNA + 1 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	8.18E+01	81.79139	0	3.13E+01	31.33309

tl_elo_b3296_6_rib1	Translation elongation 1 b3296 6 ribosome(s)	1230 EF-G.GTP + 96 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 126 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argU-tRNA + 48 EF-Tu.GTP.asn1-tRNA + 48 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 42 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 102 EF-Tu.GTP.glu1-tRNA + 90 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 48 EF-Tu.GTP.ile1-tRNA + 84 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.leu2-tRNA + 18 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 120 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 48 EF-Tu.GTP.tyr1-tRNA + 36 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 54 EF-Tu.GTP.val3-tRNA + 6150 mg2 + 1 rib_ini_b3296_6 --> 1 rib_70_elo1_b3296_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3296_6_rib2	Translation elongation 2 b3296 6 ribosome(s)	1224 h2o + 1 rib_70_elo1_b3296_6_cplx --> 1224 EF-G.GDP + 1224 EF-Tu.GDP + 96 ala1_tRNA + 12 ala2_tRNA + 126 arg1_tRNA + 6 argU_tRNA + 48 asn1_tRNA + 48 asp1_tRNA + 6 cysT_tRNA + 6 fmet_tRNA + 42 gln1_tRNA + 12 gln2_tRNA + 102 glu1_tRNA + 90 gly1_tRNA + 2448 h + 18 hisR_tRNA + 48 ile1_tRNA + 84 leu1_tRNA + 18 leu2_tRNA + 18 leuU_tRNA + 6 leuZ_tRNA + 114 lys1_tRNA + 18 met1_tRNA + 6150 mg2 + 24 phe1_tRNA + 2448 pi + 18 pro1_tRNA + 12 pro2_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b3296_6_cplx + 6 ser1_tRNA + 36 ser2_tRNA + 24 serV_tRNA + 24 thr1_tRNA + 6 thr2_tRNA + 6 thr3_tRNA + 6 trpT_tRNA + 48 tyr1_tRNA + 36 val1_tRNA + 6 val2_tRNA + 54 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3297_1_rib1	Translation elongation 1 b3297 1 ribosome(s)	128 EF-G.GTP + 14 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 4 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 4 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 640 mg2 + 1 rib_ini_b3297_1 --> 1 rib_70_elo1_b3297_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.47E+01	8.47E+01	0	8.29E+01	82.88	0	3.56E+01	35.609
tl_elo_b3297_1_rib2	Translation elongation 2 b3297 1 ribosome(s)	127 h2o + 1 rib_70_elo1_b3297_1_cplx --> 127 EF-G.GDP + 127 EF-Tu.GDP + 14 ala1_tRNA + 3 ala2_tRNA + 13 arg1_tRNA + 1 argU_tRNA + 7 asn1_tRNA + 4 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 1 gln2_tRNA + 4 glu1_tRNA + 13 gly1_tRNA + 254 h + 3 hisR_tRNA + 9 ile1_tRNA + 2 leu1_tRNA + 1 leu2_tRNA + 9 lys1_tRNA + 1 met1_tRNA + 640 mg2 + 4 phe1_tRNA + 254 pi + 5 pro1_tRNA + 1 pro2_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3297_1_cplx + 2 ser1_tRNA + 4 ser2_tRNA + 1 thr1_tRNA + 7 thr2_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 1 tyr1_tRNA + 5 val1_tRNA + 1 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.47E+01	8.47E+01	0	8.29E+01	82.88	0	3.56E+01	35.609
tl_elo_b3297_3_rib1	Translation elongation 1 b3297 3 ribosome(s)	384 EF-G.GTP + 42 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 39 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argU-tRNA + 21 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 39 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 27 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 27 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 15 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 21 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 18 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 1920 mg2 + 1 rib_ini_b3297_3 --> 1 rib_70_elo1_b3297_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3297_3_rib2	Translation elongation 2 b3297 3 ribosome(s)	381 h2o + 1 rib_70_elo1_b3297_3_cplx --> 381 EF-G.GDP + 381 EF-Tu.GDP + 42 ala1_tRNA + 9 ala2_tRNA + 39 arg1_tRNA + 3 argU_tRNA + 21 asn1_tRNA + 12 asp1_tRNA + 6 cysT_tRNA + 3 fmet_tRNA + 6 gln1_tRNA + 3 gln2_tRNA + 12 glu1_tRNA + 39 gly1_tRNA + 762 h + 9 hisR_tRNA + 27 ile1_tRNA + 6 leu1_tRNA + 3 leu2_tRNA + 27 lys1_tRNA + 3 met1_tRNA + 1920 mg2 + 12 phe1_tRNA + 762 pi + 15 pro1_tRNA + 3 pro2_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b3297_3_cplx + 6 ser1_tRNA + 12 ser2_tRNA + 3 thr1_tRNA + 21 thr2_tRNA + 3 thrU_tRNA + 3 trpT_tRNA + 3 tyr1_tRNA + 15 val1_tRNA + 3 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3297_7_rib1	Translation elongation 1 b3297 7 ribosome(s)	896 EF-G.GTP + 98 EF-Tu.GTP.ala1-tRNA + 21 EF-Tu.GTP.ala2-tRNA + 91 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argU-tRNA + 49 EF-Tu.GTP.asn1-tRNA + 28 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.cysT-tRNA + 14 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 28 EF-Tu.GTP.glu1-tRNA + 91 EF-Tu.GTP.gly1-tRNA + 21 EF-Tu.GTP.hisR-tRNA + 63 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 63 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 28 EF-Tu.GTP.phe1-tRNA + 35 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proM-tRNA + 14 EF-Tu.GTP.ser1-tRNA + 28 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 49 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 42 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 21 EF-Tu.GTP.val3-tRNA + 4480 mg2 + 1 rib_ini_b3297_7 --> 1 rib_70_elo1_b3297_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_elo_b3297_7_rib2	Translation elongation 2 b3297 7 ribosome(s)	889 h2o + 1 rib_70_elo1_b3297_7_cplx --> 889 EF-G.GDP + 889 EF-Tu.GDP + 98 ala1_tRNA + 21 ala2_tRNA + 91 arg1_tRNA + 7 argU_tRNA + 49 asn1_tRNA + 28 asp1_tRNA + 14 cysT_tRNA + 7 fmet_tRNA + 14 gln1_tRNA + 7 gln2_tRNA + 28 glu1_tRNA + 91 gly1_tRNA + 1778 h + 21 hisR_tRNA + 63 ile1_tRNA + 14 leu1_tRNA + 7 leu2_tRNA + 63 lys1_tRNA + 7 met1_tRNA + 4480 mg2 + 28 phe1_tRNA + 1778 pi + 35 pro1_tRNA + 7 pro2_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b3297_7_cplx + 14 ser1_tRNA + 28 ser2_tRNA + 7 thr1_tRNA + 49 thr2_tRNA + 7 thrU_tRNA + 7 trpT_tRNA + 7 tyr1_tRNA + 35 val1_tRNA + 7 val2_tRNA + 21 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84

tl_elo_b3298_1_rib1	Translation elongation 1 b3298 1 ribosome(s)	117 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 1 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 1 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 585 mg2 + 1 rib_ini_b3298_1 --> 1 rib_70_elo1_b3298_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3298_1_rib2	Translation elongation 2 b3298 1 ribosome(s)	116 h2o + 1 rib_70_elo1_b3298_1_cplx --> 116 EF-G.GDP + 116 EF-Tu.GDP + 7 ala1_tRNA + 4 ala2_tRNA + 15 arg1_tRNA + 2 asn1_tRNA + 6 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 1 gln2_tRNA + 6 glu1_tRNA + 10 gly1_tRNA + 1 glyT_tRNA + 232 h + 3 hisR_tRNA + 11 ile1_tRNA + 1 ile2_tRNA + 5 leu1_tRNA + 1 leu2_tRNA + 2 leuU_tRNA + 1 leuZ_tRNA + 10 lys1_tRNA + 2 met1_tRNA + 585 mg2 + 1 phe1_tRNA + 232 pi + 3 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b3298_1_cplx + 2 ser2_tRNA + 1 ser3_tRNA + 3 serV_tRNA + 4 thr1_tRNA + 1 thr2_tRNA + 1 thr3_tRNA + 2 tyr1_tRNA + 1 val1_tRNA + 2 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3298_3_rib1	Translation elongation 1 b3298 3 ribosome(s)	351 EF-G.GTP + 21 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 45 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 30 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 33 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 33 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1755 mg2 + 1 rib_ini_b3298_3 --> 1 rib_70_elo1_b3298_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3298_3_rib2	Translation elongation 2 b3298 3 ribosome(s)	348 h2o + 1 rib_70_elo1_b3298_3_cplx --> 348 EF-G.GDP + 348 EF-Tu.GDP + 21 ala1_tRNA + 12 ala2_tRNA + 45 arg1_tRNA + 6 asn1_tRNA + 18 asp1_tRNA + 3 cysT_tRNA + 3 fmet_tRNA + 3 gln1_tRNA + 3 gln2_tRNA + 18 glu1_tRNA + 30 gly1_tRNA + 3 glyT_tRNA + 696 h + 9 hisR_tRNA + 33 ile1_tRNA + 3 ile2_tRNA + 15 leu1_tRNA + 3 leu2_tRNA + 6 leuU_tRNA + 3 leuZ_tRNA + 30 lys1_tRNA + 6 met1_tRNA + 1755 mg2 + 3 phe1_tRNA + 696 pi + 9 pro1_tRNA + 3 pro2_tRNA + 1 rib_70_elo2_b3298_3_cplx + 6 ser2_tRNA + 3 ser3_tRNA + 9 serV_tRNA + 12 thr1_tRNA + 3 thr2_tRNA + 3 thr3_tRNA + 6 tyr1_tRNA + 3 val1_tRNA + 6 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3298_6_rib1	Translation elongation 1 b3298 6 ribosome(s)	702 EF-G.GTP + 42 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 90 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 36 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 36 EF-Tu.GTP.glu1-tRNA + 60 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyT-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 66 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.ile2-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 66 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 24 EF-Tu.GTP.val3-tRNA + 3510 mg2 + 1 rib_ini_b3298_6 --> 1 rib_70_elo1_b3298_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3298_6_rib2	Translation elongation 2 b3298 6 ribosome(s)	696 h2o + 1 rib_70_elo1_b3298_6_cplx --> 696 EF-G.GDP + 696 EF-Tu.GDP + 42 ala1_tRNA + 24 ala2_tRNA + 90 arg1_tRNA + 12 asn1_tRNA + 36 asp1_tRNA + 6 cysT_tRNA + 6 fmet_tRNA + 6 gln1_tRNA + 6 gln2_tRNA + 36 glu1_tRNA + 60 gly1_tRNA + 6 glyT_tRNA + 1392 h + 18 hisR_tRNA + 66 ile1_tRNA + 6 ile2_tRNA + 30 leu1_tRNA + 6 leu2_tRNA + 12 leuU_tRNA + 6 leuZ_tRNA + 60 lys1_tRNA + 12 met1_tRNA + 3510 mg2 + 6 phe1_tRNA + 1392 pi + 18 pro1_tRNA + 6 pro2_tRNA + 1 rib_70_elo2_b3298_6_cplx + 12 ser2_tRNA + 6 ser3_tRNA + 18 serV_tRNA + 24 thr1_tRNA + 6 thr2_tRNA + 6 thr3_tRNA + 12 tyr1_tRNA + 6 val1_tRNA + 12 val2_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3299_1_rib1	Translation elongation 1 b3299 1 ribosome(s)	37 EF-G.GTP + 1 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 5 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.asn1-tRNA + 1 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 1 EF-Tu.GTP.glu1-tRNA + 2 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 3 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 185 mg2 + 1 rib_ini_b3299_1 --> 1 rib_70_elo1_b3299_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3299_1_rib2	Translation elongation 2 b3299 1 ribosome(s)	36 h2o + 1 rib_70_elo1_b3299_1_cplx --> 36 EF-G.GDP + 36 EF-Tu.GDP + 1 ala1_tRNA + 1 ala2_tRNA + 5 arg1_tRNA + 1 asn1_tRNA + 1 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 1 gln2_tRNA + 1 glu1_tRNA + 1 gly1_tRNA + 72 h + 1 hisR_tRNA + 3 ile1_tRNA + 1 leuZ_tRNA + 7 lys1_tRNA + 185 mg2 + 72 pi + 1 pro1_tRNA + 1 rib_70_elo2_b3299_1_cplx + 1 ser1_tRNA + 1 serV_tRNA + 1 val1_tRNA + 2 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88

tl_elo_b3299_2_rib1	Translation elongation 1 b3299 2 ribosome(s)	74 EF-G.GTP + 2 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 2 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 2 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 370 mg2 + 1 rib_ini_b3299_2 --> 1 rib_70_elo1_b3299_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3299_2_rib2	Translation elongation 2 b3299 2 ribosome(s)	72 h2o + 1 rib_70_elo1_b3299_2_cplx --> 72 EF-G.GDP + 72 EF-Tu.GDP + 2 ala1_tRNA + 2 ala2_tRNA + 10 arg1_tRNA + 2 asn1_tRNA + 2 asp1_tRNA + 6 cysT_tRNA + 2 fmet_tRNA + 2 gln1_tRNA + 2 gln2_tRNA + 2 glu1_tRNA + 2 gly1_tRNA + 144 h + 2 hisR_tRNA + 6 ile1_tRNA + 2 leuZ_tRNA + 14 lys1_tRNA + 370 mg2 + 144 pi + 2 pro1_tRNA + 1 rib_70_elo2_b3299_2_cplx + 2 ser1_tRNA + 2 serV_tRNA + 2 val1_tRNA + 4 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3300_13_rib1	Translation elongation 1 b3300 13 ribosome(s)	5746 EF-G.GTP + 455 EF-Tu.GTP.ala1-tRNA + 78 EF-Tu.GTP.ala2-tRNA + 260 EF-Tu.GTP.arg1-tRNA + 13 EF-Tu.GTP.argU-tRNA + 130 EF-Tu.GTP.asn1-tRNA + 91 EF-Tu.GTP.asp1-tRNA + 26 EF-Tu.GTP.cysT-tRNA + 117 EF-Tu.GTP.gln1-tRNA + 156 EF-Tu.GTP.gln2-tRNA + 182 EF-Tu.GTP.glu1-tRNA + 416 EF-Tu.GTP.gly1-tRNA + 65 EF-Tu.GTP.glyT-tRNA + 78 EF-Tu.GTP.glyU-tRNA + 52 EF-Tu.GTP.hisR-tRNA + 572 EF-Tu.GTP.ile1-tRNA + 13 EF-Tu.GTP.ile2-tRNA + 364 EF-Tu.GTP.leu1-tRNA + 91 EF-Tu.GTP.leu2-tRNA + 104 EF-Tu.GTP.leuU-tRNA + 65 EF-Tu.GTP.leuZ-tRNA + 221 EF-Tu.GTP.lys1-tRNA + 195 EF-Tu.GTP.met1-tRNA + 416 EF-Tu.GTP.phe1-tRNA + 182 EF-Tu.GTP.pro1-tRNA + 39 EF-Tu.GTP.pro2-tRNA + 39 EF-Tu.GTP.proM-tRNA + 39 EF-Tu.GTP.ser1-tRNA + 78 EF-Tu.GTP.ser2-tRNA + 52 EF-Tu.GTP.ser3-tRNA + 39 EF-Tu.GTP.serT-tRNA + 91 EF-Tu.GTP.serV-tRNA + 130 EF-Tu.GTP.thr1-tRNA + 65 EF-Tu.GTP.thr2-tRNA + 65 EF-Tu.GTP.thr3-tRNA + 65 EF-Tu.GTP.thrU-tRNA + 52 EF-Tu.GTP.trpT-tRNA + 195 EF-Tu.GTP.tyr1-tRNA + 273 EF-Tu.GTP.val1-tRNA + 52 EF-Tu.GTP.val2-tRNA + 130 EF-Tu.GTP.val3-tRNA + 28730 mg2 + 1 rib_ini_b3300_13 --> 1 rib_70_elo1_b3300_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_elo_b3300_13_rib2	Translation elongation 2 b3300 13 ribosome(s)	5733 h2o + 1 rib_70_elo1_b3300_13_cplx --> 5733 EF-G.GDP + 5733 EF-Tu.GDP + 455 ala1_tRNA + 78 ala2_tRNA + 247 arg1_tRNA + 13 argU_tRNA + 130 asn1_tRNA + 91 asp1_tRNA + 26 cysT_tRNA + 13 fmet_tRNA + 117 gln1_tRNA + 156 gln2_tRNA + 182 glu1_tRNA + 416 gly1_tRNA + 65 glyT_tRNA + 78 glyU_tRNA + 11466 h + 52 hisR_tRNA + 572 ile1_tRNA + 13 ile2_tRNA + 364 leu1_tRNA + 91 leu2_tRNA + 104 leuU_tRNA + 65 leuZ_tRNA + 221 lys1_tRNA + 195 met1_tRNA + 28730 mg2 + 416 phe1_tRNA + 11466 pi + 182 pro1_tRNA + 39 pro2_tRNA + 39 proM_tRNA + 1 rib_70_elo2_b3300_13_cplx + 39 ser1_tRNA + 78 ser2_tRNA + 52 ser3_tRNA + 39 serT_tRNA + 91 serV_tRNA + 130 thr1_tRNA + 65 thr2_tRNA + 65 thr3_tRNA + 65 thrU_tRNA + 52 trpT_tRNA + 195 tyr1_tRNA + 273 val1_tRNA + 52 val2_tRNA + 130 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_elo_b3300_1_rib1	Translation elongation 1 b3300 1 ribosome(s)	442 EF-G.GTP + 35 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 7 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 9 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 32 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 44 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 28 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 17 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 32 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 21 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 2210 mg2 + 1 rib_ini_b3300_1 --> 1 rib_70_elo1_b3300_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_elo_b3300_1_rib2	Translation elongation 2 b3300 1 ribosome(s)	441 h2o + 1 rib_70_elo1_b3300_1_cplx --> 441 EF-G.GDP + 441 EF-Tu.GDP + 35 ala1_tRNA + 6 ala2_tRNA + 19 arg1_tRNA + 1 argU_tRNA + 10 asn1_tRNA + 7 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 9 gln1_tRNA + 12 gln2_tRNA + 14 glu1_tRNA + 32 gly1_tRNA + 5 glyT_tRNA + 6 glyU_tRNA + 882 h + 4 hisR_tRNA + 44 ile1_tRNA + 1 ile2_tRNA + 28 leu1_tRNA + 7 leu2_tRNA + 8 leuU_tRNA + 5 leuZ_tRNA + 17 lys1_tRNA + 15 met1_tRNA + 2210 mg2 + 32 phe1_tRNA + 882 pi + 14 pro1_tRNA + 3 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3300_1_cplx + 3 ser1_tRNA + 6 ser2_tRNA + 4 ser3_tRNA + 3 serT_tRNA + 7 serV_tRNA + 10 thr1_tRNA + 5 thr2_tRNA + 5 thr3_tRNA + 5 thrU_tRNA + 4 trpT_tRNA + 15 tyr1_tRNA + 21 val1_tRNA + 4 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_elo_b3300_26_rib1	Translation elongation 1 b3300 26 ribosome(s)	11492 EF-G.GTP + 910 EF-Tu.GTP.ala1-tRNA + 156 EF-Tu.GTP.ala2-tRNA + 520 EF-Tu.GTP.arg1-tRNA + 26 EF-Tu.GTP.argU-tRNA + 260 EF-Tu.GTP.asn1-tRNA + 182 EF-Tu.GTP.asp1-tRNA + 52 EF-Tu.GTP.cysT-tRNA + 234 EF-Tu.GTP.gln1-tRNA + 312 EF-Tu.GTP.gln2-tRNA + 364 EF-Tu.GTP.glu1-tRNA + 832 EF-Tu.GTP.gly1-tRNA + 130 EF-Tu.GTP.glyT-tRNA + 156 EF-Tu.GTP.glyU-tRNA + 104 EF-Tu.GTP.hisR-tRNA + 1144 EF-Tu.GTP.ile1-tRNA + 26 EF-Tu.GTP.ile2-tRNA + 728 EF-Tu.GTP.leu1-tRNA + 182 EF-Tu.GTP.leu2-tRNA + 208 EF-Tu.GTP.leuU-tRNA + 130 EF-Tu.GTP.leuZ-tRNA + 442 EF-Tu.GTP.lys1-tRNA + 390 EF-Tu.GTP.met1-tRNA + 832 EF-Tu.GTP.phe1-tRNA + 364 EF-Tu.GTP.pro1-tRNA + 78 EF-Tu.GTP.pro2-tRNA + 78 EF-Tu.GTP.proM-tRNA + 78 EF-Tu.GTP.ser1-tRNA + 156 EF-Tu.GTP.ser2-tRNA + 104 EF-Tu.GTP.ser3-tRNA + 78 EF-Tu.GTP.serT-tRNA + 182 EF-Tu.GTP.serV-tRNA + 260 EF-Tu.GTP.thr1-tRNA + 130 EF-Tu.GTP.thr2-tRNA + 130 EF-Tu.GTP.thr3-tRNA + 130 EF-Tu.GTP.thrU-tRNA + 104 EF-Tu.GTP.trpT-tRNA + 390 EF-Tu.GTP.tyr1-tRNA + 546 EF-Tu.GTP.val1-tRNA + 104 EF-Tu.GTP.val2-tRNA + 260 EF-Tu.GTP.val3-tRNA + 57460 mg2 + 1 rib_ini_b3300_26 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306

tl_elo_b3300_26_rib2	Translation elongation 2 b3300 26 ribosome(s)	11466 h2o + 1 rib_70_elo1_b3300_26_cplx --> 11466 EF-G.GDP + 11466 EF-Tu.GDP + 910 ala1_tRNA + 156 ala2_tRNA + 494 arg1_tRNA + 26 argU_tRNA + 260 asn1_tRNA + 182 asp1_tRNA + 52 cysT_tRNA + 26 fmet_tRNA + 234 gln1_tRNA + 312 gln2_tRNA + 364 glu1_tRNA + 832 gly1_tRNA + 130 glyT_tRNA + 156 glyU_tRNA + 22932 h + 104 hisR_tRNA + 1144 ile1_tRNA + 26 ile2_tRNA + 728 leu1_tRNA + 182 leu2_tRNA + 208 leuU_tRNA + 130 leuZ_tRNA + 442 lys1_tRNA + 390 met1_tRNA + 57460 mg2 + 832 phe1_tRNA + 22932 pi + 364 pro1_tRNA + 78 pro2_tRNA + 78 proM_tRNA + 1 rib_70_elo2_b3300_26_cplx + 78 ser1_tRNA + 156 ser2_tRNA + 104 ser3_tRNA + 78 serT_tRNA + 182 serV_tRNA + 260 thr1_tRNA + 130 thr2_tRNA + 130 thr3_tRNA + 130 thrU_tRNA + 104 trpT_tRNA + 390 tyr1_tRNA + 546 val1_tRNA + 104 val2_tRNA + 260 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_elo_b3301_1_rib1	Translation elongation 1 b3301 1 ribosome(s)	143 EF-G.GTP + 13 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 2 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 9 EF-Tu.GTP.glu1-tRNA + 26 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val3-tRNA + 715 mg2 + 1 rib_ini_b3301_1 --> 1 rib_70_elo1_b3301_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.20E+01	4.20E+01	0	6.43E+01	64.27959	0	1.72E+01	17.22971
tl_elo_b3301_1_rib2	Translation elongation 2 b3301 1 ribosome(s)	142 h2o + 1 rib_70_elo1_b3301_1_cplx --> 142 EF-G.GDP + 142 EF-Tu.GDP + 13 ala1_tRNA + 2 ala2_tRNA + 14 arg1_tRNA + 3 asn1_tRNA + 2 asp1_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 8 glu1_tRNA + 26 gly1_tRNA + 284 h + 1 hisR_tRNA + 10 ile1_tRNA + 10 leu1_tRNA + 1 leuU_tRNA + 1 leuZ_tRNA + 13 lys1_tRNA + 1 met1_tRNA + 715 mg2 + 4 phe1_tRNA + 284 pi + 3 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b3301_1_cplx + 1 ser1_tRNA + 6 ser2_tRNA + 1 thr1_tRNA + 5 thr2_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 1 tyr1_tRNA + 7 val1_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.20E+01	4.20E+01	0	6.43E+01	64.27959	0	1.72E+01	17.22971
tl_elo_b3301_4_rib1	Translation elongation 1 b3301 4 ribosome(s)	572 EF-G.GTP + 52 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 56 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 36 EF-Tu.GTP.glu1-tRNA + 104 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 40 EF-Tu.GTP.ile1-tRNA + 40 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 52 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 28 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val3-tRNA + 2860 mg2 + 1 rib_ini_b3301_4 --> 1 rib_70_elo1_b3301_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3301_4_rib2	Translation elongation 2 b3301 4 ribosome(s)	568 h2o + 1 rib_70_elo1_b3301_4_cplx --> 568 EF-G.GDP + 568 EF-Tu.GDP + 52 ala1_tRNA + 8 ala2_tRNA + 56 arg1_tRNA + 12 asn1_tRNA + 8 asp1_tRNA + 4 fmet_tRNA + 12 gln1_tRNA + 32 glu1_tRNA + 104 gly1_tRNA + 1136 h + 4 hisR_tRNA + 40 ile1_tRNA + 40 leu1_tRNA + 4 leuU_tRNA + 4 leuZ_tRNA + 52 lys1_tRNA + 4 met1_tRNA + 2860 mg2 + 16 phe1_tRNA + 1136 pi + 12 pro1_tRNA + 4 pro2_tRNA + 1 rib_70_elo2_b3301_4_cplx + 4 ser1_tRNA + 24 ser2_tRNA + 4 thr1_tRNA + 20 thr2_tRNA + 8 thr3_tRNA + 4 thrU_tRNA + 4 tyr1_tRNA + 28 val1_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3301_8_rib1	Translation elongation 1 b3301 8 ribosome(s)	1144 EF-G.GTP + 104 EF-Tu.GTP.ala1-tRNA + 16 EF-Tu.GTP.ala2-tRNA + 112 EF-Tu.GTP.arg1-tRNA + 24 EF-Tu.GTP.asn1-tRNA + 16 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 72 EF-Tu.GTP.glu1-tRNA + 208 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 80 EF-Tu.GTP.ile1-tRNA + 80 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 104 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 32 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 48 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 40 EF-Tu.GTP.thr2-tRNA + 16 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 16 EF-Tu.GTP.val3-tRNA + 5720 mg2 + 1 rib_ini_b3301_8 --> 1 rib_70_elo1_b3301_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_elo_b3301_8_rib2	Translation elongation 2 b3301 8 ribosome(s)	1136 h2o + 1 rib_70_elo1_b3301_8_cplx --> 1136 EF-G.GDP + 1136 EF-Tu.GDP + 104 ala1_tRNA + 16 ala2_tRNA + 112 arg1_tRNA + 24 asn1_tRNA + 16 asp1_tRNA + 8 fmet_tRNA + 24 gln1_tRNA + 64 glu1_tRNA + 208 gly1_tRNA + 2272 h + 8 hisR_tRNA + 80 ile1_tRNA + 80 leu1_tRNA + 8 leuU_tRNA + 8 leuZ_tRNA + 104 lys1_tRNA + 8 met1_tRNA + 5720 mg2 + 32 phe1_tRNA + 2272 pi + 24 pro1_tRNA + 8 pro2_tRNA + 1 rib_70_elo2_b3301_8_cplx + 8 ser1_tRNA + 48 ser2_tRNA + 8 thr1_tRNA + 40 thr2_tRNA + 16 thr3_tRNA + 8 thrU_tRNA + 8 tyr1_tRNA + 56 val1_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_elo_b3302_1_rib1	Translation elongation 1 b3302 1 ribosome(s)	58 EF-G.GTP + 5 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.asn1-tRNA + 1 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 4 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 1 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val3-tRNA + 290 mg2 + 1 rib_ini_b3302_1 --> 1 rib_70_elo1_b3302_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.81E+01	9.81E+01	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3302_1_rib2	Translation elongation 2 b3302 1 ribosome(s)	57 h2o + 1 rib_70_elo1_b3302_1_cplx --> 57 EF-G.GDP + 57 EF-Tu.GDP + 5 ala1_tRNA + 6 arg1_tRNA + 1 asn1_tRNA + 1 asp1_tRNA + 1 fmet_tRNA + 1 gln2_tRNA + 3 glu1_tRNA + 5 gly1_tRNA + 114 h + 2 hisR_tRNA + 6 ile1_tRNA + 4 leu1_tRNA + 1 leuU_tRNA + 5 lys1_tRNA + 2 met1_tRNA + 290 mg2 + 1 phe1_tRNA + 114 pi + 1 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b3302_1_cplx + 1 ser1_tRNA + 1 serV_tRNA + 2 thr1_tRNA + 3 thr2_tRNA + 1 thr3_tRNA + 1 val1_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.81E+01	9.81E+01	0	8.29E+01	82.88	0	8.29E+01	82.88

tl_elo_b3302_3_rib1	Translation elongation 1 b3302 3 ribosome(s)	174 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 15 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val3-tRNA + 870 mg2 + 1 rib_ini_b3302_3 --> 1 rib_70_elo1_b3302_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3302_3_rib2	Translation elongation 2 b3302 3 ribosome(s)	171 h2o + 1 rib_70_elo1_b3302_3_cplx --> 171 EF-G.GDP + 171 EF-Tu.GDP + 15 ala1_tRNA + 18 arg1_tRNA + 3 asn1_tRNA + 3 asp1_tRNA + 3 fmet_tRNA + 3 gln2_tRNA + 9 glu1_tRNA + 15 gly1_tRNA + 342 h + 6 hisR_tRNA + 18 ile1_tRNA + 12 leu1_tRNA + 3 leuU_tRNA + 15 lys1_tRNA + 6 met1_tRNA + 870 mg2 + 3 phe1_tRNA + 342 pi + 3 pro1_tRNA + 3 pro2_tRNA + 1 rib_70_elo2_b3302_3_cplx + 3 ser1_tRNA + 3 serV_tRNA + 6 thr1_tRNA + 9 thr2_tRNA + 3 thr3_tRNA + 3 val1_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3303_1_rib1	Translation elongation 1 b3303 1 ribosome(s)	166 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 11 EF-Tu.GTP.asn1-tRNA + 2 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 11 EF-Tu.GTP.glu1-tRNA + 19 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 11 EF-Tu.GTP.val3-tRNA + 830 mg2 + 1 rib_ini_b3303_1 --> 1 rib_70_elo1_b3303_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	4.48E+01	4.48E+01	0	6.53E+01	65.2924	0	2.01E+01	20.06925
tl_elo_b3303_1_rib2	Translation elongation 2 b3303 1 ribosome(s)	165 h2o + 1 rib_70_elo1_b3303_1_cplx --> 165 EF-G.GDP + 165 EF-Tu.GDP + 15 ala1_tRNA + 5 ala2_tRNA + 10 arg1_tRNA + 11 asn1_tRNA + 2 asp1_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 2 gln2_tRNA + 11 glu1_tRNA + 19 gly1_tRNA + 2 glyU_tRNA + 330 h + 4 hisR_tRNA + 10 ile1_tRNA + 9 leu1_tRNA + 11 lys1_tRNA + 6 met1_tRNA + 830 mg2 + 4 phe1_tRNA + 330 pi + 2 pro1_tRNA + 1 pro2_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3303_1_cplx + 4 ser1_tRNA + 3 ser2_tRNA + 3 thr1_tRNA + 3 thr2_tRNA + 1 thr3_tRNA + 1 thrU_tRNA + 2 tyr1_tRNA + 5 val1_tRNA + 3 val2_tRNA + 11 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.48E+01	4.48E+01	0	6.53E+01	65.2924	0	2.01E+01	20.06925
tl_elo_b3303_4_rib1	Translation elongation 1 b3303 4 ribosome(s)	664 EF-G.GTP + 60 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 40 EF-Tu.GTP.arg1-tRNA + 44 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 44 EF-Tu.GTP.glu1-tRNA + 76 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 40 EF-Tu.GTP.ile1-tRNA + 36 EF-Tu.GTP.leu1-tRNA + 48 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 44 EF-Tu.GTP.val3-tRNA + 3320 mg2 + 1 rib_ini_b3303_4 --> 1 rib_70_elo1_b3303_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.74E+01	2.74E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3303_4_rib2	Translation elongation 2 b3303 4 ribosome(s)	660 h2o + 1 rib_70_elo1_b3303_4_cplx --> 660 EF-G.GDP + 660 EF-Tu.GDP + 60 ala1_tRNA + 20 ala2_tRNA + 40 arg1_tRNA + 44 asn1_tRNA + 8 asp1_tRNA + 4 fmet_tRNA + 12 gln1_tRNA + 8 gln2_tRNA + 44 glu1_tRNA + 76 gly1_tRNA + 8 glyU_tRNA + 1320 h + 16 hisR_tRNA + 40 ile1_tRNA + 36 leu1_tRNA + 44 lys1_tRNA + 24 met1_tRNA + 3320 mg2 + 16 phe1_tRNA + 1320 pi + 8 pro1_tRNA + 4 pro2_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b3303_4_cplx + 16 ser1_tRNA + 12 ser2_tRNA + 12 thr1_tRNA + 12 thr2_tRNA + 4 thr3_tRNA + 4 thrU_tRNA + 8 tyr1_tRNA + 20 val1_tRNA + 12 val2_tRNA + 44 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.74E+01	2.74E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3303_9_rib1	Translation elongation 1 b3303 9 ribosome(s)	1494 EF-G.GTP + 135 EF-Tu.GTP.ala1-tRNA + 45 EF-Tu.GTP.ala2-tRNA + 90 EF-Tu.GTP.arg1-tRNA + 99 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 27 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 99 EF-Tu.GTP.glu1-tRNA + 171 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyU-tRNA + 36 EF-Tu.GTP.hisR-tRNA + 90 EF-Tu.GTP.ile1-tRNA + 81 EF-Tu.GTP.leu1-tRNA + 108 EF-Tu.GTP.lys1-tRNA + 54 EF-Tu.GTP.met1-tRNA + 36 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proM-tRNA + 36 EF-Tu.GTP.ser1-tRNA + 27 EF-Tu.GTP.ser2-tRNA + 27 EF-Tu.GTP.thr1-tRNA + 27 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 45 EF-Tu.GTP.val1-tRNA + 27 EF-Tu.GTP.val2-tRNA + 99 EF-Tu.GTP.val3-tRNA + 7470 mg2 + 1 rib_ini_b3303_9 --> 1 rib_70_elo1_b3303_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.25E+01	1.25E+01	0	9.21E+00	9.208889	0	9.21E+00	9.208889
tl_elo_b3303_9_rib2	Translation elongation 2 b3303 9 ribosome(s)	1485 h2o + 1 rib_70_elo1_b3303_9_cplx --> 1485 EF-G.GDP + 1485 EF-Tu.GDP + 135 ala1_tRNA + 45 ala2_tRNA + 90 arg1_tRNA + 99 asn1_tRNA + 18 asp1_tRNA + 9 fmet_tRNA + 27 gln1_tRNA + 18 gln2_tRNA + 99 glu1_tRNA + 171 gly1_tRNA + 18 glyU_tRNA + 2970 h + 36 hisR_tRNA + 90 ile1_tRNA + 81 leu1_tRNA + 99 lys1_tRNA + 54 met1_tRNA + 7470 mg2 + 36 phe1_tRNA + 2970 pi + 18 pro1_tRNA + 9 pro2_tRNA + 18 proM_tRNA + 1 rib_70_elo2_b3303_9_cplx + 36 ser1_tRNA + 27 ser2_tRNA + 27 thr1_tRNA + 27 thr2_tRNA + 9 thr3_tRNA + 9 thrU_tRNA + 18 tyr1_tRNA + 45 val1_tRNA + 27 val2_tRNA + 99 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.25E+01	1.25E+01	0	9.21E+00	9.208889	0	9.21E+00	9.208889

tl_elo_b3304_1_rib1	Translation elongation 1 b3304 1 ribosome(s)	116 EF-G.GTP + 21 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 7 EF-Tu.GTP.glu1-tRNA + 7 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 5 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 1 EF-Tu.GTP.val3-tRNA + 580 mg2 + 1 rib_ini_b3304_1 --> 1 rib_70_elo1_b3304_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.34E+01	9.34E+01	0	8.29E+01	82.88	0	7.66E+01	76.646
tl_elo_b3304_1_rib2	Translation elongation 2 b3304 1 ribosome(s)	115 h2o + 1 rib_70_elo1_b3304_1_cplx --> 115 EF-G.GDP + 115 EF-Tu.GDP + 21 ala1_tRNA + 1 ala2_tRNA + 13 arg1_tRNA + 2 asn1_tRNA + 5 asp1_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 2 gln2_tRNA + 7 glu1_tRNA + 7 gly1_tRNA + 1 glyU_tRNA + 230 h + 3 hisR_tRNA + 5 ile1_tRNA + 6 leu1_tRNA + 2 leuU_tRNA + 9 lys1_tRNA + 580 mg2 + 2 phe1_tRNA + 230 pi + 2 pro1_tRNA + 1 rib_70_elo2_b3304_1_cplx + 2 ser1_tRNA + 3 ser2_tRNA + 3 thr1_tRNA + 2 thr2_tRNA + 3 tyr1_tRNA + 7 val1_tRNA + 2 val2_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.34E+01	9.34E+01	0	8.29E+01	82.88	0	7.66E+01	76.646
tl_elo_b3304_3_rib1	Translation elongation 1 b3304 3 ribosome(s)	348 EF-G.GTP + 63 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 39 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 21 EF-Tu.GTP.glu1-tRNA + 21 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 27 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 21 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 1740 mg2 + 1 rib_ini_b3304_3 --> 1 rib_70_elo1_b3304_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3304_3_rib2	Translation elongation 2 b3304 3 ribosome(s)	345 h2o + 1 rib_70_elo1_b3304_3_cplx --> 345 EF-G.GDP + 345 EF-Tu.GDP + 63 ala1_tRNA + 3 ala2_tRNA + 39 arg1_tRNA + 6 asn1_tRNA + 15 asp1_tRNA + 3 fmet_tRNA + 12 gln1_tRNA + 6 gln2_tRNA + 21 glu1_tRNA + 21 gly1_tRNA + 3 glyU_tRNA + 690 h + 9 hisR_tRNA + 15 ile1_tRNA + 18 leu1_tRNA + 6 leuU_tRNA + 27 lys1_tRNA + 1740 mg2 + 6 phe1_tRNA + 690 pi + 6 pro1_tRNA + 1 rib_70_elo2_b3304_3_cplx + 6 ser1_tRNA + 9 ser2_tRNA + 9 thr1_tRNA + 6 thr2_tRNA + 9 tyr1_tRNA + 21 val1_tRNA + 6 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3304_6_rib1	Translation elongation 1 b3304 6 ribosome(s)	696 EF-G.GTP + 126 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 78 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 30 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 42 EF-Tu.GTP.glu1-tRNA + 42 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 30 EF-Tu.GTP.ile1-tRNA + 36 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 54 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 42 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 3480 mg2 + 1 rib_ini_b3304_6 --> 1 rib_70_elo1_b3304_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3304_6_rib2	Translation elongation 2 b3304 6 ribosome(s)	690 h2o + 1 rib_70_elo1_b3304_6_cplx --> 690 EF-G.GDP + 690 EF-Tu.GDP + 126 ala1_tRNA + 6 ala2_tRNA + 78 arg1_tRNA + 12 asn1_tRNA + 30 asp1_tRNA + 6 fmet_tRNA + 24 gln1_tRNA + 12 gln2_tRNA + 42 glu1_tRNA + 42 gly1_tRNA + 6 glyU_tRNA + 1380 h + 18 hisR_tRNA + 30 ile1_tRNA + 36 leu1_tRNA + 12 leuU_tRNA + 54 lys1_tRNA + 3480 mg2 + 12 phe1_tRNA + 1380 pi + 12 pro1_tRNA + 1 rib_70_elo2_b3304_6_cplx + 12 ser1_tRNA + 18 ser2_tRNA + 18 thr1_tRNA + 12 thr2_tRNA + 18 tyr1_tRNA + 42 val1_tRNA + 12 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3305_10_rib1	Translation elongation 1 b3305 10 ribosome(s)	1760 EF-G.GTP + 160 EF-Tu.GTP.ala1-tRNA + 40 EF-Tu.GTP.ala2-tRNA + 100 EF-Tu.GTP.arg1-tRNA + 70 EF-Tu.GTP.asn1-tRNA + 90 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.cysT-tRNA + 70 EF-Tu.GTP.gln1-tRNA + 80 EF-Tu.GTP.glu1-tRNA + 190 EF-Tu.GTP.gly1-tRNA + 30 EF-Tu.GTP.hisR-tRNA + 80 EF-Tu.GTP.ile1-tRNA + 110 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 160 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 30 EF-Tu.GTP.phe1-tRNA + 30 EF-Tu.GTP.pro1-tRNA + 50 EF-Tu.GTP.pro2-tRNA + 30 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.serT-tRNA + 50 EF-Tu.GTP.thr1-tRNA + 60 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 50 EF-Tu.GTP.tyr1-tRNA + 60 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 140 EF-Tu.GTP.val3-tRNA + 8800 mg2 + 1 rib_ini_b3305_10 --> 1 rib_70_elo1_b3305_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_elo_b3305_10_rib2	Translation elongation 2 b3305 10 ribosome(s)	1750 h2o + 1 rib_70_elo1_b3305_10_cplx --> 1750 EF-G.GDP + 1750 EF-Tu.GDP + 160 ala1_tRNA + 40 ala2_tRNA + 100 arg1_tRNA + 70 asn1_tRNA + 90 asp1_tRNA + 10 cysT_tRNA + 10 fmet_tRNA + 70 gln1_tRNA + 80 glu1_tRNA + 190 gly1_tRNA + 3500 h + 30 hisR_tRNA + 80 ile1_tRNA + 110 leu1_tRNA + 10 leuU_tRNA + 150 lys1_tRNA + 10 met1_tRNA + 8800 mg2 + 30 phe1_tRNA + 3500 pi + 30 pro1_tRNA + 50 pro2_tRNA + 1 rib_70_elo2_b3305_10_cplx + 30 ser2_tRNA + 10 serT_tRNA + 50 thr1_tRNA + 60 thr2_tRNA + 10 thr3_tRNA + 10 trpT_tRNA + 50 tyr1_tRNA + 60 val1_tRNA + 20 val2_tRNA + 140 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_elo_b3305_1_rib1	Translation elongation 1 b3305 1 ribosome(s)	176 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 19 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 14 EF-Tu.GTP.val3-tRNA + 880 mg2 + 1 rib_ini_b3305_1 --> 1 rib_70_elo1_b3305_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.48E+01	4.48E+01	0	6.51E+01	65.07918	0	2.01E+01	20.14445

tl_elo_b3305_1_rib2	Translation elongation 2 b3305 1 ribosome(s)	175 h2o + 1 rib_70_elo1_b3305_1_cplx --> 175 EF-G.GDP + 175 EF-Tu.GDP + 16 ala1_tRNA + 4 ala2_tRNA + 10 arg1_tRNA + 7 asn1_tRNA + 9 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 8 glu1_tRNA + 19 gly1_tRNA + 350 h + 3 hisR_tRNA + 8 ile1_tRNA + 11 leu1_tRNA + 1 leuU_tRNA + 15 lys1_tRNA + 1 met1_tRNA + 880 mg2 + 3 phe1_tRNA + 350 pi + 3 pro1_tRNA + 5 pro2_tRNA + 1 rib_70_elo2_b3305_1_cplx + 3 ser2_tRNA + 1 serT_tRNA + 5 thr1_tRNA + 6 thr2_tRNA + 1 thr3_tRNA + 1 trpT_tRNA + 5 tyr1_tRNA + 6 val1_tRNA + 2 val2_tRNA + 14 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.48E+01	4.48E+01	0	6.51E+01	65.07918	0	2.01E+01	20.14445
tl_elo_b3305_5_rib1	Translation elongation 1 b3305 5 ribosome(s)	880 EF-G.GTP + 80 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 50 EF-Tu.GTP.arg1-tRNA + 35 EF-Tu.GTP.asn1-tRNA + 45 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 35 EF-Tu.GTP.gln1-tRNA + 40 EF-Tu.GTP.glu1-tRNA + 95 EF-Tu.GTP.gly1-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 40 EF-Tu.GTP.ile1-tRNA + 55 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 80 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 15 EF-Tu.GTP.pro1-tRNA + 25 EF-Tu.GTP.pro2-tRNA + 15 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serT-tRNA + 25 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 25 EF-Tu.GTP.tyr1-tRNA + 30 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 70 EF-Tu.GTP.val3-tRNA + 4400 mg2 + 1 rib_ini_b3305_5 --> 1 rib_70_elo1_b3305_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3305_5_rib2	Translation elongation 2 b3305 5 ribosome(s)	875 h2o + 1 rib_70_elo1_b3305_5_cplx --> 875 EF-G.GDP + 875 EF-Tu.GDP + 80 ala1_tRNA + 20 ala2_tRNA + 50 arg1_tRNA + 35 asn1_tRNA + 45 asp1_tRNA + 5 cysT_tRNA + 5 fmet_tRNA + 35 gln1_tRNA + 40 glu1_tRNA + 95 gly1_tRNA + 1750 h + 15 hisR_tRNA + 40 ile1_tRNA + 55 leu1_tRNA + 5 leuU_tRNA + 75 lys1_tRNA + 5 met1_tRNA + 4400 mg2 + 15 phe1_tRNA + 1750 pi + 15 pro1_tRNA + 25 pro2_tRNA + 1 rib_70_elo2_b3305_5_cplx + 15 ser2_tRNA + 5 serT_tRNA + 25 thr1_tRNA + 30 thr2_tRNA + 5 thr3_tRNA + 5 trpT_tRNA + 25 tyr1_tRNA + 30 val1_tRNA + 10 val2_tRNA + 70 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3306_1_rib1	Translation elongation 1 b3306 1 ribosome(s)	129 EF-G.GTP + 11 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 9 EF-Tu.GTP.glu1-tRNA + 11 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 645 mg2 + 1 rib_ini_b3306_1 --> 1 rib_70_elo1_b3306_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3306_1_rib2	Translation elongation 2 b3306 1 ribosome(s)	128 h2o + 1 rib_70_elo1_b3306_1_cplx --> 128 EF-G.GDP + 128 EF-Tu.GDP + 11 ala1_tRNA + 2 ala2_tRNA + 8 arg1_tRNA + 3 asn1_tRNA + 6 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 1 gln2_tRNA + 9 glu1_tRNA + 11 gly1_tRNA + 256 h + 9 ile1_tRNA + 8 leu1_tRNA + 2 leuU_tRNA + 12 lys1_tRNA + 5 met1_tRNA + 645 mg2 + 3 phe1_tRNA + 256 pi + 2 pro1_tRNA + 2 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3306_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 3 serV_tRNA + 4 thr1_tRNA + 2 thr2_tRNA + 3 tyr1_tRNA + 4 val1_tRNA + 2 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3306_3_rib1	Translation elongation 1 b3306 3 ribosome(s)	387 EF-G.GTP + 33 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 27 EF-Tu.GTP.glu1-tRNA + 33 EF-Tu.GTP.gly1-tRNA + 27 EF-Tu.GTP.ile1-tRNA + 24 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 9 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 18 EF-Tu.GTP.val3-tRNA + 1935 mg2 + 1 rib_ini_b3306_3 --> 1 rib_70_elo1_b3306_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3306_3_rib2	Translation elongation 2 b3306 3 ribosome(s)	384 h2o + 1 rib_70_elo1_b3306_3_cplx --> 384 EF-G.GDP + 384 EF-Tu.GDP + 33 ala1_tRNA + 6 ala2_tRNA + 24 arg1_tRNA + 9 asn1_tRNA + 18 asp1_tRNA + 3 cysT_tRNA + 3 fmet_tRNA + 12 gln1_tRNA + 3 gln2_tRNA + 27 glu1_tRNA + 33 gly1_tRNA + 768 h + 27 ile1_tRNA + 24 leu1_tRNA + 6 leuU_tRNA + 36 lys1_tRNA + 15 met1_tRNA + 1935 mg2 + 9 phe1_tRNA + 768 pi + 6 pro1_tRNA + 6 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3306_3_cplx + 6 ser1_tRNA + 6 ser2_tRNA + 9 serV_tRNA + 12 thr1_tRNA + 6 thr2_tRNA + 9 tyr1_tRNA + 12 val1_tRNA + 6 val2_tRNA + 18 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3306_7_rib1	Translation elongation 1 b3306 7 ribosome(s)	903 EF-G.GTP + 77 EF-Tu.GTP.ala1-tRNA + 21 EF-Tu.GTP.ala2-tRNA + 56 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.asn1-tRNA + 42 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 28 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 63 EF-Tu.GTP.glu1-tRNA + 77 EF-Tu.GTP.gly1-tRNA + 63 EF-Tu.GTP.ile1-tRNA + 56 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leuU-tRNA + 84 EF-Tu.GTP.lys1-tRNA + 35 EF-Tu.GTP.met1-tRNA + 21 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proM-tRNA + 14 EF-Tu.GTP.ser1-tRNA + 14 EF-Tu.GTP.ser2-tRNA + 21 EF-Tu.GTP.serV-tRNA + 28 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 21 EF-Tu.GTP.tyr1-tRNA + 28 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 42 EF-Tu.GTP.val3-tRNA + 4515 mg2 + 1 rib_ini_b3306_7 --> 1 rib_70_elo1_b3306_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84

tl_elo_b3306_7_rib2	Translation elongation 2 b3306 7 ribosome(s)	896 h2o + 1 rib_70_elo1_b3306_7_cplx --> 896 EF-Tu.GDP + 77 ala1_tRNA + 14 ala2_tRNA + 56 arg1_tRNA + 21 asn1_tRNA + 42 asp1_tRNA + 7 cysT_tRNA + 7 fmet_tRNA + 28 gln1_tRNA + 7 gln2_tRNA + 63 glu1_tRNA + 77 gly1_tRNA + 1792 h + 63 ile1_tRNA + 56 leu1_tRNA + 14 leuU_tRNA + 84 lys1_tRNA + 35 met1_tRNA + 4515 mg2 + 21 phe1_tRNA + 1792 pi + 14 pro1_tRNA + 14 pro2_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b3306_7_cplx + 14 ser1_tRNA + 14 ser2_tRNA + 21 serV_tRNA + 28 thr1_tRNA + 14 thr2_tRNA + 21 tyr1_tRNA + 28 val1_tRNA + 14 val2_tRNA + 42 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_elo_b3307_1_rib1	Translation elongation 1 b3307 1 ribosome(s)	100 EF-G.GTP + 11 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 13 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 5 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 1 EF-Tu.GTP.val3-tRNA + 500 mg2 + 1 rib_ini_b3307_1 --> 1 rib_70_elo1_b3307_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3307_1_rib2	Translation elongation 2 b3307 1 ribosome(s)	99 h2o + 1 rib_70_elo1_b3307_1_cplx --> 99 EF-G.GDP + 99 EF-Tu.GDP + 11 ala1_tRNA + 1 ala2_tRNA + 13 arg1_tRNA + 1 argX_tRNA + 3 asn1_tRNA + 5 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 2 gln2_tRNA + 5 glu1_tRNA + 4 gly1_tRNA + 1 glyU_tRNA + 198 h + 1 hisR_tRNA + 4 ile1_tRNA + 5 leu1_tRNA + 1 leu2_tRNA + 1 leuU_tRNA + 1 leuZ_tRNA + 11 lys1_tRNA + 2 met1_tRNA + 500 mg2 + 3 phe1_tRNA + 198 pi + 4 pro1_tRNA + 1 rib_70_elo2_b3307_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 1 serT_tRNA + 3 serV_tRNA + 1 thr2_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 1 tyr1_tRNA + 3 val1_tRNA + 1 val2_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3307_2_rib1	Translation elongation 1 b3307 2 ribosome(s)	200 EF-G.GTP + 22 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 26 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 10 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 22 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 1000 mg2 + 1 rib_ini_b3307_2 --> 1 rib_70_elo1_b3307_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3307_2_rib2	Translation elongation 2 b3307 2 ribosome(s)	198 h2o + 1 rib_70_elo1_b3307_2_cplx --> 198 EF-G.GDP + 198 EF-Tu.GDP + 22 ala1_tRNA + 2 ala2_tRNA + 26 arg1_tRNA + 2 argX_tRNA + 6 asn1_tRNA + 10 asp1_tRNA + 2 cysT_tRNA + 2 fmet_tRNA + 4 gln1_tRNA + 4 gln2_tRNA + 10 glu1_tRNA + 8 gly1_tRNA + 2 glyU_tRNA + 396 h + 2 hisR_tRNA + 8 ile1_tRNA + 10 leu1_tRNA + 2 leu2_tRNA + 2 leuU_tRNA + 2 leuZ_tRNA + 22 lys1_tRNA + 4 met1_tRNA + 1000 mg2 + 6 phe1_tRNA + 396 pi + 8 pro1_tRNA + 1 rib_70_elo2_b3307_2_cplx + 4 ser1_tRNA + 4 ser2_tRNA + 2 serT_tRNA + 6 serV_tRNA + 2 thr2_tRNA + 2 thrU_tRNA + 2 trpT_tRNA + 2 tyr1_tRNA + 6 val1_tRNA + 2 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3307_5_rib1	Translation elongation 1 b3307 5 ribosome(s)	500 EF-G.GTP + 55 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 65 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argX-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 25 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 25 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 25 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 55 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.ser1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serT-tRNA + 15 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 2500 mg2 + 1 rib_ini_b3307_5 --> 1 rib_70_elo1_b3307_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3307_5_rib2	Translation elongation 2 b3307 5 ribosome(s)	495 h2o + 1 rib_70_elo1_b3307_5_cplx --> 495 EF-G.GDP + 495 EF-Tu.GDP + 55 ala1_tRNA + 5 ala2_tRNA + 65 arg1_tRNA + 5 argX_tRNA + 15 asn1_tRNA + 25 asp1_tRNA + 5 cysT_tRNA + 5 fmet_tRNA + 10 gln1_tRNA + 10 gln2_tRNA + 25 glu1_tRNA + 20 gly1_tRNA + 5 glyU_tRNA + 990 h + 5 hisR_tRNA + 20 ile1_tRNA + 25 leu1_tRNA + 5 leu2_tRNA + 5 leuU_tRNA + 5 leuZ_tRNA + 55 lys1_tRNA + 10 met1_tRNA + 2500 mg2 + 15 phe1_tRNA + 990 pi + 20 pro1_tRNA + 1 rib_70_elo2_b3307_5_cplx + 10 ser1_tRNA + 10 ser2_tRNA + 5 serT_tRNA + 15 serV_tRNA + 5 thr2_tRNA + 5 thrU_tRNA + 5 trpT_tRNA + 5 tyr1_tRNA + 15 val1_tRNA + 5 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576

tl_elo_b3308_10_rib1	Translation elongation 1 b3308 10 ribosome(s)	1780 EF-G.GTP + 150 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 140 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argX-tRNA + 50 EF-Tu.GTP.asn1-tRNA + 130 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.cysT-tRNA + 20 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 110 EF-Tu.GTP.glu1-tRNA + 130 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 140 EF-Tu.GTP.ile1-tRNA + 110 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 160 EF-Tu.GTP.lys1-tRNA + 50 EF-Tu.GTP.met1-tRNA + 100 EF-Tu.GTP.phe1-tRNA + 30 EF-Tu.GTP.pro1-tRNA + 20 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proM-tRNA + 20 EF-Tu.GTP.ser1-tRNA + 40 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.serV-tRNA + 40 EF-Tu.GTP.thr1-tRNA + 50 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 60 EF-Tu.GTP.tyr1-tRNA + 30 EF-Tu.GTP.val1-tRNA + 50 EF-Tu.GTP.val2-tRNA + 40 EF-Tu.GTP.val3-tRNA + 8900 mg2 + 1 rib_ini_b3308_10 --> 1 rib_70_elo1_b3308_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_elo_b3308_10_rib2	Translation elongation 2 b3308 10 ribosome(s)	1770 h2o + 1 rib_70_elo1_b3308_10_cplx --> 1770 EF-G.GDP + 1770 EF-Tu.GDP + 150 ala1_tRNA + 10 ala2_tRNA + 140 arg1_tRNA + 10 argX_tRNA + 50 asn1_tRNA + 130 asp1_tRNA + 10 cysT_tRNA + 10 fmet_tRNA + 20 gln1_tRNA + 20 gln2_tRNA + 110 glu1_tRNA + 130 gly1_tRNA + 3540 h + 10 hisR_tRNA + 140 ile1_tRNA + 110 leu1_tRNA + 10 leu2_tRNA + 10 leuU_tRNA + 150 lys1_tRNA + 50 met1_tRNA + 8900 mg2 + 100 phe1_tRNA + 3540 pi + 30 pro1_tRNA + 20 pro2_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b3308_10_cplx + 20 ser1_tRNA + 40 ser2_tRNA + 10 serV_tRNA + 40 thr1_tRNA + 50 thr2_tRNA + 10 trpT_tRNA + 60 tyr1_tRNA + 30 val1_tRNA + 50 val2_tRNA + 40 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_elo_b3308_1_rib1	Translation elongation 1 b3308 1 ribosome(s)	178 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 13 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 11 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 14 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 890 mg2 + 1 rib_ini_b3308_1 --> 1 rib_70_elo1_b3308_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	7.43E+01	74.33847	0	3.96E+01	39.58889
tl_elo_b3308_1_rib2	Translation elongation 2 b3308 1 ribosome(s)	177 h2o + 1 rib_70_elo1_b3308_1_cplx --> 177 EF-G.GDP + 177 EF-Tu.GDP + 15 ala1_tRNA + 1 ala2_tRNA + 14 arg1_tRNA + 1 argX_tRNA + 5 asn1_tRNA + 13 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 2 gln2_tRNA + 11 glu1_tRNA + 13 gly1_tRNA + 354 h + 1 hisR_tRNA + 14 ile1_tRNA + 11 leu1_tRNA + 1 leu2_tRNA + 1 leuU_tRNA + 15 lys1_tRNA + 5 met1_tRNA + 890 mg2 + 10 phe1_tRNA + 354 pi + 3 pro1_tRNA + 2 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3308_1_cplx + 2 ser1_tRNA + 4 ser2_tRNA + 1 serV_tRNA + 4 thr1_tRNA + 5 thr2_tRNA + 1 trpT_tRNA + 6 tyr1_tRNA + 3 val1_tRNA + 5 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	7.43E+01	74.33847	0	3.96E+01	39.58889
tl_elo_b3308_5_rib1	Translation elongation 1 b3308 5 ribosome(s)	890 EF-G.GTP + 75 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 70 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argX-tRNA + 25 EF-Tu.GTP.asn1-tRNA + 65 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 55 EF-Tu.GTP.glu1-tRNA + 65 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 70 EF-Tu.GTP.ile1-tRNA + 55 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 80 EF-Tu.GTP.lys1-tRNA + 25 EF-Tu.GTP.met1-tRNA + 50 EF-Tu.GTP.phe1-tRNA + 15 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proM-tRNA + 10 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 25 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 25 EF-Tu.GTP.val2-tRNA + 20 EF-Tu.GTP.val3-tRNA + 4450 mg2 + 1 rib_ini_b3308_5 --> 1 rib_70_elo1_b3308_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3308_5_rib2	Translation elongation 2 b3308 5 ribosome(s)	885 h2o + 1 rib_70_elo1_b3308_5_cplx --> 885 EF-G.GDP + 885 EF-Tu.GDP + 75 ala1_tRNA + 5 ala2_tRNA + 70 arg1_tRNA + 5 argX_tRNA + 25 asn1_tRNA + 65 asp1_tRNA + 5 cysT_tRNA + 5 fmet_tRNA + 10 gln1_tRNA + 10 gln2_tRNA + 55 glu1_tRNA + 65 gly1_tRNA + 1770 h + 5 hisR_tRNA + 70 ile1_tRNA + 55 leu1_tRNA + 5 leu2_tRNA + 5 leuU_tRNA + 75 lys1_tRNA + 25 met1_tRNA + 4450 mg2 + 50 phe1_tRNA + 1770 pi + 15 pro1_tRNA + 10 pro2_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b3308_5_cplx + 10 ser1_tRNA + 20 ser2_tRNA + 5 serV_tRNA + 20 thr1_tRNA + 25 thr2_tRNA + 5 trpT_tRNA + 30 tyr1_tRNA + 15 val1_tRNA + 25 val2_tRNA + 20 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3309_1_rib1	Translation elongation 1 b3309 1 ribosome(s)	103 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 5 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 515 mg2 + 1 rib_ini_b3309_1 --> 1 rib_70_elo1_b3309_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3309_1_rib2	Translation elongation 2 b3309 1 ribosome(s)	102 h2o + 1 rib_70_elo1_b3309_1_cplx --> 102 EF-G.GDP + 102 EF-Tu.GDP + 7 ala1_tRNA + 2 ala2_tRNA + 5 arg1_tRNA + 1 argU_tRNA + 6 asn1_tRNA + 5 asp1_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 1 gln2_tRNA + 6 glu1_tRNA + 10 gly1_tRNA + 204 h + 1 hisR_tRNA + 8 ile1_tRNA + 3 leu1_tRNA + 1 leuZ_tRNA + 15 lys1_tRNA + 515 mg2 + 5 phe1_tRNA + 204 pi + 3 pro1_tRNA + 1 rib_70_elo2_b3309_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 1 serV_tRNA + 2 thr1_tRNA + 1 thr2_tRNA + 3 val1_tRNA + 3 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88

tl_elo_b3309_3_rib1	Translation elongation 1 b3309 3 ribosome(s)	309 EF-G.GTP + 21 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argU-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 30 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 24 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 48 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 21 EF-Tu.GTP.val3-tRNA + 1545 mg2 + 1 rib_ini_b3309_3 --> 1 rib_70_elo1_b3309_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3309_3_rib2	Translation elongation 2 b3309 3 ribosome(s)	306 h2o + 1 rib_70_elo1_b3309_3_cplx --> 306 EF-G.GDP + 306 EF-Tu.GDP + 21 ala1_tRNA + 6 ala2_tRNA + 15 arg1_tRNA + 3 argU_tRNA + 18 asn1_tRNA + 15 asp1_tRNA + 3 fmet_tRNA + 6 gln1_tRNA + 3 gln2_tRNA + 18 glu1_tRNA + 30 gly1_tRNA + 612 h + 3 hisR_tRNA + 24 ile1_tRNA + 9 leu1_tRNA + 3 leuZ_tRNA + 45 lys1_tRNA + 1545 mg2 + 15 phe1_tRNA + 612 pi + 9 pro1_tRNA + 1 rib_70_elo2_b3309_3_cplx + 6 ser1_tRNA + 6 ser2_tRNA + 3 serV_tRNA + 6 thr1_tRNA + 3 thr2_tRNA + 9 val1_tRNA + 9 val2_tRNA + 21 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3309_6_rib1	Translation elongation 1 b3309 6 ribosome(s)	618 EF-G.GTP + 42 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 30 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argU-tRNA + 36 EF-Tu.GTP.asn1-tRNA + 30 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 36 EF-Tu.GTP.glu1-tRNA + 60 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 48 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 96 EF-Tu.GTP.lys1-tRNA + 30 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 42 EF-Tu.GTP.val3-tRNA + 3090 mg2 + 1 rib_ini_b3309_6 --> 1 rib_70_elo1_b3309_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3309_6_rib2	Translation elongation 2 b3309 6 ribosome(s)	612 h2o + 1 rib_70_elo1_b3309_6_cplx --> 612 EF-G.GDP + 612 EF-Tu.GDP + 42 ala1_tRNA + 12 ala2_tRNA + 30 arg1_tRNA + 6 argU_tRNA + 36 asn1_tRNA + 30 asp1_tRNA + 6 fmet_tRNA + 12 gln1_tRNA + 6 gln2_tRNA + 36 glu1_tRNA + 60 gly1_tRNA + 1224 h + 6 hisR_tRNA + 48 ile1_tRNA + 18 leu1_tRNA + 6 leuZ_tRNA + 90 lys1_tRNA + 3090 mg2 + 30 phe1_tRNA + 1224 pi + 18 pro1_tRNA + 1 rib_70_elo2_b3309_6_cplx + 12 ser1_tRNA + 12 ser2_tRNA + 6 serV_tRNA + 12 thr1_tRNA + 6 thr2_tRNA + 18 val1_tRNA + 18 val2_tRNA + 42 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3310_1_rib1	Translation elongation 1 b3310 1 ribosome(s)	122 EF-G.GTP + 6 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 11 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 610 mg2 + 1 rib_ini_b3310_1 --> 1 rib_70_elo1_b3310_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	8.49E+01	8.49E+01	0	8.29E+01	82.88	0	6.06E+01	60.627
tl_elo_b3310_1_rib2	Translation elongation 2 b3310 1 ribosome(s)	121 h2o + 1 rib_70_elo1_b3310_1_cplx --> 121 EF-G.GDP + 121 EF-Tu.GDP + 6 ala1_tRNA + 1 ala2_tRNA + 12 arg1_tRNA + 6 asn1_tRNA + 5 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 1 gln2_tRNA + 6 glu1_tRNA + 11 gly1_tRNA + 1 glyU_tRNA + 242 h + 1 hisR_tRNA + 12 ile1_tRNA + 5 leu1_tRNA + 2 leuU_tRNA + 11 lys1_tRNA + 3 met1_tRNA + 610 mg2 + 3 phe1_tRNA + 242 pi + 3 pro1_tRNA + 1 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3310_1_cplx + 1 ser1_tRNA + 2 ser2_tRNA + 1 ser3_tRNA + 2 serV_tRNA + 2 thr1_tRNA + 2 thr2_tRNA + 1 thr3_tRNA + 1 tyr1_tRNA + 8 val1_tRNA + 3 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.49E+01	8.49E+01	0	8.29E+01	82.88	0	6.06E+01	60.627
tl_elo_b3310_3_rib1	Translation elongation 1 b3310 3 ribosome(s)	366 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 36 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 33 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 36 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 33 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 24 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 1830 mg2 + 1 rib_ini_b3310_3 --> 1 rib_70_elo1_b3310_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3310_3_rib2	Translation elongation 2 b3310 3 ribosome(s)	363 h2o + 1 rib_70_elo1_b3310_3_cplx --> 363 EF-G.GDP + 363 EF-Tu.GDP + 18 ala1_tRNA + 3 ala2_tRNA + 36 arg1_tRNA + 18 asn1_tRNA + 15 asp1_tRNA + 6 cysT_tRNA + 3 fmet_tRNA + 6 gln1_tRNA + 3 gln2_tRNA + 18 glu1_tRNA + 33 gly1_tRNA + 3 glyU_tRNA + 726 h + 3 hisR_tRNA + 36 ile1_tRNA + 15 leu1_tRNA + 6 leuU_tRNA + 33 lys1_tRNA + 9 met1_tRNA + 1830 mg2 + 9 phe1_tRNA + 726 pi + 9 pro1_tRNA + 3 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3310_3_cplx + 3 ser1_tRNA + 6 ser2_tRNA + 3 ser3_tRNA + 6 serV_tRNA + 6 thr1_tRNA + 6 thr2_tRNA + 3 thr3_tRNA + 3 tyr1_tRNA + 24 val1_tRNA + 9 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667

tl_elo_b3310_7_rib1	Translation elongation 1 b3310 7 ribosome(s)	854 EF-G.GTP + 42 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 84 EF-Tu.GTP.arg1-tRNA + 42 EF-Tu.GTP.asn1-tRNA + 35 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.cysT-tRNA + 14 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 42 EF-Tu.GTP.glu1-tRNA + 77 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 84 EF-Tu.GTP.ile1-tRNA + 35 EF-Tu.GTP.leu1-tRNA + 21 EF-Tu.GTP.leuU-tRNA + 77 EF-Tu.GTP.lys1-tRNA + 21 EF-Tu.GTP.met1-tRNA + 21 EF-Tu.GTP.phe1-tRNA + 21 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 14 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.ser3-tRNA + 14 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 21 EF-Tu.GTP.val2-tRNA + 21 EF-Tu.GTP.val3-tRNA + 4270 mg2 + 1 rib_ini_b3310_7 --> 1 rib_70_elo1_b3310_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_elo_b3310_7_rib2	Translation elongation 2 b3310 7 ribosome(s)	847 h2o + 1 rib_70_elo1_b3310_7_cplx --> 847 EF-G.GDP + 847 EF-Tu.GDP + 42 ala1_tRNA + 7 ala2_tRNA + 84 arg1_tRNA + 42 asn1_tRNA + 35 asp1_tRNA + 14 cysT_tRNA + 7 fmet_tRNA + 14 gln1_tRNA + 7 gln2_tRNA + 42 glu1_tRNA + 77 gly1_tRNA + 7 glyU_tRNA + 1694 h + 7 hisR_tRNA + 84 ile1_tRNA + 35 leu1_tRNA + 14 leuU_tRNA + 77 lys1_tRNA + 21 met1_tRNA + 4270 mg2 + 21 phe1_tRNA + 1694 pi + 21 pro1_tRNA + 7 pro2_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b3310_7_cplx + 7 ser1_tRNA + 14 ser2_tRNA + 7 ser3_tRNA + 14 serV_tRNA + 14 thr1_tRNA + 14 thr2_tRNA + 7 thr3_tRNA + 7 tyr1_tRNA + 56 val1_tRNA + 21 val2_tRNA + 21 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_elo_b3311_1_rib1	Translation elongation 1 b3311 1 ribosome(s)	83 EF-G.GTP + 2 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 4 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 7 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val3-tRNA + 415 mg2 + 1 rib_ini_b3311_1 --> 1 rib_70_elo1_b3311_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.74E+01	8.74E+01	0	8.29E+01	82.88	0	6.35E+01	63.472
tl_elo_b3311_1_rib2	Translation elongation 2 b3311 1 ribosome(s)	82 h2o + 1 rib_70_elo1_b3311_1_cplx --> 82 EF-G.GDP + 82 EF-Tu.GDP + 2 ala1_tRNA + 7 arg1_tRNA + 2 asn1_tRNA + 4 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 1 gln2_tRNA + 7 glu1_tRNA + 4 gly1_tRNA + 164 h + 3 hisR_tRNA + 7 ile1_tRNA + 4 leu1_tRNA + 10 lys1_tRNA + 1 met1_tRNA + 415 mg2 + 2 phe1_tRNA + 164 pi + 2 pro1_tRNA + 1 rib_70_elo2_b3311_1_cplx + 3 ser1_tRNA + 1 serV_tRNA + 2 thr1_tRNA + 2 thr2_tRNA + 2 thr3_tRNA + 1 trpT_tRNA + 1 tyr1_tRNA + 4 val1_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.74E+01	8.74E+01	0	8.29E+01	82.88	0	6.35E+01	63.472
tl_elo_b3311_2_rib1	Translation elongation 1 b3311 2 ribosome(s)	166 EF-G.GTP + 4 EF-Tu.GTP.ala1-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 14 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 16 EF-Tu.GTP.val3-tRNA + 830 mg2 + 1 rib_ini_b3311_2 --> 1 rib_70_elo1_b3311_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3311_2_rib2	Translation elongation 2 b3311 2 ribosome(s)	164 h2o + 1 rib_70_elo1_b3311_2_cplx --> 164 EF-G.GDP + 164 EF-Tu.GDP + 4 ala1_tRNA + 14 arg1_tRNA + 4 asn1_tRNA + 8 asp1_tRNA + 4 cysT_tRNA + 2 fmet_tRNA + 2 gln2_tRNA + 14 glu1_tRNA + 8 gly1_tRNA + 328 h + 6 hisR_tRNA + 14 ile1_tRNA + 8 leu1_tRNA + 20 lys1_tRNA + 2 met1_tRNA + 830 mg2 + 4 phe1_tRNA + 328 pi + 4 pro1_tRNA + 1 rib_70_elo2_b3311_2_cplx + 6 ser1_tRNA + 2 serV_tRNA + 4 thr1_tRNA + 4 thr2_tRNA + 4 thr3_tRNA + 2 trpT_tRNA + 2 tyr1_tRNA + 8 val1_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3311_4_rib1	Translation elongation 1 b3311 4 ribosome(s)	332 EF-G.GTP + 8 EF-Tu.GTP.ala1-tRNA + 28 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 16 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 28 EF-Tu.GTP.glu1-tRNA + 16 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 28 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.leu1-tRNA + 40 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 16 EF-Tu.GTP.val1-tRNA + 32 EF-Tu.GTP.val3-tRNA + 1660 mg2 + 1 rib_ini_b3311_4 --> 1 rib_70_elo1_b3311_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3311_4_rib2	Translation elongation 2 b3311 4 ribosome(s)	328 h2o + 1 rib_70_elo1_b3311_4_cplx --> 328 EF-G.GDP + 328 EF-Tu.GDP + 8 ala1_tRNA + 28 arg1_tRNA + 8 asn1_tRNA + 16 asp1_tRNA + 8 cysT_tRNA + 4 fmet_tRNA + 4 gln2_tRNA + 28 glu1_tRNA + 16 gly1_tRNA + 656 h + 12 hisR_tRNA + 28 ile1_tRNA + 16 leu1_tRNA + 40 lys1_tRNA + 4 met1_tRNA + 1660 mg2 + 8 phe1_tRNA + 656 pi + 8 pro1_tRNA + 1 rib_70_elo2_b3311_4_cplx + 12 ser1_tRNA + 4 serV_tRNA + 8 thr1_tRNA + 8 thr2_tRNA + 8 thr3_tRNA + 4 trpT_tRNA + 4 tyr1_tRNA + 16 val1_tRNA + 32 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3312_1_rib1	Translation elongation 1 b3312 1 ribosome(s)	62 EF-G.GTP + 6 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 1 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 7 EF-Tu.GTP.glu1-tRNA + 2 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 6 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 1 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 310 mg2 + 1 rib_ini_b3312_1 --> 1 rib_70_elo1_b3312_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88

tl_elo_b3312_1_rib2	Translation elongation 2 b3312 1 ribosome(s)	61 h2o + 1 rib_70_elo1_b3312_1_cplx --> 61 EF-G.GDP + 61 EF-Tu.GDP + 5 ala1_tRNA + 6 arg1_tRNA + 4 asn1_tRNA + 1 asp1_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 2 gln2_tRNA + 7 glu1_tRNA + 2 gly1_tRNA + 122 h + 1 hisR_tRNA + 10 leu1_tRNA + 1 leu2_tRNA + 1 leuZ_tRNA + 6 lys1_tRNA + 1 met1_tRNA + 310 mg2 + 1 phe1_tRNA + 122 pi + 1 rib_70_elo2_b3312_1_cplx + 1 ser2_tRNA + 2 serV_tRNA + 1 thr1_tRNA + 1 thr2_tRNA + 1 val1_tRNA + 1 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3312_3_rib1	Translation elongation 1 b3312 3 ribosome(s)	186 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 21 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 18 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 930 mg2 + 1 rib_ini_b3312_3 --> 1 rib_70_elo1_b3312_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3312_3_rib2	Translation elongation 2 b3312 3 ribosome(s)	183 h2o + 1 rib_70_elo1_b3312_3_cplx --> 183 EF-G.GDP + 183 EF-Tu.GDP + 15 ala1_tRNA + 18 arg1_tRNA + 12 asn1_tRNA + 3 asp1_tRNA + 3 fmet_tRNA + 12 gln1_tRNA + 6 gln2_tRNA + 21 glu1_tRNA + 6 gly1_tRNA + 366 h + 3 hisR_tRNA + 30 leu1_tRNA + 3 leu2_tRNA + 3 leuZ_tRNA + 18 lys1_tRNA + 3 met1_tRNA + 930 mg2 + 3 phe1_tRNA + 366 pi + 1 rib_70_elo2_b3312_3_cplx + 3 ser2_tRNA + 6 serV_tRNA + 3 thr1_tRNA + 3 thr2_tRNA + 3 val1_tRNA + 3 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3313_1_rib1	Translation elongation 1 b3313 1 ribosome(s)	135 EF-G.GTP + 11 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 7 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 675 mg2 + 1 rib_ini_b3313_1 --> 1 rib_70_elo1_b3313_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.45E+01	4.45E+01	0	6.62E+01	66.1957	0	1.71E+01	17.14514
tl_elo_b3313_1_rib2	Translation elongation 2 b3313 1 ribosome(s)	134 h2o + 1 rib_70_elo1_b3313_1_cplx --> 134 EF-G.GDP + 134 EF-Tu.GDP + 11 ala1_tRNA + 3 ala2_tRNA + 14 arg1_tRNA + 2 asn1_tRNA + 3 asp1_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 2 gln2_tRNA + 7 glu1_tRNA + 13 gly1_tRNA + 268 h + 1 hisR_tRNA + 6 ile1_tRNA + 8 leu1_tRNA + 1 leu2_tRNA + 1 leuZ_tRNA + 16 lys1_tRNA + 4 met1_tRNA + 675 mg2 + 6 phe1_tRNA + 268 pi + 6 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3313_1_cplx + 2 serV_tRNA + 3 thr1_tRNA + 3 thr2_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 2 trpT_tRNA + 2 tyr1_tRNA + 5 val1_tRNA + 1 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.45E+01	4.45E+01	0	6.62E+01	66.1957	0	1.71E+01	17.14514
tl_elo_b3313_4_rib1	Translation elongation 1 b3313 4 ribosome(s)	540 EF-G.GTP + 44 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 56 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 28 EF-Tu.GTP.glu1-tRNA + 52 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 24 EF-Tu.GTP.ile1-tRNA + 32 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 64 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 20 EF-Tu.GTP.val3-tRNA + 2700 mg2 + 1 rib_ini_b3313_4 --> 1 rib_70_elo1_b3313_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3313_4_rib2	Translation elongation 2 b3313 4 ribosome(s)	536 h2o + 1 rib_70_elo1_b3313_4_cplx --> 536 EF-G.GDP + 536 EF-Tu.GDP + 44 ala1_tRNA + 12 ala2_tRNA + 56 arg1_tRNA + 8 asn1_tRNA + 12 asp1_tRNA + 4 fmet_tRNA + 12 gln1_tRNA + 8 gln2_tRNA + 28 glu1_tRNA + 52 gly1_tRNA + 1072 h + 4 hisR_tRNA + 24 ile1_tRNA + 32 leu1_tRNA + 4 leu2_tRNA + 4 leuZ_tRNA + 64 lys1_tRNA + 16 met1_tRNA + 2700 mg2 + 24 phe1_tRNA + 1072 pi + 24 pro1_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b3313_4_cplx + 8 serV_tRNA + 12 thr1_tRNA + 12 thr2_tRNA + 8 thr3_tRNA + 4 thrU_tRNA + 8 trpT_tRNA + 8 tyr1_tRNA + 20 val1_tRNA + 4 val2_tRNA + 20 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3313_8_rib1	Translation elongation 1 b3313 8 ribosome(s)	1080 EF-G.GTP + 88 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 112 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.asn1-tRNA + 24 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.gln2-tRNA + 56 EF-Tu.GTP.glu1-tRNA + 104 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 48 EF-Tu.GTP.ile1-tRNA + 64 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 128 EF-Tu.GTP.lys1-tRNA + 40 EF-Tu.GTP.met1-tRNA + 48 EF-Tu.GTP.phe1-tRNA + 48 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr2-tRNA + 16 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 16 EF-Tu.GTP.trpT-tRNA + 16 EF-Tu.GTP.tyr1-tRNA + 40 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 40 EF-Tu.GTP.val3-tRNA + 5400 mg2 + 1 rib_ini_b3313_8 --> 1 rib_70_elo1_b3313_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_elo_b3313_8_rib2	Translation elongation 2 b3313 8 ribosome(s)	1072 h2o + 1 rib_70_elo1_b3313_8_cplx --> 1072 EF-G.GDP + 1072 EF-Tu.GDP + 88 ala1_tRNA + 24 ala2_tRNA + 112 arg1_tRNA + 16 asn1_tRNA + 24 asp1_tRNA + 8 fmet_tRNA + 24 gln1_tRNA + 16 gln2_tRNA + 56 glu1_tRNA + 104 gly1_tRNA + 2144 h + 8 hisR_tRNA + 48 ile1_tRNA + 64 leu1_tRNA + 8 leu2_tRNA + 8 leuZ_tRNA + 128 lys1_tRNA + 32 met1_tRNA + 5400 mg2 + 48 phe1_tRNA + 2144 pi + 48 pro1_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b3313_8_cplx + 16 serV_tRNA + 24 thr1_tRNA + 24 thr2_tRNA + 16 thr3_tRNA + 8 thrU_tRNA + 16 trpT_tRNA + 16 tyr1_tRNA + 40 val1_tRNA + 8 val2_tRNA + 40 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36

tl_elo_b3314_13_rib1	Translation elongation 1 b3314 13 ribosome(s)	3016 EF-G.GTP + 299 EF-Tu.GTP.ala1-tRNA + 13 EF-Tu.GTP.ala2-tRNA + 273 EF-Tu.GTP.arg1-tRNA + 91 EF-Tu.GTP.asn1-tRNA + 117 EF-Tu.GTP.asp1-tRNA + 104 EF-Tu.GTP.gln1-tRNA + 13 EF-Tu.GTP.gln2-tRNA + 208 EF-Tu.GTP.glu1-tRNA + 247 EF-Tu.GTP.gly1-tRNA + 52 EF-Tu.GTP.hisR-tRNA + 234 EF-Tu.GTP.ile1-tRNA + 169 EF-Tu.GTP.leu1-tRNA + 299 EF-Tu.GTP.lys1-tRNA + 52 EF-Tu.GTP.met1-tRNA + 65 EF-Tu.GTP.phe1-tRNA + 65 EF-Tu.GTP.pro1-tRNA + 52 EF-Tu.GTP.pro2-tRNA + 13 EF-Tu.GTP.proM-tRNA + 13 EF-Tu.GTP.ser1-tRNA + 52 EF-Tu.GTP.ser2-tRNA + 52 EF-Tu.GTP.serV-tRNA + 78 EF-Tu.GTP.thr1-tRNA + 65 EF-Tu.GTP.thr2-tRNA + 52 EF-Tu.GTP.trpT-tRNA + 52 EF-Tu.GTP.tyr1-tRNA + 143 EF-Tu.GTP.val1-tRNA + 13 EF-Tu.GTP.val2-tRNA + 130 EF-Tu.GTP.val3-tRNA + 15080 mg2 + 1 rib_ini_b3314_13 --> 1 rib_70_elo1_b3314_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.66E+00	8.66E+00	0	6.38E+00	6.375385	0	6.38E+00	6.375385
tl_elo_b3314_13_rib2	Translation elongation 2 b3314 13 ribosome(s)	3003 h2o + 1 rib_70_elo1_b3314_13_cplx --> 3003 EF-G.GDP + 3003 EF-Tu.GDP + 299 ala1_tRNA + 13 ala2_tRNA + 273 arg1_tRNA + 91 asn1_tRNA + 117 asp1_tRNA + 13 fmet_tRNA + 104 gln1_tRNA + 13 gln2_tRNA + 208 glu1_tRNA + 247 gly1_tRNA + 6006 h + 52 hisR_tRNA + 234 ile1_tRNA + 169 leu1_tRNA + 286 lys1_tRNA + 52 met1_tRNA + 15080 mg2 + 65 phe1_tRNA + 6006 pi + 65 pro1_tRNA + 52 pro2_tRNA + 13 proM_tRNA + 1 rib_70_elo2_b3314_13_cplx + 13 ser1_tRNA + 52 ser2_tRNA + 52 serV_tRNA + 78 thr1_tRNA + 65 thr2_tRNA + 52 trpT_tRNA + 52 tyr1_tRNA + 143 val1_tRNA + 13 val2_tRNA + 130 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.66E+00	8.66E+00	0	6.38E+00	6.375385	0	6.38E+00	6.375385
tl_elo_b3314_1_rib1	Translation elongation 1 b3314 1 ribosome(s)	232 EF-G.GTP + 23 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 21 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 19 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 23 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 11 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 1160 mg2 + 1 rib_ini_b3314_1 --> 1 rib_70_elo1_b3314_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.73E+01	3.73E+01	0	6.14E+01	61.39904	0	1.02E+01	10.173
tl_elo_b3314_1_rib2	Translation elongation 2 b3314 1 ribosome(s)	231 h2o + 1 rib_70_elo1_b3314_1_cplx --> 231 EF-G.GDP + 231 EF-Tu.GDP + 23 ala1_tRNA + 1 ala2_tRNA + 21 arg1_tRNA + 7 asn1_tRNA + 9 asp1_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 1 gln2_tRNA + 16 glu1_tRNA + 19 gly1_tRNA + 462 h + 4 hisR_tRNA + 18 ile1_tRNA + 13 leu1_tRNA + 22 lys1_tRNA + 4 met1_tRNA + 116 mg2 + 5 phe1_tRNA + 462 pi + 5 pro1_tRNA + 4 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3314_1_cplx + 1 ser1_tRNA + 4 ser2_tRNA + 4 serV_tRNA + 6 thr1_tRNA + 5 thr2_tRNA + 4 trpT_tRNA + 4 tyr1_tRNA + 11 val1_tRNA + 1 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.73E+01	3.73E+01	0	6.14E+01	61.39904	0	1.02E+01	10.173
tl_elo_b3314_6_rib1	Translation elongation 1 b3314 6 ribosome(s)	1392 EF-G.GTP + 138 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 126 EF-Tu.GTP.arg1-tRNA + 42 EF-Tu.GTP.asn1-tRNA + 54 EF-Tu.GTP.asp1-tRNA + 48 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 96 EF-Tu.GTP.glu1-tRNA + 114 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.hisR-tRNA + 108 EF-Tu.GTP.ile1-tRNA + 78 EF-Tu.GTP.leu1-tRNA + 138 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 30 EF-Tu.GTP.phe1-tRNA + 30 EF-Tu.GTP.pro1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.serV-tRNA + 36 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 24 EF-Tu.GTP.tyr1-tRNA + 66 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 60 EF-Tu.GTP.val3-tRNA + 6960 mg2 + 1 rib_ini_b3314_6 --> 1 rib_70_elo1_b3314_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3314_6_rib2	Translation elongation 2 b3314 6 ribosome(s)	1386 h2o + 1 rib_70_elo1_b3314_6_cplx --> 1386 EF-G.GDP + 1386 EF-Tu.GDP + 138 ala1_tRNA + 6 ala2_tRNA + 126 arg1_tRNA + 42 asn1_tRNA + 54 asp1_tRNA + 6 fmet_tRNA + 48 gln1_tRNA + 6 gln2_tRNA + 96 glu1_tRNA + 114 gly1_tRNA + 2772 h + 24 hisR_tRNA + 108 ile1_tRNA + 78 leu1_tRNA + 132 lys1_tRNA + 24 met1_tRNA + 6960 mg2 + 30 phe1_tRNA + 2772 pi + 30 pro1_tRNA + 24 pro2_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b3314_6_cplx + 6 ser1_tRNA + 24 ser2_tRNA + 24 serV_tRNA + 36 thr1_tRNA + 30 thr2_tRNA + 24 trpT_tRNA + 24 tyr1_tRNA + 66 val1_tRNA + 6 val2_tRNA + 60 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3315_1_rib1	Translation elongation 1 b3315 1 ribosome(s)	109 EF-G.GTP + 12 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 1 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 545 mg2 + 1 rib_ini_b3315_1 --> 1 rib_70_elo1_b3315_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.01E+01	6.01E+01	0	7.37E+01	73.65124	0	3.25E+01	32.5344
tl_elo_b3315_1_rib2	Translation elongation 2 b3315 1 ribosome(s)	108 h2o + 1 rib_70_elo1_b3315_1_cplx --> 108 EF-G.GDP + 108 EF-Tu.GDP + 12 ala1_tRNA + 1 ala2_tRNA + 9 arg1_tRNA + 3 asn1_tRNA + 9 asp1_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 4 glu1_tRNA + 4 gly1_tRNA + 216 h + 4 hisR_tRNA + 9 ile1_tRNA + 6 leu1_tRNA + 1 leu2_tRNA + 1 leuU_tRNA + 13 lys1_tRNA + 2 met1_tRNA + 545 mg2 + 1 phe1_tRNA + 216 pi + 2 pro1_tRNA + 1 rib_70_elo2_b3315_1_cplx + 1 ser1_tRNA + 3 ser2_tRNA + 1 ser3_tRNA + 2 serV_tRNA + 3 thr1_tRNA + 2 thr2_tRNA + 1 thr3_tRNA + 1 tyr1_tRNA + 5 val1_tRNA + 1 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.01E+01	6.01E+01	0	7.37E+01	73.65124	0	3.25E+01	32.5344

tl_elo_b3315_3_rib1	Translation elongation 1 b3315 3 ribosome(s)	327 EF-G.GTP + 36 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 30 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 27 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 27 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 39 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 15 EF-Tu.GTP.val3-tRNA + 1635 mg2 + 1 rib_ini_b3315_3 --> 1 rib_70_elo1_b3315_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3315_3_rib2	Translation elongation 2 b3315 3 ribosome(s)	324 h2o + 1 rib_70_elo1_b3315_3_cplx --> 324 EF-G.GDP + 324 EF-Tu.GDP + 36 ala1_tRNA + 3 ala2_tRNA + 27 arg1_tRNA + 9 asn1_tRNA + 27 asp1_tRNA + 3 fmet_tRNA + 6 gln1_tRNA + 12 glu1_tRNA + 12 gly1_tRNA + 648 h + 12 hisR_tRNA + 27 ile1_tRNA + 18 leu1_tRNA + 3 leu2_tRNA + 3 leuU_tRNA + 39 lys1_tRNA + 6 met1_tRNA + 1635 mg2 + 3 phe1_tRNA + 648 pi + 6 pro1_tRNA + 1 rib_70_elo2_b3315_3_cplx + 3 ser1_tRNA + 9 ser2_tRNA + 3 ser3_tRNA + 6 serV_tRNA + 9 thr1_tRNA + 6 thr2_tRNA + 3 thr3_tRNA + 3 tyr1_tRNA + 15 val1_tRNA + 3 val2_tRNA + 15 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3315_6_rib1	Translation elongation 1 b3315 6 ribosome(s)	654 EF-G.GTP + 72 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 60 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 54 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 24 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.hisR-tRNA + 54 EF-Tu.GTP.ile1-tRNA + 36 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 78 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 12 EF-Tu.GTP.serV-tRNA + 18 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 30 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 30 EF-Tu.GTP.val3-tRNA + 3270 mg2 + 1 rib_ini_b3315_6 --> 1 rib_70_elo1_b3315_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3315_6_rib2	Translation elongation 2 b3315 6 ribosome(s)	648 h2o + 1 rib_70_elo1_b3315_6_cplx --> 648 EF-G.GDP + 648 EF-Tu.GDP + 72 ala1_tRNA + 6 ala2_tRNA + 54 arg1_tRNA + 18 asn1_tRNA + 54 asp1_tRNA + 6 fmet_tRNA + 12 gln1_tRNA + 24 glu1_tRNA + 24 gly1_tRNA + 1296 h + 24 hisR_tRNA + 54 ile1_tRNA + 36 leu1_tRNA + 6 leu2_tRNA + 6 leuU_tRNA + 78 lys1_tRNA + 12 met1_tRNA + 3270 mg2 + 6 phe1_tRNA + 1296 pi + 12 pro1_tRNA + 1 rib_70_elo2_b3315_6_cplx + 6 ser1_tRNA + 18 ser2_tRNA + 6 ser3_tRNA + 12 serV_tRNA + 18 thr1_tRNA + 12 thr2_tRNA + 6 thr3_tRNA + 6 tyr1_tRNA + 30 val1_tRNA + 6 val2_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3316_1_rib1	Translation elongation 1 b3316 1 ribosome(s)	91 EF-G.GTP + 6 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 4 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 1 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 455 mg2 + 1 rib_ini_b3316_1 --> 1 rib_70_elo1_b3316_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3316_1_rib2	Translation elongation 2 b3316 1 ribosome(s)	90 h2o + 1 rib_70_elo1_b3316_1_cplx --> 90 EF-G.GDP + 90 EF-Tu.GDP + 6 ala1_tRNA + 7 arg1_tRNA + 2 asn1_tRNA + 4 asp1_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 4 glu1_tRNA + 6 gly1_tRNA + 1 glyT_tRNA + 180 h + 5 hisR_tRNA + 4 ile1_tRNA + 4 leu1_tRNA + 2 leu2_tRNA + 1 leuU_tRNA + 12 lys1_tRNA + 2 met1_tRNA + 455 mg2 + 4 phe1_tRNA + 180 pi + 2 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3316_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 1 serT_tRNA + 1 serV_tRNA + 2 thr1_tRNA + 3 thr2_tRNA + 1 thr3_tRNA + 1 trpT_tRNA + 1 tyr1_tRNA + 4 val1_tRNA + 1 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3316_2_rib1	Translation elongation 1 b3316 2 ribosome(s)	182 EF-G.GTP + 12 EF-Tu.GTP.ala1-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 26 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serT-tRNA + 2 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 910 mg2 + 1 rib_ini_b3316_2 --> 1 rib_70_elo1_b3316_2_cp	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3316_2_rib2	Translation elongation 2 b3316 2 ribosome(s)	180 h2o + 1 rib_70_elo1_b3316_2_cplx --> 180 EF-G.GDP + 180 EF-Tu.GDP + 12 ala1_tRNA + 14 arg1_tRNA + 4 asn1_tRNA + 8 asp1_tRNA + 2 fmet_tRNA + 2 gln1_tRNA + 8 glu1_tRNA + 12 gly1_tRNA + 2 glyT_tRNA + 360 h + 10 hisR_tRNA + 8 ile1_tRNA + 8 leu1_tRNA + 4 leu2_tRNA + 2 leuU_tRNA + 24 lys1_tRNA + 4 met1_tRNA + 910 mg2 + 8 phe1_tRNA + 360 pi + 4 pro1_tRNA + 4 pro2_tRNA + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3316_2_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 2 serT_tRNA + 2 serV_tRNA + 4 thr1_tRNA + 6 thr2_tRNA + 2 thr3_tRNA + 2 trpT_tRNA + 2 tyr1_tRNA + 8 val1_tRNA + 2 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44

tl_elo_b3316_5_rib1	Translation elongation 1 b3316 5 ribosome(s)	455 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 35 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 20 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 30 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 25 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 65 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 20 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 15 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 2275 mg2 + 1 rib_ini_b3316_5 --> 1 rib_70_elo1_b3316_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3316_5_rib2	Translation elongation 2 b3316 5 ribosome(s)	450 h2o + 1 rib_70_elo1_b3316_5_cplx --> 450 EF-G.GDP + 450 EF-Tu.GDP + 30 ala1_tRNA + 35 arg1_tRNA + 10 asn1_tRNA + 20 asp1_tRNA + 5 fmet_tRNA + 5 gln1_tRNA + 20 glu1_tRNA + 30 gly1_tRNA + 5 glyT_tRNA + 900 h + 25 hisR_tRNA + 20 ile1_tRNA + 20 leu1_tRNA + 10 leu2_tRNA + 5 leuU_tRNA + 60 lys1_tRNA + 10 met1_tRNA + 2275 mg2 + 20 phe1_tRNA + 900 pi + 10 pro1_tRNA + 10 pro2_tRNA + 5 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b3316_5_cplx + 5 ser1_tRNA + 5 ser2_tRNA + 5 serT_tRNA + 5 serV_tRNA + 10 thr1_tRNA + 15 thr2_tRNA + 5 thr3_tRNA + 5 trpT_tRNA + 5 tyr1_tRNA + 20 val1_tRNA + 5 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3317_16_rib1	Translation elongation 1 b3317 16 ribosome(s)	4352 EF-G.GTP + 320 EF-Tu.GTP.ala1-tRNA + 16 EF-Tu.GTP.ala2-tRNA + 464 EF-Tu.GTP.arg1-tRNA + 240 EF-Tu.GTP.asn1-tRNA + 160 EF-Tu.GTP.asp1-tRNA + 32 EF-Tu.GTP.cysT-tRNA + 96 EF-Tu.GTP.gln1-tRNA + 176 EF-Tu.GTP.glu1-tRNA + 544 EF-Tu.GTP.gly1-tRNA + 144 EF-Tu.GTP.hisR-tRNA + 176 EF-Tu.GTP.ile1-tRNA + 208 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 400 EF-Tu.GTP.lys1-tRNA + 80 EF-Tu.GTP.met1-tRNA + 64 EF-Tu.GTP.phe1-tRNA + 176 EF-Tu.GTP.pro1-tRNA + 48 EF-Tu.GTP.pro2-tRNA + 48 EF-Tu.GTP.proM-tRNA + 48 EF-Tu.GTP.ser1-tRNA + 64 EF-Tu.GTP.ser2-tRNA + 48 EF-Tu.GTP.serV-tRNA + 112 EF-Tu.GTP.thr1-tRNA + 96 EF-Tu.GTP.thr2-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 32 EF-Tu.GTP.trpT-tRNA + 96 EF-Tu.GTP.tyr1-tRNA + 112 EF-Tu.GTP.val1-tRNA + 16 EF-Tu.GTP.val2-tRNA + 288 EF-Tu.GTP.val3-tRNA + 21760 mg2 + 1 rib_ini_b3317_16 --> 1 rib_70_elo1_b3317_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+00	7.04E+00	0	5.18E+00	5.18	0	5.18E+00	5.18
tl_elo_b3317_16_rib2	Translation elongation 2 b3317 16 ribosome(s)	4336 h2o + 1 rib_70_elo1_b3317_16_cplx --> 4336 EF-G.GDP + 4336 EF-Tu.GDP + 320 ala1_tRNA + 16 ala2_tRNA + 464 arg1_tRNA + 240 asn1_tRNA + 160 asp1_tRNA + 32 cysT_tRNA + 16 fmet_tRNA + 96 gln1_tRNA + 176 glu1_tRNA + 544 gly1_tRNA + 8672 h + 144 hisR_tRNA + 176 ile1_tRNA + 208 leu1_tRNA + 16 leu2_tRNA + 16 leuU_tRNA + 384 lys1_tRNA + 80 met1_tRNA + 21760 mg2 + 64 phe1_tRNA + 8672 pi + 176 pro1_tRNA + 48 pro2_tRNA + 48 proM_tRNA + 1 rib_70_elo2_b3317_16_cplx + 48 ser1_tRNA + 64 ser2_tRNA + 48 serV_tRNA + 112 thr1_tRNA + 96 thr2_tRNA + 16 thrU_tRNA + 32 trpT_tRNA + 96 tyr1_tRNA + 112 val1_tRNA + 16 val2_tRNA + 288 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+00	7.04E+00	0	5.18E+00	5.18	0	5.18E+00	5.18
tl_elo_b3317_1_rib1	Translation elongation 1 b3317 1 ribosome(s)	272 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 29 EF-Tu.GTP.arg1-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 11 EF-Tu.GTP.glu1-tRNA + 34 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 25 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 18 EF-Tu.GTP.val3-tRNA + 1360 mg2 + 1 rib_ini_b3317_1 --> 1 rib_70_elo1_b3317_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.04E+01	5.04E+01	0	6.77E+01	67.7286	0	2.33E+01	23.34613
tl_elo_b3317_1_rib2	Translation elongation 2 b3317 1 ribosome(s)	271 h2o + 1 rib_70_elo1_b3317_1_cplx --> 271 EF-G.GDP + 271 EF-Tu.GDP + 20 ala1_tRNA + 1 ala2_tRNA + 29 arg1_tRNA + 15 asn1_tRNA + 10 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 11 glu1_tRNA + 34 gly1_tRNA + 542 h + 9 hisR_tRNA + 11 ile1_tRNA + 13 leu1_tRNA + 1 leu2_tRNA + 1 leuU_tRNA + 24 lys1_tRNA + 5 met1_tRNA + 1360 mg2 + 4 phe1_tRNA + 542 pi + 11 pro1_tRNA + 3 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3317_1_cplx + 3 ser1_tRNA + 4 ser2_tRNA + 3 serV_tRNA + 7 thr1_tRNA + 6 thr2_tRNA + 1 thrU_tRNA + 2 trpT_tRNA + 6 tyr1_tRNA + 7 val1_tRNA + 1 val2_tRNA + 18 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.04E+01	5.04E+01	0	6.77E+01	67.7286	0	2.33E+01	23.34613
tl_elo_b3317_8_rib1	Translation elongation 1 b3317 8 ribosome(s)	2176 EF-G.GTP + 160 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 232 EF-Tu.GTP.arg1-tRNA + 120 EF-Tu.GTP.asn1-tRNA + 80 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.cysT-tRNA + 48 EF-Tu.GTP.gln1-tRNA + 88 EF-Tu.GTP.glu1-tRNA + 272 EF-Tu.GTP.gly1-tRNA + 72 EF-Tu.GTP.hisR-tRNA + 88 EF-Tu.GTP.ile1-tRNA + 104 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 200 EF-Tu.GTP.lys1-tRNA + 40 EF-Tu.GTP.met1-tRNA + 32 EF-Tu.GTP.phe1-tRNA + 88 EF-Tu.GTP.pro1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proM-tRNA + 24 EF-Tu.GTP.ser1-tRNA + 32 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.serV-tRNA + 56 EF-Tu.GTP.thr1-tRNA + 48 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 16 EF-Tu.GTP.trpT-tRNA + 48 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 144 EF-Tu.GTP.val3-tRNA + 10880 mg2 + 1 rib_ini_b3317_8 --> 1 rib_70_elo1_b3317_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36

tl_elo_b3317_8_rib2	Translation elongation 2 b3317 8 ribosome(s)	2168 h2o + 1 rib_70_elo1_b3317_8_cplx --> 2168 EF-G.GDP + 2168 EF-Tu.GDP + 160 ala1_tRNA + 8 ala2_tRNA + 232 arg1_tRNA + 120 asn1_tRNA + 80 asp1_tRNA + 16 cysT_tRNA + 8 fmet_tRNA + 48 gln1_tRNA + 88 glu1_tRNA + 272 gly1_tRNA + 4336 h + 72 hisR_tRNA + 88 ile1_tRNA + 104 leu1_tRNA + 8 leu2_tRNA + 8 leuU_tRNA + 192 lys1_tRNA + 40 met1_tRNA + 10880 mg2 + 32 phe1_tRNA + 4336 pi + 88 pro1_tRNA + 24 pro2_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b3317_8_cplx + 24 ser1_tRNA + 32 ser2_tRNA + 24 serV_tRNA + 56 thr1_tRNA + 48 thr2_tRNA + 8 thrU_tRNA + 16 trpT_tRNA + 48 tyr1_tRNA + 56 val1_tRNA + 8 val2_tRNA + 144 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_elo_b3318_1_rib1	Translation elongation 1 b3318 1 ribosome(s)	99 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 495 mg2 + 1 rib_ini_b3318_1 --> 1 rib_70_elo1_b3318_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3318_1_rib2	Translation elongation 2 b3318 1 ribosome(s)	98 h2o + 1 rib_70_elo1_b3318_1_cplx --> 98 EF-G.GDP + 98 EF-Tu.GDP + 10 ala1_tRNA + 7 arg1_tRNA + 3 asn1_tRNA + 3 asp1_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 9 glu1_tRNA + 4 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 196 h + 2 hisR_tRNA + 4 ile1_tRNA + 7 leu1_tRNA + 1 leuU_tRNA + 14 lys1_tRNA + 1 met1_tRNA + 495 mg2 + 2 phe1_tRNA + 196 pi + 1 pro1_tRNA + 1 rib_70_elo2_b3318_1_cplx + 1 ser1_tRNA + 2 ser2_tRNA + 1 serV_tRNA + 4 thr1_tRNA + 1 thr2_tRNA + 1 trpT_tRNA + 1 tyr1_tRNA + 4 val1_tRNA + 4 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3318_2_rib1	Translation elongation 1 b3318 2 ribosome(s)	198 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 28 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 990 mg2 + 1 rib_ini_b3318_2 --> 1 rib_70_elo1_b3318_2_cp	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3318_2_rib2	Translation elongation 2 b3318 2 ribosome(s)	196 h2o + 1 rib_70_elo1_b3318_2_cplx --> 196 EF-G.GDP + 196 EF-Tu.GDP + 20 ala1_tRNA + 14 arg1_tRNA + 6 asn1_tRNA + 6 asp1_tRNA + 2 fmet_tRNA + 6 gln1_tRNA + 18 glu1_tRNA + 8 gly1_tRNA + 2 glyT_tRNA + 2 glyU_tRNA + 392 h + 4 hisR_tRNA + 8 ile1_tRNA + 14 leu1_tRNA + 2 leuU_tRNA + 28 lys1_tRNA + 2 met1_tRNA + 990 mg2 + 4 phe1_tRNA + 392 pi + 2 pro1_tRNA + 1 rib_70_elo2_b3318_2_cplx + 2 ser1_tRNA + 4 ser2_tRNA + 2 serV_tRNA + 8 thr1_tRNA + 2 thr2_tRNA + 2 trpT_tRNA + 2 tyr1_tRNA + 8 val1_tRNA + 8 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3318_5_rib1	Translation elongation 1 b3318 5 ribosome(s)	495 EF-G.GTP + 50 EF-Tu.GTP.ala1-tRNA + 35 EF-Tu.GTP.arg1-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 15 EF-Tu.GTP.gln1-tRNA + 50 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 35 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 70 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 30 EF-Tu.GTP.val3-tRNA + 2475 mg2 + 1 rib_ini_b3318_5 --> 1 rib_70_elo1_b3318_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3318_5_rib2	Translation elongation 2 b3318 5 ribosome(s)	490 h2o + 1 rib_70_elo1_b3318_5_cplx --> 490 EF-G.GDP + 490 EF-Tu.GDP + 50 ala1_tRNA + 35 arg1_tRNA + 15 asn1_tRNA + 15 asp1_tRNA + 5 fmet_tRNA + 15 gln1_tRNA + 45 glu1_tRNA + 20 gly1_tRNA + 5 glyT_tRNA + 5 glyU_tRNA + 980 h + 10 hisR_tRNA + 20 ile1_tRNA + 35 leu1_tRNA + 5 leuU_tRNA + 70 lys1_tRNA + 5 met1_tRNA + 2475 mg2 + 10 phe1_tRNA + 980 pi + 5 pro1_tRNA + rib_70_elo2_b3318_5_cplx + 5 ser1_tRNA + 10 ser2_tRNA + 5 serV_tRNA + 20 thr1_tRNA + 5 thr2_tRNA + 5 trpT_tRNA + 5 tyr1_tRNA + 20 val1_tRNA + 20 val2_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3319_11_rib1	Translation elongation 1 b3319 11 ribosome(s)	2200 EF-G.GTP + 242 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.ala2-tRNA + 154 EF-Tu.GTP.arg1-tRNA + 44 EF-Tu.GTP.asn1-tRNA + 132 EF-Tu.GTP.asp1-tRNA + 88 EF-Tu.GTP.gln1-tRNA + 22 EF-Tu.GTP.gln2-tRNA + 132 EF-Tu.GTP.glu1-tRNA + 143 EF-Tu.GTP.gly1-tRNA + 33 EF-Tu.GTP.hisR-tRNA + 88 EF-Tu.GTP.ile1-tRNA + 187 EF-Tu.GTP.leu1-tRNA + 11 EF-Tu.GTP.leu2-tRNA + 11 EF-Tu.GTP.leuZ-tRNA + 198 EF-Tu.GTP.lys1-tRNA + 44 EF-Tu.GTP.met1-tRNA + 66 EF-Tu.GTP.phe1-tRNA + 55 EF-Tu.GTP.pro1-tRNA + 33 EF-Tu.GTP.ser1-tRNA + 44 EF-Tu.GTP.ser2-tRNA + 55 EF-Tu.GTP.serV-tRNA + 44 EF-Tu.GTP.thr1-tRNA + 88 EF-Tu.GTP.thr2-tRNA + 22 EF-Tu.GTP.trpT-tRNA + 22 EF-Tu.GTP.tyr1-tRNA + 88 EF-Tu.GTP.val1-tRNA + 22 EF-Tu.GTP.val2-tRNA + 121 EF-Tu.GTP.val3-tRNA + 11000 mg2 + 1 rib_ini_b3319_11 --> 1 rib_70_elo1_b3319_11_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.02E+01	1.02E+01	0	7.53E+00	7.534545	0	7.53E+00	7.534545
tl_elo_b3319_11_rib2	Translation elongation 2 b3319 11 ribosome(s)	2189 h2o + 1 rib_70_elo1_b3319_11_cplx --> 2189 EF-G.GDP + 2189 EF-Tu.GDP + 231 ala1_tRNA + 11 ala2_tRNA + 154 arg1_tRNA + 44 asn1_tRNA + 132 asp1_tRNA + 11 fmet_tRNA + 88 gln1_tRNA + 22 gln2_tRNA + 132 glu1_tRNA + 143 gly1_tRNA + 4378 h + 33 hisR_tRNA + 88 ile1_tRNA + 187 leu1_tRNA + 11 leu2_tRNA + 11 leuZ_tRNA + 198 lys1_tRNA + 44 met1_tRNA + 11000 mg2 + 66 phe1_tRNA + 4378 pi + 55 pro1_tRNA + 1 rib_70_elo2_b3319_11_cplx + 33 ser1_tRNA + 44 ser2_tRNA + 55 serV_tRNA + 44 thr1_tRNA + 88 thr2_tRNA + 22 trpT_tRNA + 22 tyr1_tRNA + 88 val1_tRNA + 22 val2_tRNA + 121 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.02E+01	1.02E+01	0	7.53E+00	7.534545	0	7.53E+00	7.534545

tl_elo_b3319_1_rib1	Translation elongation 1 b3319 1 ribosome(s)	200 EF-G.GTP + 22 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 14 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 17 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 18 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 11 EF-Tu.GTP.val3-tRNA + 1000 mg2 + 1 rib_ini_b3319_1 --> 1 rib_70_elo1_b3319_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.27E+01	62.72106	0	1.14E+01	11.3532
tl_elo_b3319_1_rib2	Translation elongation 2 b3319 1 ribosome(s)	199 h2o + 1 rib_70_elo1_b3319_1_cplx --> 199 EF-G.GDP + 199 EF-Tu.GDP + 21 ala1_tRNA + 1 ala2_tRNA + 14 arg1_tRNA + 4 asn1_tRNA + 12 asp1_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 2 gln2_tRNA + 12 glu1_tRNA + 13 gly1_tRNA + 398 h + 3 hisR_tRNA + 8 ile1_tRNA + 17 leu1_tRNA + 1 leu2_tRNA + 1 leuZ_tRNA + 18 lys1_tRNA + 4 met1_tRNA + 1000 mg2 + 6 phe1_tRNA + 398 pi + 5 pro1_tRNA + 1 rib_70_elo2_b3319_1_cplx + 3 ser1_tRNA + 4 ser2_tRNA + 5 serV_tRNA + 4 thr1_tRNA + 8 thr2_tRNA + 2 trpT_tRNA + 2 tyr1_tRNA + 8 val1_tRNA + 2 val2_tRNA + 11 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.27E+01	62.72106	0	1.14E+01	11.3532
tl_elo_b3319_5_rib1	Translation elongation 1 b3319 5 ribosome(s)	1000 EF-G.GTP + 110 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 70 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 60 EF-Tu.GTP.asp1-tRNA + 40 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 60 EF-Tu.GTP.glu1-tRNA + 65 EF-Tu.GTP.gly1-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 40 EF-Tu.GTP.ile1-tRNA + 85 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 90 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 30 EF-Tu.GTP.phe1-tRNA + 25 EF-Tu.GTP.pro1-tRNA + 15 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 25 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 40 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 40 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 55 EF-Tu.GTP.val3-tRNA + 5000 mg2 + 1 rib_ini_b3319_5 --> 1 rib_70_elo1_b3319_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	1.66E+01	16.576	0	1.60E+01	15.972
tl_elo_b3319_5_rib2	Translation elongation 2 b3319 5 ribosome(s)	995 h2o + 1 rib_70_elo1_b3319_5_cplx --> 995 EF-G.GDP + 995 EF-Tu.GDP + 105 ala1_tRNA + 5 ala2_tRNA + 70 arg1_tRNA + 20 asn1_tRNA + 60 asp1_tRNA + 5 fmet_tRNA + 40 gln1_tRNA + 10 gln2_tRNA + 60 glu1_tRNA + 65 gly1_tRNA + 1990 h + 15 hisR_tRNA + 40 ile1_tRNA + 85 leu1_tRNA + 5 leu2_tRNA + 5 leuZ_tRNA + 90 lys1_tRNA + 20 met1_tRNA + 5000 mg2 + 30 phe1_tRNA + 1990 pi + 25 pro1_tRNA + 1 rib_70_elo2_b3319_5_cplx + 15 ser1_tRNA + 20 ser2_tRNA + 25 serV_tRNA + 20 thr1_tRNA + 40 thr2_tRNA + 10 trpT_tRNA + 10 tyr1_tRNA + 40 val1_tRNA + 10 val2_tRNA + 55 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	1.66E+01	16.576	0	1.60E+01	15.972
tl_elo_b3320_12_rib1	Translation elongation 1 b3320 12 ribosome(s)	2496 EF-G.GTP + 228 EF-Tu.GTP.ala1-tRNA + 144 EF-Tu.GTP.arg1-tRNA + 96 EF-Tu.GTP.asn1-tRNA + 108 EF-Tu.GTP.asp1-tRNA + 96 EF-Tu.GTP.gln1-tRNA + 144 EF-Tu.GTP.glu1-tRNA + 312 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.hisR-tRNA + 96 EF-Tu.GTP.ile1-tRNA + 96 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 228 EF-Tu.GTP.lys1-tRNA + 36 EF-Tu.GTP.met1-tRNA + 96 EF-Tu.GTP.phe1-tRNA + 36 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 48 EF-Tu.GTP.ser2-tRNA + 48 EF-Tu.GTP.serV-tRNA + 120 EF-Tu.GTP.thr1-tRNA + 60 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.thrU-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 156 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val2-tRNA + 156 EF-Tu.GTP.val3-tRNA + 12480 mg2 + 1 rib_ini_b3320_12 --> 1 rib_70_elo1_b3320_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.38E+00	9.38E+00	0	6.91E+00	6.906667	0	6.91E+00	6.906667
tl_elo_b3320_12_rib2	Translation elongation 2 b3320 12 ribosome(s)	2484 h2o + 1 rib_70_elo1_b3320_12_cplx --> 2484 EF-G.GDP + 2484 EF-Tu.GDP + 216 ala1_tRNA + 144 arg1_tRNA + 96 asn1_tRNA + 108 asp1_tRNA + 12 fmet_tRNA + 96 gln1_tRNA + 144 glu1_tRNA + 312 gly1_tRNA + 4968 h + 36 hisR_tRNA + 96 ile1_tRNA + 96 leu1_tRNA + 12 leu2_tRNA + 12 leuU_tRNA + 12 leuZ_tRNA + 228 lys1_tRNA + 36 met1_tRNA + 12480 mg2 + 96 phe1_tRNA + 4968 pi + 36 pro1_tRNA + 12 pro2_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b3320_12_cplx + 12 ser1_tRNA + 48 ser2_tRNA + 48 serV_tRNA + 120 thr1_tRNA + 60 thr2_tRNA + 12 thrU_tRNA + 24 trpT_tRNA + 12 tyr1_tRNA + 156 val1_tRNA + 24 val2_tRNA + 156 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.38E+00	9.38E+00	0	6.91E+00	6.906667	0	6.91E+00	6.906667
tl_elo_b3320_1_rib1	Translation elongation 1 b3320 1 ribosome(s)	208 EF-G.GTP + 19 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 26 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 19 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 13 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 13 EF-Tu.GTP.val3-tRNA + 1040 mg2 + 1 rib_ini_b3320_1 --> 1 rib_70_elo1_b3320_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	6.88E+01	68.80163	0	2.48E+01	24.75491
tl_elo_b3320_1_rib2	Translation elongation 2 b3320 1 ribosome(s)	207 h2o + 1 rib_70_elo1_b3320_1_cplx --> 207 EF-G.GDP + 207 EF-Tu.GDP + 18 ala1_tRNA + 12 arg1_tRNA + 8 asn1_tRNA + 9 asp1_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 12 glu1_tRNA + 26 gly1_tRNA + 414 h + 3 hisR_tRNA + 8 ile1_tRNA + 8 leu1_tRNA + 1 leu2_tRNA + 1 leuU_tRNA + 1 leuZ_tRNA + 19 lys1_tRNA + 3 met1_tRNA + 1040 mg2 + 8 phe1_tRNA + 414 pi + 3 pro1_tRNA + 1 pro2_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3320_1_cplx + 1 ser1_tRNA + 4 ser2_tRNA + 4 serV_tRNA + 10 thr1_tRNA + 5 thr2_tRNA + 1 thrU_tRNA + 2 trpT_tRNA + 1 tyr1_tRNA + 13 val1_tRNA + 2 val2_tRNA + 13 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	6.88E+01	68.80163	0	2.48E+01	24.75491

tl_elo_b3320_6_rib1	Translation elongation 1 b3320 6 ribosome(s)	1248 EF-G.GTP + 114 EF-Tu.GTP.ala1-tRNA + 72 EF-Tu.GTP.arg1-tRNA + 48 EF-Tu.GTP.asn1-tRNA + 54 EF-Tu.GTP.asp1-tRNA + 48 EF-Tu.GTP.gln1-tRNA + 72 EF-Tu.GTP.glu1-tRNA + 156 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 48 EF-Tu.GTP.ile1-tRNA + 48 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 114 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 48 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.serV-tRNA + 60 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 78 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 78 EF-Tu.GTP.val3-tRNA + 6240 mg2 + 1 rib_ini_b3320_6 --> 1 rib_70_elo1_b3320_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3320_6_rib2	Translation elongation 2 b3320 6 ribosome(s)	1242 h2o + 1 rib_70_elo1_b3320_6_cplx --> 1242 EF-G.GDP + 1242 EF-Tu.GDP + 108 ala1_tRNA + 72 arg1_tRNA + 48 asn1_tRNA + 54 asp1_tRNA + 6 fmet_tRNA + 48 gln1_tRNA + 72 glu1_tRNA + 156 gly1_tRNA + 2484 h + 18 hisR_tRNA + 48 ile1_tRNA + 48 leu1_tRNA + 6 leu2_tRNA + 6 leuU_tRNA + 6 leuZ_tRNA + 114 lys1_tRNA + 18 met1_tRNA + 6240 mg2 + 48 phe1_tRNA + 2484 pi + 18 pro1_tRNA + 6 pro2_tRNA + 12 proM_tRNA + 1 rib_70_elo2_b3320_6_cplx + 6 ser1_tRNA + 24 ser2_tRNA + 24 serV_tRNA + 60 thr1_tRNA + 30 thr2_tRNA + 6 thrU_tRNA + 12 trpT_tRNA + 6 tyr1_tRNA + 78 val1_tRNA + 12 val2_tRNA + 78 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3321_1_rib1	Translation elongation 1 b3321 1 ribosome(s)	102 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 510 mg2 + 1 rib_ini_b3321_1 --> 1 rib_70_elo1_b3321_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3321_1_rib2	Translation elongation 2 b3321 1 ribosome(s)	101 h2o + 1 rib_70_elo1_b3321_1_cplx --> 101 EF-G.GDP + 101 EF-Tu.GDP + 7 ala1_tRNA + 2 ala2_tRNA + 11 arg1_tRNA + 1 argU_tRNA + 2 asn1_tRNA + 8 asp1_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 2 gln2_tRNA + 6 glu1_tRNA + 3 gly1_tRNA + 202 h + 3 hisR_tRNA + 9 ile1_tRNA + 9 leu1_tRNA + 1 leu2_tRNA + 5 lys1_tRNA + 1 met1_tRNA + 510 mg2 + 2 phe1_tRNA + 202 pi + 4 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3321_1_cplx + 1 ser1_tRNA + 1 serV_tRNA + 3 thr1_tRNA + 4 thr2_tRNA + 1 thrU_tRNA + 1 tyr1_tRNA + 2 val1_tRNA + 3 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3321_3_rib1	Translation elongation 1 b3321 3 ribosome(s)	306 EF-G.GTP + 21 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 33 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argU-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 24 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 27 EF-Tu.GTP.ile1-tRNA + 27 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 15 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1530 mg2 + 1 rib_ini_b3321_3 --> 1 rib_70_elo1_b3321_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3321_3_rib2	Translation elongation 2 b3321 3 ribosome(s)	303 h2o + 1 rib_70_elo1_b3321_3_cplx --> 303 EF-G.GDP + 303 EF-Tu.GDP + 21 ala1_tRNA + 6 ala2_tRNA + 33 arg1_tRNA + 3 argU_tRNA + 6 asn1_tRNA + 24 asp1_tRNA + 3 fmet_tRNA + 12 gln1_tRNA + 6 gln2_tRNA + 18 glu1_tRNA + 9 gly1_tRNA + 606 h + 9 hisR_tRNA + 27 ile1_tRNA + 27 leu1_tRNA + 3 leu2_tRNA + 15 lys1_tRNA + 3 met1_tRNA + 1530 mg2 + 6 phe1_tRNA + 606 pi + 12 pro1_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3321_3_cplx + 3 ser1_tRNA + 3 serV_tRNA + 9 thr1_tRNA + 12 thr2_tRNA + 3 thrU_tRNA + 3 tyr1_tRNA + 6 val1_tRNA + 9 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3321_6_rib1	Translation elongation 1 b3321 6 ribosome(s)	612 EF-G.GTP + 42 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 66 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argU-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 48 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 36 EF-Tu.GTP.glu1-tRNA + 24 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 54 EF-Tu.GTP.ile1-tRNA + 54 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 30 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.serV-tRNA + 18 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 24 EF-Tu.GTP.val3-tRNA + 3060 mg2 + 1 rib_ini_b3321_6 --> 1 rib_70_elo1_b3321_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_elo_b3321_6_rib2	Translation elongation 2 b3321 6 ribosome(s)	606 h2o + 1 rib_70_elo1_b3321_6_cplx --> 606 EF-G.GDP + 606 EF-Tu.GDP + 42 ala1_tRNA + 12 ala2_tRNA + 66 arg1_tRNA + 6 argU_tRNA + 12 asn1_tRNA + 48 asp1_tRNA + 6 fmet_tRNA + 24 gln1_tRNA + 12 gln2_tRNA + 36 glu1_tRNA + 18 gly1_tRNA + 1212 h + 18 hisR_tRNA + 54 ile1_tRNA + 54 leu1_tRNA + 6 leu2_tRNA + 30 lys1_tRNA + 6 met1_tRNA + 3060 mg2 + 12 phe1_tRNA + 1212 pi + 24 pro1_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b3321_6_cplx + 6 ser1_tRNA + 6 serV_tRNA + 18 thr1_tRNA + 24 thr2_tRNA + 6 thrU_tRNA + 6 tyr1_tRNA + 12 val1_tRNA + 18 val2_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333

tl_elo_b3339_11_rib1	Translation elongation 1 b3339 11 ribosome(s)	4323 EF-G.GTP + 286 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.ala2-tRNA + 253 EF-Tu.GTP.arg1-tRNA + 77 EF-Tu.GTP.asn1-tRNA + 264 EF-Tu.GTP.asp1-tRNA + 33 EF-Tu.GTP.cysT-tRNA + 88 EF-Tu.GTP.gln1-tRNA + 407 EF-Tu.GTP.glu1-tRNA + 440 EF-Tu.GTP.gly1-tRNA + 11 EF-Tu.GTP.glyU-tRNA + 121 EF-Tu.GTP.hisR-tRNA + 319 EF-Tu.GTP.ile1-tRNA + 297 EF-Tu.GTP.leu1-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 253 EF-Tu.GTP.lys1-tRNA + 110 EF-Tu.GTP.met1-tRNA + 154 EF-Tu.GTP.phe1-tRNA + 209 EF-Tu.GTP.pro1-tRNA + 11 EF-Tu.GTP.proM-tRNA + 33 EF-Tu.GTP.ser1-tRNA + 77 EF-Tu.GTP.ser2-tRNA + 176 EF-Tu.GTP.thr1-tRNA + 143 EF-Tu.GTP.thr2-tRNA + 11 EF-Tu.GTP.thrU-tRNA + 11 EF-Tu.GTP.trpT-tRNA + 110 EF-Tu.GTP.tyr1-tRNA + 143 EF-Tu.GTP.val1-tRNA + 264 EF-Tu.GTP.val3-tRNA + 21615 mg2 + 1 rib_ini_b3339_11 --> 1 rib_70_elo1_b3339_11_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_elo_b3339_11_rib2	Translation elongation 2 b3339 11 ribosome(s)	4312 h2o + 1 rib_70_elo1_b3339_11_cplx --> 4312 EF-G.GDP + 4312 EF-Tu.GDP + 286 ala1_tRNA + 11 ala2_tRNA + 253 arg1_tRNA + 77 asn1_tRNA + 264 asp1_tRNA + 33 cysT_tRNA + 11 fmet_tRNA + 88 gln1_tRNA + 407 glu1_tRNA + 429 gly1_tRNA + 11 glyU_tRNA + 8624 h + 121 hisR_tRNA + 319 ile1_tRNA + 297 leu1_tRNA + 11 leuU_tRNA + 253 lys1_tRNA + 110 met1_tRNA + 21615 mg2 + 154 phe1_tRNA + 8624 pi + 209 pro1_tRNA + 11 proM_tRNA + 1 rib_70_elo2_b3339_11_cplx + 33 ser1_tRNA + 77 ser2_tRNA + 176 thr1_tRNA + 143 thr2_tRNA + 11 thrU_tRNA + 11 trpT_tRNA + 110 tyr1_tRNA + 143 val1_tRNA + 264 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_elo_b3339_1_rib1	Translation elongation 1 b3339 1 ribosome(s)	393 EF-G.GTP + 26 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 23 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 24 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 37 EF-Tu.GTP.glu1-tRNA + 40 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 29 EF-Tu.GTP.ile1-tRNA + 27 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 23 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 14 EF-Tu.GTP.phe1-tRNA + 19 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 16 EF-Tu.GTP.thr1-tRNA + 13 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 13 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val3-tRNA + 1965 mg2 + 1 rib_ini_b3339_1 --> 1 rib_70_elo1_b3339_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_elo_b3339_1_rib2	Translation elongation 2 b3339 1 ribosome(s)	392 h2o + 1 rib_70_elo1_b3339_1_cplx --> 392 EF-G.GDP + 392 EF-Tu.GDP + 26 ala1_tRNA + 1 ala2_tRNA + 23 arg1_tRNA + 7 asn1_tRNA + 24 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 37 glu1_tRNA + 39 gly1_tRNA + 1 glyU_tRNA + 784 h + 11 hisR_tRNA + 29 ile1_tRNA + 27 leu1_tRNA + 1 leuU_tRNA + 23 lys1_tRNA + 10 met1_tRNA + 1965 mg2 + 14 phe1_tRNA + 784 pi + 19 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3339_1_cplx + 3 ser1_tRNA + 7 ser2_tRNA + 16 thr1_tRNA + 13 thr2_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 10 tyr1_tRNA + 13 val1_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_elo_b3339_23_rib1	Translation elongation 1 b3339 23 ribosome(s)	9039 EF-G.GTP + 598 EF-Tu.GTP.ala1-tRNA + 23 EF-Tu.GTP.ala2-tRNA + 529 EF-Tu.GTP.arg1-tRNA + 161 EF-Tu.GTP.asn1-tRNA + 552 EF-Tu.GTP.asp1-tRNA + 69 EF-Tu.GTP.cysT-tRNA + 184 EF-Tu.GTP.gln1-tRNA + 851 EF-Tu.GTP.glu1-tRNA + 920 EF-Tu.GTP.gly1-tRNA + 23 EF-Tu.GTP.glyU-tRNA + 253 EF-Tu.GTP.hisR-tRNA + 667 EF-Tu.GTP.ile1-tRNA + 621 EF-Tu.GTP.leu1-tRNA + 23 EF-Tu.GTP.leuU-tRNA + 529 EF-Tu.GTP.lys1-tRNA + 230 EF-Tu.GTP.met1-tRNA + 322 EF-Tu.GTP.phe1-tRNA + 437 EF-Tu.GTP.pro1-tRNA + 23 EF-Tu.GTP.proM-tRNA + 69 EF-Tu.GTP.ser1-tRNA + 161 EF-Tu.GTP.ser2-tRNA + 368 EF-Tu.GTP.thr1-tRNA + 299 EF-Tu.GTP.thr2-tRNA + 23 EF-Tu.GTP.thrU-tRNA + 23 EF-Tu.GTP.trpT-tRNA + 230 EF-Tu.GTP.tyr1-tRNA + 299 EF-Tu.GTP.val1-tRNA + 552 EF-Tu.GTP.val3-tRNA + 45195 mg2 + 1 rib_ini_b3339_23 --> 1 rib_70_elo1_b3339_23_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_elo_b3339_23_rib2	Translation elongation 2 b3339 23 ribosome(s)	9016 h2o + 1 rib_70_elo1_b3339_23_cplx --> 9016 EF-G.GDP + 9016 EF-Tu.GDP + 598 ala1_tRNA + 23 ala2_tRNA + 529 arg1_tRNA + 161 asn1_tRNA + 552 asp1_tRNA + 69 cysT_tRNA + 23 fmet_tRNA + 184 gln1_tRNA + 851 glu1_tRNA + 897 gly1_tRNA + 23 glyU_tRNA + 18032 h + 253 hisR_tRNA + 667 ile1_tRNA + 621 leu1_tRNA + 23 leuU_tRNA + 529 lys1_tRNA + 230 met1_tRNA + 45195 mg2 + 322 phe1_tRNA + 18032 pi + 437 pro1_tRNA + 23 proM_tRNA + 1 rib_70_elo2_b3339_23_cplx + 69 ser1_tRNA + 161 ser2_tRNA + 368 thr1_tRNA + 299 thr2_tRNA + 23 thrU_tRNA + 23 trpT_tRNA + 230 tyr1_tRNA + 299 val1_tRNA + 552 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_elo_b3340_1_rib1	Translation elongation 1 b3340 1 ribosome(s)	703 EF-G.GTP + 62 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 36 EF-Tu.GTP.arg1-tRNA + 27 EF-Tu.GTP.asn1-tRNA + 42 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 62 EF-Tu.GTP.glu1-tRNA + 57 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 50 EF-Tu.GTP.ile1-tRNA + 38 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 44 EF-Tu.GTP.lys1-tRNA + 22 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 27 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 15 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 21 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 19 EF-Tu.GTP.tyr1-tRNA + 22 EF-Tu.GTP.val1-tRNA + 38 EF-Tu.GTP.val3-tRNA + 3515 mg2 + 1 rib_ini_b3340_1 --> 1 rib_70_elo1_b3340_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.91E+01	79.05913	0	1.25E+01	12.458
tl_elo_b3340_1_rib2	Translation elongation 2 b3340 1 ribosome(s)	702 h2o + 1 rib_70_elo1_b3340_1_cplx --> 702 EF-G.GDP + 702 EF-Tu.GDP + 62 ala1_tRNA + 5 ala2_tRNA + 36 arg1_tRNA + 27 asn1_tRNA + 42 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 24 gln1_tRNA + 62 glu1_tRNA + 57 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 1404 h + 15 hisR_tRNA + 50 ile1_tRNA + 38 leu1_tRNA + 1 leu2_tRNA + 4 leuU_tRNA + 43 lys1_tRNA + 22 met1_tRNA + 3515 mg2 + 24 phe1_tRNA + 1404 pi + 27 pro1_tRNA + 3 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3340_1_cplx + 8 ser1_tRNA + 15 ser2_tRNA + 2 serT_tRNA + 4 serV_tRNA + 21 thr1_tRNA + 14 thr2_tRNA + 3 thrU_tRNA + 6 trpT_tRNA + 19 tyr1_tRNA + 22 val1_tRNA + 38 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.91E+01	79.05913	0	1.25E+01	12.458

tl_elo_b3340_20_rib1	Translation elongation 1 b3340 20 ribosome(s)	14060 EF-G.GTP + 1240 EF-Tu.GTP.ala1-tRNA + 100 EF-Tu.GTP.ala2-tRNA + 720 EF-Tu.GTP.arg1-tRNA + 540 EF-Tu.GTP.asn1-tRNA + 840 EF-Tu.GTP.asp1-tRNA + 60 EF-Tu.GTP.cysT-tRNA + 480 EF-Tu.GTP.gln1-tRNA + 1240 EF-Tu.GTP.glu1-tRNA + 1140 EF-Tu.GTP.gly1-tRNA + 20 EF-Tu.GTP.glyT-tRNA + 20 EF-Tu.GTP.glyU-tRNA + 300 EF-Tu.GTP.hisR-tRNA + 1000 EF-Tu.GTP.ile1-tRNA + 760 EF-Tu.GTP.leu1-tRNA + 20 EF-Tu.GTP.leu2-tRNA + 80 EF-Tu.GTP.leuU-tRNA + 880 EF-Tu.GTP.lys1-tRNA + 440 EF-Tu.GTP.met1-tRNA + 480 EF-Tu.GTP.phe1-tRNA + 540 EF-Tu.GTP.pro1-tRNA + 60 EF-Tu.GTP.pro2-tRNA + 20 EF-Tu.GTP.proL-tRNA + 40 EF-Tu.GTP.proM-tRNA + 160 EF-Tu.GTP.ser1-tRNA + 300 EF-Tu.GTP.ser2-tRNA + 40 EF-Tu.GTP.serT-tRNA + 80 EF-Tu.GTP.serV-tRNA + 420 EF-Tu.GTP.thr1-tRNA + 280 EF-Tu.GTP.thr2-tRNA + 60 EF-Tu.GTP.thrU-tRNA + 120 EF-Tu.GTP.trpT-tRNA + 380 EF-Tu.GTP.tyr1-tRNA + 440 EF-Tu.GTP.val1-tRNA + 760 EF-Tu.GTP.val3-tRNA + 70300 mg2 + 1 rib_ini_b3340_20 --> 1 rib_70_elo1_b3340_20_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.91E+01	79.05913	0	1.25E+01	12.458
tl_elo_b3340_20_rib2	Translation elongation 2 b3340 20 ribosome(s)	14040 h2o + 1 rib_70_elo1_b3340_20_cplx --> 14040 EF-G.GDP + 14040 EF-Tu.GDP + 1240 ala1_tRNA + 100 ala2_tRNA + 720 arg1_tRNA + 540 asn1_tRNA + 840 asp1_tRNA + 60 cysT_tRNA + 20 fmet_tRNA + 480 gln1_tRNA + 1240 glu1_tRNA + 1140 gly1_tRNA + 20 glyT_tRNA + 20 glyU_tRNA + 28080 h + 300 hisR_tRNA + 1000 ile1_tRNA + 760 leu1_tRNA + 20 leu2_tRNA + 80 leuU_tRNA + 860 lys1_tRNA + 440 met1_tRNA + 70300 mg2 + 480 phe1_tRNA + 28080 pi + 540 pro1_tRNA + 60 pro2_tRNA + 20 proL_tRNA + 40 proM_tRNA + 1 rib_70_elo2_b3340_20_cplx + 160 ser1_tRNA + 300 ser2_tRNA + 40 serT_tRNA + 80 serV_tRNA + 420 thr1_tRNA + 280 thr2_tRNA + 60 thrU_tRNA + 120 trpT_tRNA + 380 tyr1_tRNA + 440 val1_tRNA + 760 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.91E+01	79.05913	0	1.25E+01	12.458
tl_elo_b3340_41_rib1	Translation elongation 1 b3340 41 ribosome(s)	28823 EF-G.GTP + 2542 EF-Tu.GTP.ala1-tRNA + 205 EF-Tu.GTP.ala2-tRNA + 1476 EF-Tu.GTP.arg1-tRNA + 1107 EF-Tu.GTP.asn1-tRNA + 1722 EF-Tu.GTP.asp1-tRNA + 123 EF-Tu.GTP.cysT-tRNA + 984 EF-Tu.GTP.gln1-tRNA + 2542 EF-Tu.GTP.glu1-tRNA + 2337 EF-Tu.GTP.gly1-tRNA + 41 EF-Tu.GTP.glyT-tRNA + 41 EF-Tu.GTP.glyU-tRNA + 615 EF-Tu.GTP.hisR-tRNA + 2050 EF-Tu.GTP.ile1-tRNA + 1558 EF-Tu.GTP.leu1-tRNA + 41 EF-Tu.GTP.leu2-tRNA + 164 EF-Tu.GTP.leuU-tRNA + 1804 EF-Tu.GTP.lys1-tRNA + 902 EF-Tu.GTP.met1-tRNA + 984 EF-Tu.GTP.phe1-tRNA + 1107 EF-Tu.GTP.pro1-tRNA + 123 EF-Tu.GTP.pro2-tRNA + 41 EF-Tu.GTP.proL-tRNA + 82 EF-Tu.GTP.proM-tRNA + 328 EF-Tu.GTP.ser1-tRNA + 615 EF-Tu.GTP.ser2-tRNA + 82 EF-Tu.GTP.serT-tRNA + 164 EF-Tu.GTP.serV-tRNA + 861 EF-Tu.GTP.thr1-tRNA + 574 EF-Tu.GTP.thr2-tRNA + 123 EF-Tu.GTP.thrU-tRNA + 246 EF-Tu.GTP.trpT-tRNA + 779 EF-Tu.GTP.tyr1-tRNA + 902 EF-Tu.GTP.val1-tRNA + 1558 EF-Tu.GTP.val3-tRNA + 144115 mg2 + 1 rib_ini_b3340_41 --> 1 rib_70_elo1_b3340_41_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.66E+01	76.60959	0	1.25E+01	12.458
tl_elo_b3340_41_rib2	Translation elongation 2 b3340 41 ribosome(s)	28782 h2o + 1 rib_70_elo1_b3340_41_cplx --> 28782 EF-G.GDP + 28782 EF-Tu.GDP + 2542 ala1_tRNA + 205 ala2_tRNA + 1476 arg1_tRNA + 1107 asn1_tRNA + 1722 asp1_tRNA + 123 cysT_tRNA + 41 fmet_tRNA + 984 gln1_tRNA + 2542 glu1_tRNA + 2337 gly1_tRNA + 41 glyT_tRNA + 41 glyU_tRNA + 57564 h + 615 hisR_tRNA + 2050 ile1_tRNA + 1558 leu1_tRNA + 41 leu2_tRNA + 164 leuU_tRNA + 1763 lys1_tRNA + 902 met1_tRNA + 144115 mg2 + 984 phe1_tRNA + 57564 pi + 1107 pro1_tRNA + 123 pro2_tRNA + 41 proL_tRNA + 82 proM_tRNA + 1 rib_70_elo2_b3340_41_cplx + 328 ser1_tRNA + 615 ser2_tRNA + 82 serT_tRNA + 164 serV_tRNA + 861 thr1_tRNA + 574 thr2_tRNA + 123 thrU_tRNA + 246 trpT_tRNA + 779 tyr1_tRNA + 902 val1_tRNA + 1558 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.66E+01	76.60959	0	1.25E+01	12.458
tl_elo_b3341_10_rib1	Translation elongation 1 b3341 10 ribosome(s)	1780 EF-G.GTP + 200 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 180 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argX-tRNA + 70 EF-Tu.GTP.asn1-tRNA + 50 EF-Tu.GTP.asp1-tRNA + 50 EF-Tu.GTP.gln1-tRNA + 140 EF-Tu.GTP.glu1-tRNA + 90 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 30 EF-Tu.GTP.hisR-tRNA + 50 EF-Tu.GTP.ile1-tRNA + 100 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 30 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 140 EF-Tu.GTP.lys1-tRNA + 40 EF-Tu.GTP.met1-tRNA + 50 EF-Tu.GTP.phe1-tRNA + 40 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.proL-tRNA + 20 EF-Tu.GTP.proM-tRNA + 30 EF-Tu.GTP.ser1-tRNA + 70 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.serT-tRNA + 40 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 40 EF-Tu.GTP.thr2-tRNA + 20 EF-Tu.GTP.trpT-tRNA + 40 EF-Tu.GTP.tyr1-tRNA + 70 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 70 EF-Tu.GTP.val3-tRNA + 8900 mg2 + 1 rib_ini_b3341_10 --> 1 rib_70_elo1_b3341_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_elo_b3341_10_rib2	Translation elongation 2 b3341 10 ribosome(s)	1770 h2o + 1 rib_70_elo1_b3341_10_cplx --> 1770 EF-G.GDP + 1770 EF-Tu.GDP + 200 ala1_tRNA + 20 ala2_tRNA + 180 arg1_tRNA + 10 argX_tRNA + 60 asn1_tRNA + 50 asp1_tRNA + 10 fmet_tRNA + 50 gln1_tRNA + 140 glu1_tRNA + 90 gly1_tRNA + 10 glyT_tRNA + 3540 h + 30 hisR_tRNA + 50 ile1_tRNA + 100 leu1_tRNA + 10 leu2_tRNA + 30 leuU_tRNA + 20 leuZ_tRNA + 140 lys1_tRNA + 40 met1_tRNA + 8900 mg2 + 50 phe1_tRNA + 3540 pi + 40 pro1_tRNA + 10 proL_tRNA + 20 proM_tRNA + 1 rib_70_elo2_b3341_10_cplx + 30 ser1_tRNA + 70 ser2_tRNA + 10 serT_tRNA + 40 serV_tRNA + 10 thr1_tRNA + 40 thr2_tRNA + 20 trpT_tRNA + 40 tyr1_tRNA + 70 val1_tRNA + 20 val2_tRNA + 70 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288

tl_elo_b3341_1_rib1	Translation elongation 1 b3341 1 ribosome(s)	178 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 5 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 890 mg2 + 1 rib_ini_b3341_1 --> 1 rib_70_elo1_b3341_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.67E+01	5.67E+01	0	7.18E+01	71.82262	0	2.73E+01	27.27889
tl_elo_b3341_1_rib2	Translation elongation 2 b3341 1 ribosome(s)	177 h2o + 1 rib_70_elo1_b3341_1_cplx --> 177 EF-G.GDP + 177 EF-Tu.GDP + 20 ala1_tRNA + 2 ala2_tRNA + 18 arg1_tRNA + 1 argX_tRNA + 6 asn1_tRNA + 5 asp1_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 14 glu1_tRNA + 9 gly1_tRNA + 1 glyT_tRNA + 354 h + 3 hisR_tRNA + 5 ile1_tRNA + 10 leu1_tRNA + 1 leu2_tRNA + 3 leuU_tRNA + 2 leuZ_tRNA + 14 lys1_tRNA + 4 met1_tRNA + 890 mg2 + 5 phe1_tRNA + 354 pi + 4 pro1_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3341_1_cplx + 3 ser1_tRNA + 7 ser2_tRNA + 1 serT_tRNA + 4 serV_tRNA + 1 thr1_tRNA + 4 thr2_tRNA + 2 trpT_tRNA + 4 tyr1_tRNA + 7 val1_tRNA + 2 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.67E+01	5.67E+01	0	7.18E+01	71.82262	0	2.73E+01	27.27889
tl_elo_b3341_5_rib1	Translation elongation 1 b3341 5 ribosome(s)	890 EF-G.GTP + 100 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 90 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argX-tRNA + 35 EF-Tu.GTP.asn1-tRNA + 25 EF-Tu.GTP.asp1-tRNA + 25 EF-Tu.GTP.gln1-tRNA + 70 EF-Tu.GTP.glu1-tRNA + 45 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 25 EF-Tu.GTP.ile1-tRNA + 50 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 15 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 70 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 25 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.proM-tRNA + 15 EF-Tu.GTP.ser1-tRNA + 35 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serT-tRNA + 20 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 20 EF-Tu.GTP.tyr1-tRNA + 35 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 35 EF-Tu.GTP.val3-tRNA + 4450 mg2 + 1 rib_ini_b3341_5 --> 1 rib_70_elo1_b3341_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3341_5_rib2	Translation elongation 2 b3341 5 ribosome(s)	885 h2o + 1 rib_70_elo1_b3341_5_cplx --> 885 EF-G.GDP + 885 EF-Tu.GDP + 100 ala1_tRNA + 10 ala2_tRNA + 90 arg1_tRNA + 5 argX_tRNA + 30 asn1_tRNA + 25 asp1_tRNA + 5 fmet_tRNA + 25 gln1_tRNA + 70 glu1_tRNA + 45 gly1_tRNA + 5 glyT_tRNA + 1770 h + 15 hisR_tRNA + 25 ile1_tRNA + 50 leu1_tRNA + 5 leu2_tRNA + 15 leuU_tRNA + 10 leuZ_tRNA + 70 lys1_tRNA + 20 met1_tRNA + 4450 mg2 + 25 phe1_tRNA + 1770 pi + 20 pro1_tRNA + 5 proL_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b3341_5_cplx + 15 ser1_tRNA + 35 ser2_tRNA + 5 serT_tRNA + 20 serV_tRNA + 5 thr1_tRNA + 20 thr2_tRNA + 10 trpT_tRNA + 20 tyr1_tRNA + 35 val1_tRNA + 10 val2_tRNA + 35 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_elo_b3342_1_rib1	Translation elongation 1 b3342 1 ribosome(s)	123 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 4 EF-Tu.GTP.glu1-tRNA + 11 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 3 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val3-tRNA + 615 mg2 + 1 rib_ini_b3342_1 --> 1 rib_70_elo1_b3342_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.32E+01	9.32E+01	0	8.29E+01	82.88	0	7.36E+01	73.567
tl_elo_b3342_1_rib2	Translation elongation 2 b3342 1 ribosome(s)	122 h2o + 1 rib_70_elo1_b3342_1_cplx --> 122 EF-G.GDP + 122 EF-Tu.GDP + 8 ala1_tRNA + 15 arg1_tRNA + 5 asn1_tRNA + 3 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 1 gln2_tRNA + 4 glu1_tRNA + 11 gly1_tRNA + 244 h + 3 hisR_tRNA + 3 ile1_tRNA + 6 leu1_tRNA + 2 leuU_tRNA + 13 lys1_tRNA + 615 mg2 + 1 phe1_tRNA + 244 pi + 3 pro1_tRNA + 3 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3342_1_cplx + 5 ser1_tRNA + 1 serV_tRNA + 2 thr1_tRNA + 5 thr2_tRNA + 1 thrU_tRNA + 4 tyr1_tRNA + 9 val1_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.32E+01	9.32E+01	0	8.29E+01	82.88	0	7.36E+01	73.567
tl_elo_b3342_3_rib1	Translation elongation 1 b3342 3 ribosome(s)	369 EF-G.GTP + 27 EF-Tu.GTP.ala1-tRNA + 45 EF-Tu.GTP.arg1-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 9 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 33 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 39 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 15 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 15 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 27 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val3-tRNA + 1845 mg2 + 1 rib_ini_b3342_3 --> 1 rib_70_elo1_b3342_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3342_3_rib2	Translation elongation 2 b3342 3 ribosome(s)	366 h2o + 1 rib_70_elo1_b3342_3_cplx --> 366 EF-G.GDP + 366 EF-Tu.GDP + 24 ala1_tRNA + 45 arg1_tRNA + 15 asn1_tRNA + 9 asp1_tRNA + 12 cysT_tRNA + 3 fmet_tRNA + 9 gln1_tRNA + 3 gln2_tRNA + 12 glu1_tRNA + 33 gly1_tRNA + 732 h + 9 hisR_tRNA + 9 ile1_tRNA + 18 leu1_tRNA + 6 leuU_tRNA + 39 lys1_tRNA + 1845 mg2 + 3 phe1_tRNA + 732 pi + 9 pro1_tRNA + 9 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3342_3_cplx + 15 ser1_tRNA + 3 serV_tRNA + 6 thr1_tRNA + 15 thr2_tRNA + 3 thrU_tRNA + 12 tyr1_tRNA + 27 val1_tRNA + 18 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667

tl_elo_b3342_7_rib1	Translation elongation 1 b3342 7 ribosome(s)	861 EF-G.GTP + 63 EF-Tu.GTP.ala1-tRNA + 105 EF-Tu.GTP.arg1-tRNA + 35 EF-Tu.GTP.asn1-tRNA + 21 EF-Tu.GTP.asp1-tRNA + 28 EF-Tu.GTP.cysT-tRNA + 21 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 28 EF-Tu.GTP.glu1-tRNA + 77 EF-Tu.GTP.gly1-tRNA + 21 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 42 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leuU-tRNA + 91 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 21 EF-Tu.GTP.pro1-tRNA + 21 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proM-tRNA + 35 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 35 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 28 EF-Tu.GTP.tyr1-tRNA + 63 EF-Tu.GTP.val1-tRNA + 42 EF-Tu.GTP.val3-tRNA + 4305 mg2 + 1 rib_ini_b3342_7 --> 1 rib_70_elo1_b3342_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_elo_b3342_7_rib2	Translation elongation 2 b3342 7 ribosome(s)	854 h2o + 1 rib_70_elo1_b3342_7_cplx --> 854 EF-G.GDP + 854 EF-Tu.GDP + 56 ala1_tRNA + 105 arg1_tRNA + 35 asn1_tRNA + 21 asp1_tRNA + 28 cysT_tRNA + 7 fmet_tRNA + 21 gln1_tRNA + 7 gln2_tRNA + 28 glu1_tRNA + 77 gly1_tRNA + 1708 h + 21 hisR_tRNA + 21 ile1_tRNA + 42 leu1_tRNA + 14 leuU_tRNA + 91 lys1_tRNA + 4305 mg2 + 7 phe1_tRNA + 1708 pi + 21 pro1_tRNA + 21 pro2_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b3342_7_cplx + 35 ser1_tRNA + 7 serV_tRNA + 14 thr1_tRNA + 35 thr2_tRNA + 7 thrU_tRNA + 28 tyr1_tRNA + 63 val1_tRNA + 42 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_elo_b3343_1_rib1	Translation elongation 1 b3343 1 ribosome(s)	94 EF-G.GTP + 3 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 5 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 4 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 2 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 1 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 470 mg2 + 1 rib_ini_b3343_1 --> 1 rib_70_elo1_b3343_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.48E+01	14.812
tl_elo_b3343_1_rib2	Translation elongation 2 b3343 1 ribosome(s)	93 h2o + 1 rib_70_elo1_b3343_1_cplx --> 93 EF-G.GDP + 93 EF-Tu.GDP + 3 ala1_tRNA + 5 ala2_tRNA + 5 arg1_tRNA + 1 argU_tRNA + 4 asn1_tRNA + 8 asp1_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 2 gln2_tRNA + 4 glu1_tRNA + 4 gly1_tRNA + 1 glyT_tRNA + 186 h + 3 hisR_tRNA + 6 ile1_tRNA + 8 leu1_tRNA + 2 leu2_tRNA + 5 leuU_tRNA + 1 leuW_tRNA + 2 leuZ_tRNA + 2 lys1_tRNA + 1 met1_tRNA + 470 mg2 + 2 phe1_tRNA + 186 pi + 3 proL_tRNA + 1 rib_70_elo2_b3343_1_cplx + 1 ser3_tRNA + 1 serT_tRNA + 3 serV_tRNA + 3 thr2_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 3 tyr1_tRNA + 1 val1_tRNA + 2 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.48E+01	14.812
tl_elo_b3343_2_rib1	Translation elongation 1 b3343 2 ribosome(s)	188 EF-G.GTP + 6 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argU-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 16 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 940 mg2 + 1 rib_ini_b3343_2 --> 1 rib_70_elo1_b3343_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.48E+01	14.812
tl_elo_b3343_2_rib2	Translation elongation 2 b3343 2 ribosome(s)	186 h2o + 1 rib_70_elo1_b3343_2_cplx --> 186 EF-G.GDP + 186 EF-Tu.GDP + 6 ala1_tRNA + 10 ala2_tRNA + 10 arg1_tRNA + 2 argU_tRNA + 8 asn1_tRNA + 16 asp1_tRNA + 2 fmet_tRNA + 2 gln1_tRNA + 4 gln2_tRNA + 8 glu1_tRNA + 8 gly1_tRNA + 2 glyT_tRNA + 372 h + 6 hisR_tRNA + 12 ile1_tRNA + 16 leu1_tRNA + 4 leu2_tRNA + 10 leuU_tRNA + 2 leuW_tRNA + 4 leuZ_tRNA + 4 lys1_tRNA + 2 met1_tRNA + 940 mg2 + 4 phe1_tRNA + 372 pi + 6 proL_tRNA + 1 rib_70_elo2_b3343_2_cplx + 2 ser3_tRNA + 2 serT_tRNA + 6 serV_tRNA + 6 thr2_tRNA + 4 thr3_tRNA + 2 thrU_tRNA + 2 trpT_tRNA + 6 tyr1_tRNA + 2 val1_tRNA + 4 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.48E+01	14.812
tl_elo_b3343_5_rib1	Translation elongation 1 b3343 5 ribosome(s)	470 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 25 EF-Tu.GTP.ala2-tRNA + 25 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argU-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 40 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 30 EF-Tu.GTP.ile1-tRNA + 40 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 25 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuW-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 15 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serT-tRNA + 15 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 2350 mg2 + 1 rib_ini_b3343_5 --> 1 rib_70_elo1_b3343_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.34E+01	13.4148
tl_elo_b3343_5_rib2	Translation elongation 2 b3343 5 ribosome(s)	465 h2o + 1 rib_70_elo1_b3343_5_cplx --> 465 EF-G.GDP + 465 EF-Tu.GDP + 15 ala1_tRNA + 25 ala2_tRNA + 25 arg1_tRNA + 5 argU_tRNA + 20 asn1_tRNA + 40 asp1_tRNA + 5 fmet_tRNA + 5 gln1_tRNA + 10 gln2_tRNA + 20 glu1_tRNA + 20 gly1_tRNA + 5 glyT_tRNA + 930 h + 15 hisR_tRNA + 30 ile1_tRNA + 40 leu1_tRNA + 10 leu2_tRNA + 25 leuU_tRNA + 5 leuW_tRNA + 10 leuZ_tRNA + 10 lys1_tRNA + 5 met1_tRNA + 2350 mg2 + 10 phe1_tRNA + 930 pi + 15 proL_tRNA + 1 rib_70_elo2_b3343_5_cplx + 5 ser3_tRNA + 5 serT_tRNA + 15 serV_tRNA + 15 thr2_tRNA + 10 thr3_tRNA + 5 thrU_tRNA + 5 trpT_tRNA + 15 tyr1_tRNA + 5 val1_tRNA + 10 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.34E+01	13.4148

tl_elo_b3344_1_rib1	Translation elongation 1 b3344 1 ribosome(s)	118 EF-G.GTP + 13 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.argX-tRNA + 1 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 7 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 3 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 1 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 590 mg2 + 1 rib_ini_b3344_1 --> 1 rib_70_elo1_b3344_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.76E+01	8.76E+01	0	1.44E+02	144.4153	0	1.34E+01	13.412
tl_elo_b3344_1_rib2	Translation elongation 2 b3344 1 ribosome(s)	117 h2o + 1 rib_70_elo1_b3344_1_cplx --> 117 EF-G.GDP + 117 EF-Tu.GDP + 13 ala1_tRNA + 5 ala2_tRNA + 6 arg1_tRNA + 1 argW_tRNA + 1 argX_tRNA + 1 asn1_tRNA + 10 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 1 gln2_tRNA + 6 glu1_tRNA + 5 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 234 h + 1 hisR_tRNA + 4 ile1_tRNA + 1 ile2_tRNA + 7 leu1_tRNA + 3 leu2_tRNA + 2 leuU_tRNA + 5 leuZ_tRNA + 3 lys1_tRNA + 590 mg2 + 7 phe1_tRNA + 234 pi + 2 pro1_tRNA + 1 pro2_tRNA + 2 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3344_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 1 serT_tRNA + 4 thr2_tRNA + 1 thr3_tRNA + 2 thrU_tRNA + 1 trpT_tRNA + 3 tyr1_tRNA + 1 val1_tRNA + 2 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.76E+01	8.76E+01	0	1.44E+02	144.4153	0	1.34E+01	13.412
tl_elo_b3344_3_rib1	Translation elongation 1 b3344 3 ribosome(s)	354 EF-G.GTP + 39 EF-Tu.GTP.ala1-tRNA + 15 EF-Tu.GTP.ala2-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argW-tRNA + 3 EF-Tu.GTP.argX-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 30 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 9 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 21 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 15 EF-Tu.GTP.leuZ-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serT-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 15 EF-Tu.GTP.val3-tRNA + 1770 mg2 + 1 rib_ini_b3344_3 --> 1 rib_70_elo1_b3344_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.76E+01	8.76E+01	0	1.44E+02	144.4153	0	1.34E+01	13.412
tl_elo_b3344_3_rib2	Translation elongation 2 b3344 3 ribosome(s)	351 h2o + 1 rib_70_elo1_b3344_3_cplx --> 351 EF-G.GDP + 351 EF-Tu.GDP + 39 ala1_tRNA + 15 ala2_tRNA + 18 arg1_tRNA + 3 argW_tRNA + 3 argX_tRNA + 3 asn1_tRNA + 30 asp1_tRNA + 6 cysT_tRNA + 3 fmet_tRNA + 9 gln1_tRNA + 3 gln2_tRNA + 18 glu1_tRNA + 15 gly1_tRNA + 3 glyT_tRNA + 3 glyU_tRNA + 702 h + 3 hisR_tRNA + 12 ile1_tRNA + 3 ile2_tRNA + 21 leu1_tRNA + 9 leu2_tRNA + 6 leuU_tRNA + 15 leuZ_tRNA + 9 lys1_tRNA + 1770 mg2 + 21 phe1_tRNA + 702 pi + 6 pro1_tRNA + 3 pro2_tRNA + 6 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3344_3_cplx + 3 ser1_tRNA + 3 ser2_tRNA + 3 serT_tRNA + 12 thr2_tRNA + 3 thr3_tRNA + 6 thrU_tRNA + 3 trpT_tRNA + 9 tyr1_tRNA + 3 val1_tRNA + 6 val2_tRNA + 15 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.76E+01	8.76E+01	0	1.44E+02	144.4153	0	1.34E+01	13.412
tl_elo_b3344_7_rib1	Translation elongation 1 b3344 7 ribosome(s)	826 EF-G.GTP + 91 EF-Tu.GTP.ala1-tRNA + 35 EF-Tu.GTP.ala2-tRNA + 42 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argW-tRNA + 7 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 70 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.cysT-tRNA + 21 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 42 EF-Tu.GTP.glu1-tRNA + 35 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyT-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 28 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.ile2-tRNA + 49 EF-Tu.GTP.leu1-tRNA + 21 EF-Tu.GTP.leu2-tRNA + 14 EF-Tu.GTP.leuU-tRNA + 35 EF-Tu.GTP.leuZ-tRNA + 21 EF-Tu.GTP.lys1-tRNA + 56 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proL-tRNA + 7 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.serT-tRNA + 28 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.thrU-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 21 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 35 EF-Tu.GTP.val3-tRNA + 4130 mg2 + 1 rib_ini_b3344_7 --> 1 rib_70_elo1_b3344_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	9.97E+01	99.66022	0	9.58E+00	9.582
tl_elo_b3344_7_rib2	Translation elongation 2 b3344 7 ribosome(s)	819 h2o + 1 rib_70_elo1_b3344_7_cplx --> 819 EF-G.GDP + 819 EF-Tu.GDP + 91 ala1_tRNA + 35 ala2_tRNA + 42 arg1_tRNA + 7 argW_tRNA + 7 argX_tRNA + 7 asn1_tRNA + 70 asp1_tRNA + 14 cysT_tRNA + 7 fmet_tRNA + 21 gln1_tRNA + 7 gln2_tRNA + 42 glu1_tRNA + 35 gly1_tRNA + 7 glyT_tRNA + 7 glyU_tRNA + 1638 h + 7 hisR_tRNA + 28 ile1_tRNA + 7 ile2_tRNA + 49 leu1_tRNA + 21 leu2_tRNA + 14 leuU_tRNA + 35 leuZ_tRNA + 21 lys1_tRNA + 4130 mg2 + 49 phe1_tRNA + 1638 pi + 14 pro1_tRNA + 7 pro2_tRNA + 14 proL_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b3344_7_cplx + 7 ser1_tRNA + 7 ser2_tRNA + 7 serT_tRNA + 28 thr2_tRNA + 7 thr3_tRNA + 14 thrU_tRNA + 7 trpT_tRNA + 21 tyr1_tRNA + 7 val1_tRNA + 14 val2_tRNA + 35 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	9.97E+01	99.66022	0	9.58E+00	9.582

tl_elo_b3345_1_rib1	Translation elongation 1 b3345 1 ribosome(s)	127 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 3 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argW-tRNA + 2 EF-Tu.GTP.argX-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 2 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 7 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 635 mg2 + 1 rib_ini_b3345_1 --> 1 rib_70_elo1_b3345_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.37E+01	8.37E+01	0	1.41E+02	140.5853	0	9.58E+00	9.582
tl_elo_b3345_1_rib2	Translation elongation 2 b3345 1 ribosome(s)	126 h2o + 1 rib_70_elo1_b3345_1_cplx --> 126 EF-G.GDP + 126 EF-Tu.GDP + 16 ala1_tRNA + 4 ala2_tRNA + 3 arg1_tRNA + 1 argU_tRNA + 1 argW_tRNA + 2 argX_tRNA + 5 asn1_tRNA + 5 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 5 gln2_tRNA + 6 glu1_tRNA + 4 gly1_tRNA + 3 glyT_tRNA + 4 glyU_tRNA + 252 h + 2 hisR_tRNA + 2 ile1_tRNA + 1 ile2_tRNA + 7 leu1_tRNA + 1 leu2_tRNA + 3 leuU_tRNA + 3 leuZ_tRNA + 635 mg2 + 7 phe1_tRNA + 252 pi + 1 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3345_1_cplx + 1 ser2_tRNA + 2 ser3_tRNA + 1 serT_tRNA + 6 serV_tRNA + 4 thr1_tRNA + 2 thr3_tRNA + 1 trpT_tRNA + 3 tyr1_tRNA + 7 val1_tRNA + 2 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.37E+01	8.37E+01	0	1.41E+02	140.5853	0	9.58E+00	9.582
tl_elo_b3345_3_rib1	Translation elongation 1 b3345 3 ribosome(s)	381 EF-G.GTP + 48 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 9 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argU-tRNA + 3 EF-Tu.GTP.argW-tRNA + 6 EF-Tu.GTP.argX-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 18 EF-Tu.GTP.gln1-tRNA + 15 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 21 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuZ-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 18 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 21 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1905 mg2 + 1 rib_ini_b3345_3 --> 1 rib_70_elo1_b3345_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.37E+01	8.37E+01	0	1.41E+02	140.5853	0	9.58E+00	9.582
tl_elo_b3345_3_rib2	Translation elongation 2 b3345 3 ribosome(s)	378 h2o + 1 rib_70_elo1_b3345_3_cplx --> 378 EF-G.GDP + 378 EF-Tu.GDP + 48 ala1_tRNA + 12 ala2_tRNA + 9 arg1_tRNA + 3 argU_tRNA + 3 argW_tRNA + 6 argX_tRNA + 15 asn1_tRNA + 15 asp1_tRNA + 6 cysT_tRNA + 3 fmet_tRNA + 18 gln1_tRNA + 15 gln2_tRNA + 18 glu1_tRNA + 12 gly1_tRNA + 9 glyT_tRNA + 12 glyU_tRNA + 756 h + 6 hisR_tRNA + 6 ile1_tRNA + 3 ile2_tRNA + 21 leu1_tRNA + 3 leu2_tRNA + 9 leuU_tRNA + 9 leuZ_tRNA + 1905 mg2 + 21 phe1_tRNA + 756 pi + 3 pro1_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3345_3_cplx + 3 ser2_tRNA + 6 ser3_tRNA + 3 serT_tRNA + 18 serV_tRNA + 12 thr1_tRNA + 6 thr3_tRNA + 3 trpT_tRNA + 9 tyr1_tRNA + 21 val1_tRNA + 6 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.37E+01	8.37E+01	0	1.41E+02	140.5853	0	9.58E+00	9.582
tl_elo_b3345_7_rib1	Translation elongation 1 b3345 7 ribosome(s)	889 EF-G.GTP + 112 EF-Tu.GTP.ala1-tRNA + 28 EF-Tu.GTP.ala2-tRNA + 21 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argU-tRNA + 7 EF-Tu.GTP.argW-tRNA + 14 EF-Tu.GTP.argX-tRNA + 35 EF-Tu.GTP.asn1-tRNA + 35 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.cysT-tRNA + 42 EF-Tu.GTP.gln1-tRNA + 35 EF-Tu.GTP.gln2-tRNA + 42 EF-Tu.GTP.glu1-tRNA + 28 EF-Tu.GTP.gly1-tRNA + 21 EF-Tu.GTP.glyT-tRNA + 28 EF-Tu.GTP.glyU-tRNA + 14 EF-Tu.GTP.hisR-tRNA + 14 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.ile2-tRNA + 49 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.leu2-tRNA + 21 EF-Tu.GTP.leuU-tRNA + 21 EF-Tu.GTP.leuZ-tRNA + 56 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 14 EF-Tu.GTP.ser3-tRNA + 7 EF-Tu.GTP.serT-tRNA + 42 EF-Tu.GTP.serV-tRNA + 28 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 21 EF-Tu.GTP.tyr1-tRNA + 49 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 14 EF-Tu.GTP.val3-tRNA + 4445 mg2 + 1 rib_ini_b3345_7 --> 1 rib_70_elo1_b3345_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	9.97E+01	99.66022	0	9.58E+00	9.582
tl_elo_b3345_7_rib2	Translation elongation 2 b3345 7 ribosome(s)	882 h2o + 1 rib_70_elo1_b3345_7_cplx --> 882 EF-G.GDP + 882 EF-Tu.GDP + 112 ala1_tRNA + 28 ala2_tRNA + 21 arg1_tRNA + 7 argU_tRNA + 7 argW_tRNA + 14 argX_tRNA + 35 asn1_tRNA + 35 asp1_tRNA + 14 cysT_tRNA + 7 fmet_tRNA + 42 gln1_tRNA + 35 gln2_tRNA + 42 glu1_tRNA + 28 gly1_tRNA + 21 glyT_tRNA + 28 glyU_tRNA + 1764 h + 14 hisR_tRNA + 14 ile1_tRNA + 7 ile2_tRNA + 49 leu1_tRNA + 7 leu2_tRNA + 21 leuU_tRNA + 21 leuZ_tRNA + 4445 mg2 + 49 phe1_tRNA + 1764 pi + 7 pro1_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b3345_7_cplx + 7 ser2_tRNA + 14 ser3_tRNA + 7 serT_tRNA + 42 serV_tRNA + 28 thr1_tRNA + 14 thr3_tRNA + 7 trpT_tRNA + 21 tyr1_tRNA + 49 val1_tRNA + 14 val2_tRNA + 14 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	9.97E+01	99.66022	0	9.58E+00	9.582

tl_elo_b3346_14_rib1	Translation elongation 1 b3346 14 ribosome(s)	3346 EF-G.GTP + 112 EF-Tu.GTP.ala1-tRNA + 70 EF-Tu.GTP.ala2-tRNA + 154 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.argW-tRNA + 14 EF-Tu.GTP.argX-tRNA + 196 EF-Tu.GTP.asn1-tRNA + 266 EF-Tu.GTP.asp1-tRNA + 56 EF-Tu.GTP.cysT-tRNA + 112 EF-Tu.GTP.gln1-tRNA + 42 EF-Tu.GTP.gln2-tRNA + 168 EF-Tu.GTP.glu1-tRNA + 112 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyT-tRNA + 42 EF-Tu.GTP.glyU-tRNA + 70 EF-Tu.GTP.hisR-tRNA + 266 EF-Tu.GTP.ile1-tRNA + 154 EF-Tu.GTP.leu1-tRNA + 42 EF-Tu.GTP.leu2-tRNA + 70 EF-Tu.GTP.leuU-tRNA + 28 EF-Tu.GTP.leuW-tRNA + 56 EF-Tu.GTP.leuZ-tRNA + 168 EF-Tu.GTP.lys1-tRNA + 84 EF-Tu.GTP.met1-tRNA + 140 EF-Tu.GTP.phe1-tRNA + 28 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proL-tRNA + 28 EF-Tu.GTP.proM-tRNA + 70 EF-Tu.GTP.ser1-tRNA + 70 EF-Tu.GTP.ser2-tRNA + 42 EF-Tu.GTP.ser3-tRNA + 28 EF-Tu.GTP.serT-tRNA + 98 EF-Tu.GTP.serV-tRNA + 98 EF-Tu.GTP.thr1-tRNA + 56 EF-Tu.GTP.thr2-tRNA + 28 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.thrU-tRNA + 70 EF-Tu.GTP.tyr1-tRNA + 98 EF-Tu.GTP.val1-tRNA + 42 EF-Tu.GTP.val2-tRNA + 98 EF-Tu.GTP.val3-tRNA + 16730 mg2 + 1 rib_ini_b3346_14 --> 1 rib_70_elo1_b3346_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_elo_b3346_14_rib2	Translation elongation 2 b3346 14 ribosome(s)	3332 h2o + 1 rib_70_elo1_b3346_14_cplx --> 3332 EF-G.GDP + 3332 EF-Tu.GDP + 112 ala1_tRNA + 70 ala2_tRNA + 154 arg1_tRNA + 14 argW_tRNA + 14 argX_tRNA + 196 asn1_tRNA + 266 asp1_tRNA + 56 cysT_tRNA + 14 fmet_tRNA + 112 gln1_tRNA + 42 gln2_tRNA + 168 glu1_tRNA + 112 gly1_tRNA + 14 glyT_tRNA + 42 glyU_tRNA + 6664 h + 70 hisR_tRNA + 266 ile1_tRNA + 154 leu1_tRNA + 42 leu2_tRNA + 70 leuU_tRNA + 28 leuW_tRNA + 56 leuZ_tRNA + 154 lys1_tRNA + 84 met1_tRNA + 16730 mg2 + 140 phe1_tRNA + 6664 pi + 28 pro1_tRNA + 14 pro2_tRNA + 14 proL_tRNA + 28 proM_tRNA + 1 rib_70_elo2_b3346_14_cplx + 70 ser1_tRNA + 70 ser2_tRNA + 42 ser3_tRNA + 28 serT_tRNA + 98 serV_tRNA + 98 thr1_tRNA + 56 thr2_tRNA + 28 thr3_tRNA + 14 thrU_tRNA + 70 tyr1_tRNA + 98 val1_tRNA + 42 val2_tRNA + 98 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_elo_b3346_1_rib1	Translation elongation 1 b3346 1 ribosome(s)	239 EF-G.GTP + 8 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.argX-tRNA + 14 EF-Tu.GTP.asn1-tRNA + 19 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 19 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 1195 mg2 + 1 rib_ini_b3346_1 --> 1 rib_70_elo1_b3346_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_elo_b3346_1_rib2	Translation elongation 2 b3346 1 ribosome(s)	238 h2o + 1 rib_70_elo1_b3346_1_cplx --> 238 EF-G.GDP + 238 EF-Tu.GDP + 8 ala1_tRNA + 5 ala2_tRNA + 11 arg1_tRNA + 1 argW_tRNA + 1 argX_tRNA + 14 asn1_tRNA + 19 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 3 gln2_tRNA + 12 glu1_tRNA + 8 gly1_tRNA + 1 glyT_tRNA + 3 glyU_tRNA + 476 h + 5 hisR_tRNA + 19 ile1_tRNA + 11 leu1_tRNA + 3 leu2_tRNA + 5 leuU_tRNA + 2 leuW_tRNA + 4 leuZ_tRNA + 11 lys1_tRNA + 6 met1_tRNA + 1195 mg2 + 10 phe1_tRNA + 476 pi + 2 pro1_tRNA + pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3346_1_cplx + 5 ser1_tRNA + 5 ser2_tRNA + 3 ser3_tRNA + 2 serT_tRNA + 7 serV_tRNA + 7 thr1_tRNA + 4 thr2_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 5 tyr1_tRNA + 7 val1_tRNA + 3 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_elo_b3346_7_rib1	Translation elongation 1 b3346 7 ribosome(s)	1673 EF-G.GTP + 56 EF-Tu.GTP.ala1-tRNA + 35 EF-Tu.GTP.ala2-tRNA + 77 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argW-tRNA + 7 EF-Tu.GTP.argX-tRNA + 98 EF-Tu.GTP.asn1-tRNA + 133 EF-Tu.GTP.asp1-tRNA + 28 EF-Tu.GTP.cysT-tRNA + 56 EF-Tu.GTP.gln1-tRNA + 21 EF-Tu.GTP.gln2-tRNA + 84 EF-Tu.GTP.glu1-tRNA + 56 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyT-tRNA + 21 EF-Tu.GTP.glyU-tRNA + 35 EF-Tu.GTP.hisR-tRNA + 133 EF-Tu.GTP.ile1-tRNA + 77 EF-Tu.GTP.leu1-tRNA + 21 EF-Tu.GTP.leu2-tRNA + 35 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.leuW-tRNA + 28 EF-Tu.GTP.leuZ-tRNA + 84 EF-Tu.GTP.lys1-tRNA + 42 EF-Tu.GTP.met1-tRNA + 70 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proL-tRNA + 14 EF-Tu.GTP.proM-tRNA + 35 EF-Tu.GTP.ser1-tRNA + 35 EF-Tu.GTP.ser2-tRNA + 21 EF-Tu.GTP.ser3-tRNA + 14 EF-Tu.GTP.serT-tRNA + 49 EF-Tu.GTP.serV-tRNA + 49 EF-Tu.GTP.thr1-tRNA + 28 EF-Tu.GTP.thr2-tRNA + 14 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 35 EF-Tu.GTP.tyr1-tRNA + 49 EF-Tu.GTP.val1-tRNA + 21 EF-Tu.GTP.val2-tRNA + 49 EF-Tu.GTP.val3-tRNA + 8365 mg2 + 1 rib_ini_b3346_7 --> 1 rib_70_elo1_b3346_7_c	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_elo_b3346_7_rib2	Translation elongation 2 b3346 7 ribosome(s)	1666 h2o + 1 rib_70_elo1_b3346_7_cplx --> 1666 EF-G.GDP + 1666 EF-Tu.GDP + 56 ala1_tRNA + 35 ala2_tRNA + 77 arg1_tRNA + 7 argW_tRNA + 7 argX_tRNA + 98 asn1_tRNA + 133 asp1_tRNA + 28 cysT_tRNA + 7 fmet_tRNA + 56 gln1_tRNA + 21 gln2_tRNA + 84 glu1_tRNA + 56 gly1_tRNA + 7 glyT_tRNA + 21 glyU_tRNA + 3332 h + 35 hisR_tRNA + 133 ile1_tRNA + 77 leu1_tRNA + 21 leu2_tRNA + 35 leuU_tRNA + 14 leuW_tRNA + 28 leuZ_tRNA + 77 lys1_tRNA + 42 met1_tRNA + 8365 mg2 + 70 phe1_tRNA + 3332 pi + 14 pro1_tRNA + 7 pro2_tRNA + 7 proL_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b3346_7_cplx + 35 ser1_tRNA + 35 ser2_tRNA + 21 ser3_tRNA + 14 serT_tRNA + 49 serV_tRNA + 49 thr1_tRNA + 28 thr2_tRNA + 14 thr3_tRNA + 7 thrU_tRNA + 35 tyr1_tRNA + 49 val1_tRNA + 21 val2_tRNA + 49 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942

tl_elo_b3384_19_rib1	Translation elongation 1 b3384 19 ribosome(s)	6327 EF-G.GTP + 456 EF-Tu.GTP.ala1-tRNA + 114 EF-Tu.GTP.ala2-tRNA + 285 EF-Tu.GTP.arg1-tRNA + 247 EF-Tu.GTP.asn1-tRNA + 399 EF-Tu.GTP.asp1-tRNA + 76 EF-Tu.GTP.cysT-tRNA + 304 EF-Tu.GTP.gln1-tRNA + 57 EF-Tu.GTP.gln2-tRNA + 399 EF-Tu.GTP.glu1-tRNA + 380 EF-Tu.GTP.gly1-tRNA + 152 EF-Tu.GTP.hisR-tRNA + 323 EF-Tu.GTP.ile1-tRNA + 437 EF-Tu.GTP.leu1-tRNA + 76 EF-Tu.GTP.leu2-tRNA + 38 EF-Tu.GTP.leuU-tRNA + 19 EF-Tu.GTP.leuW-tRNA + 19 EF-Tu.GTP.leuZ-tRNA + 456 EF-Tu.GTP.lys1-tRNA + 171 EF-Tu.GTP.met1-tRNA + 228 EF-Tu.GTP.phe1-tRNA + 209 EF-Tu.GTP.pro1-tRNA + 19 EF-Tu.GTP.pro2-tRNA + 38 EF-Tu.GTP.proL-tRNA + 19 EF-Tu.GTP.proM-tRNA + 114 EF-Tu.GTP.ser1-tRNA + 57 EF-Tu.GTP.ser2-tRNA + 38 EF-Tu.GTP.ser3-tRNA + 38 EF-Tu.GTP.serT-tRNA + 114 EF-Tu.GTP.serV-tRNA + 95 EF-Tu.GTP.thr1-tRNA + 76 EF-Tu.GTP.thr2-tRNA + 95 EF-Tu.GTP.thr3-tRNA + 38 EF-Tu.GTP.trpT-tRNA + 266 EF-Tu.GTP.tyr1-tRNA + 323 EF-Tu.GTP.val1-tRNA + 19 EF-Tu.GTP.val2-tRNA + 133 EF-Tu.GTP.val3-tRNA + 31635 mg2 + 1 rib_ini_b3384_19 --> 1 rib_70_elo1_b3384_19_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_elo_b3384_19_rib2	Translation elongation 2 b3384 19 ribosome(s)	6308 h2o + 1 rib_70_elo1_b3384_19_cplx --> 6308 EF-G.GDP + 6308 EF-Tu.GDP + 456 ala1_tRNA + 114 ala2_tRNA + 285 arg1_tRNA + 247 asn1_tRNA + 399 asp1_tRNA + 76 cysT_tRNA + 19 fmet_tRNA + 304 gln1_tRNA + 57 gln2_tRNA + 399 glu1_tRNA + 380 gly1_tRNA + 12616 h + 152 hisR_tRNA + 323 ile1_tRNA + 437 leu1_tRNA + 76 leu2_tRNA + 38 leuU_tRNA + 19 leuW_tRNA + 19 leuZ_tRNA + 456 lys1_tRNA + 171 met1_tRNA + 31635 mg2 + 228 phe1_tRNA + 12616 pi + 190 pro1_tRNA + 19 pro2_tRNA + 38 proL_tRNA + 19 proM_tRNA + 1 rib_70_elo2_b3384_19_cplx + 114 ser1_tRNA + 57 ser2_tRNA + 38 ser3_tRNA + 38 serT_tRNA + 114 serV_tRNA + 95 thr1_tRNA + 76 thr2_tRNA + 95 thr3_tRNA + 38 trpT_tRNA + 266 tyr1_tRNA + 323 val1_tRNA + 19 val2_tRNA + 133 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_elo_b3384_1_rib1	Translation elongation 1 b3384 1 ribosome(s)	333 EF-G.GTP + 24 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 13 EF-Tu.GTP.asn1-tRNA + 21 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 21 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 17 EF-Tu.GTP.ile1-tRNA + 23 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 24 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 14 EF-Tu.GTP.tyr1-tRNA + 17 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 1665 mg2 + 1 rib_ini_b3384_1 --> 1 rib_70_elo1_b3384_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_elo_b3384_1_rib2	Translation elongation 2 b3384 1 ribosome(s)	332 h2o + 1 rib_70_elo1_b3384_1_cplx --> 332 EF-G.GDP + 332 EF-Tu.GDP + 24 ala1_tRNA + 6 ala2_tRNA + 15 arg1_tRNA + 13 asn1_tRNA + 21 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 16 gln1_tRNA + 3 gln2_tRNA + 21 glu1_tRNA + 20 gly1_tRNA + 664 h + 8 hisR_tRNA + 17 ile1_tRNA + 23 leu1_tRNA + 4 leu2_tRNA + 2 leuU_tRNA + 1 leuW_tRNA + 1 leuZ_tRNA + 24 lys1_tRNA + 9 met1_tRNA + 1665 mg2 + 12 phe1_tRNA + 664 pi + 10 pro1_tRNA + 1 pro2_tRNA + 2 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3384_1_cplx + 6 ser1_tRNA + 3 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 6 serV_tRNA + 5 thr1_tRNA + 4 thr2_tRNA + 5 thr3_tRNA + 2 trpT_tRNA + 14 tyr1_tRNA + 17 val1_tRNA + 1 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_elo_b3384_9_rib1	Translation elongation 1 b3384 9 ribosome(s)	2997 EF-G.GTP + 216 EF-Tu.GTP.ala1-tRNA + 54 EF-Tu.GTP.ala2-tRNA + 135 EF-Tu.GTP.arg1-tRNA + 117 EF-Tu.GTP.asn1-tRNA + 189 EF-Tu.GTP.asp1-tRNA + 36 EF-Tu.GTP.cysT-tRNA + 144 EF-Tu.GTP.gln1-tRNA + 27 EF-Tu.GTP.gln2-tRNA + 189 EF-Tu.GTP.glu1-tRNA + 180 EF-Tu.GTP.gly1-tRNA + 72 EF-Tu.GTP.hisR-tRNA + 153 EF-Tu.GTP.ile1-tRNA + 207 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 18 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuW-tRNA + 9 EF-Tu.GTP.leuZ-tRNA + 216 EF-Tu.GTP.lys1-tRNA + 81 EF-Tu.GTP.met1-tRNA + 108 EF-Tu.GTP.phe1-tRNA + 99 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proL-tRNA + 9 EF-Tu.GTP.proM-tRNA + 54 EF-Tu.GTP.ser1-tRNA + 27 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serT-tRNA + 54 EF-Tu.GTP.serV-tRNA + 45 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 45 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.trpT-tRNA + 126 EF-Tu.GTP.tyr1-tRNA + 153 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 63 EF-Tu.GTP.val3-tRNA + 14985 mg2 + 1 rib_ini_b3384_9 --> 1 rib_70_elo1_b3384_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_elo_b3384_9_rib2	Translation elongation 2 b3384 9 ribosome(s)	2988 h2o + 1 rib_70_elo1_b3384_9_cplx --> 2988 EF-G.GDP + 2988 EF-Tu.GDP + 216 ala1_tRNA + 54 ala2_tRNA + 135 arg1_tRNA + 117 asn1_tRNA + 189 asp1_tRNA + 36 cysT_tRNA + 9 fmet_tRNA + 144 gln1_tRNA + 27 gln2_tRNA + 189 glu1_tRNA + 180 gly1_tRNA + 5976 h + 72 hisR_tRNA + 153 ile1_tRNA + 207 leu1_tRNA + 36 leu2_tRNA + 18 leuU_tRNA + 9 leuW_tRNA + 9 leuZ_tRNA + 216 lys1_tRNA + 81 met1_tRNA + 14985 mg2 + 108 phe1_tRNA + 5976 pi + 90 pro1_tRNA + 9 pro2_tRNA + 18 proL_tRNA + 9 proM_tRNA + 1 rib_70_elo2_b3384_9_cplx + 54 ser1_tRNA + 27 ser2_tRNA + 18 ser3_tRNA + 18 serT_tRNA + 54 serV_tRNA + 45 thr1_tRNA + 36 thr2_tRNA + 45 thr3_tRNA + 18 trpT_tRNA + 126 tyr1_tRNA + 153 val1_tRNA + 9 val2_tRNA + 63 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329

tl_elo_b3385_14_rib1	Translation elongation 1 b3385 14 ribosome(s)	3514 EF-G.GTP + 322 EF-Tu.GTP.ala1-tRNA + 70 EF-Tu.GTP.ala2-tRNA + 140 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.argX-tRNA + 126 EF-Tu.GTP.asn1-tRNA + 294 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.cysT-tRNA + 126 EF-Tu.GTP.gln1-tRNA + 28 EF-Tu.GTP.gln2-tRNA + 224 EF-Tu.GTP.glu1-tRNA + 238 EF-Tu.GTP.gly1-tRNA + 28 EF-Tu.GTP.glyT-tRNA + 28 EF-Tu.GTP.glyU-tRNA + 42 EF-Tu.GTP.hisR-tRNA + 154 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.ile2-tRNA + 182 EF-Tu.GTP.leu1-tRNA + 70 EF-Tu.GTP.leu2-tRNA + 84 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.leuW-tRNA + 56 EF-Tu.GTP.leuZ-tRNA + 154 EF-Tu.GTP.lys1-tRNA + 70 EF-Tu.GTP.met1-tRNA + 112 EF-Tu.GTP.phe1-tRNA + 154 EF-Tu.GTP.pro1-tRNA + 28 EF-Tu.GTP.pro2-tRNA + 42 EF-Tu.GTP.proL-tRNA + 28 EF-Tu.GTP.proM-tRNA + 14 EF-Tu.GTP.ser2-tRNA + 14 EF-Tu.GTP.ser3-tRNA + 28 EF-Tu.GTP.serT-tRNA + 56 EF-Tu.GTP.serV-tRNA + 56 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 56 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.thrU-tRNA + 28 EF-Tu.GTP.trpT-tRNA + 112 EF-Tu.GTP.tyr1-tRNA + 98 EF-Tu.GTP.val1-tRNA + 84 EF-Tu.GTP.val2-tRNA + 84 EF-Tu.GTP.val3-tRNA + 17570 mg2 + 1 rib_ini_b3385_14 --> 1 rib_70_elo1_b3385_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_elo_b3385_14_rib2	Translation elongation 2 b3385 14 ribosome(s)	3500 h2o + 1 rib_70_elo1_b3385_14_cplx --> 3500 EF-G.GDP + 3500 EF-Tu.GDP + 322 ala1_tRNA + 70 ala2_tRNA + 140 arg1_tRNA + 14 argX_tRNA + 126 asn1_tRNA + 280 asp1_tRNA + 14 cysT_tRNA + 14 fmet_tRNA + 126 gln1_tRNA + 28 gln2_tRNA + 224 glu1_tRNA + 238 gly1_tRNA + 28 glyT_tRNA + 28 glyU_tRNA + 7000 h + 42 hisR_tRNA + 154 ile1_tRNA + 14 ile2_tRNA + 182 leu1_tRNA + 70 leu2_tRNA + 84 leuU_tRNA + 14 leuW_tRNA + 56 leuZ_tRNA + 154 lys1_tRNA + 70 met1_tRNA + 17570 mg2 + 112 phe1_tRNA + 7000 pi + 154 pro1_tRNA + 28 pro2_tRNA + 42 proL_tRNA + 28 proM_tRNA + 1 rib_70_elo2_b3385_14_cplx + 14 ser2_tRNA + 14 ser3_tRNA + 28 serT_tRNA + 56 serV_tRNA + 56 thr1_tRNA + 14 thr2_tRNA + 56 thr3_tRNA + 14 thrU_tRNA + 28 trpT_tRNA + 112 tyr1_tRNA + 98 val1_tRNA + 84 val2_tRNA + 84 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_elo_b3385_1_rib1	Translation elongation 1 b3385 1 ribosome(s)	251 EF-G.GTP + 23 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 21 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 9 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 17 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1255 mg2 + 1 rib_ini_b3385_1 --> 1 rib_70_elo1_b3385_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_elo_b3385_1_rib2	Translation elongation 2 b3385 1 ribosome(s)	250 h2o + 1 rib_70_elo1_b3385_1_cplx --> 250 EF-G.GDP + 250 EF-Tu.GDP + 23 ala1_tRNA + 5 ala2_tRNA + 10 arg1_tRNA + 1 argX_tRNA + 9 asn1_tRNA + 20 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 9 gln1_tRNA + 2 gln2_tRNA + 16 glu1_tRNA + 17 gly1_tRNA + 2 glyT_tRNA + 2 glyU_tRNA + 500 h + 3 hisR_tRNA + 11 ile1_tRNA + 1 ile2_tRNA + 13 leu1_tRNA + 5 leu2_tRNA + 6 leuU_tRNA + 1 leuW_tRNA + 4 leuZ_tRNA + 11 lys1_tRNA + 5 met1_tRNA + 1255 mg2 + 8 phe1_tRNA + 500 pi + 11 pro1_tRNA + 2 pro2_tRNA + 3 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3385_1_cplx + 1 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 4 serV_tRNA + 4 thr1_tRNA + 1 thr2_tRNA + 4 thr3_tRNA + 1 thrU_tRNA + 2 trpT_tRNA + 8 tyr1_tRNA + 7 val1_tRNA + 6 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_elo_b3385_7_rib1	Translation elongation 1 b3385 7 ribosome(s)	1757 EF-G.GTP + 161 EF-Tu.GTP.ala1-tRNA + 35 EF-Tu.GTP.ala2-tRNA + 70 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argX-tRNA + 63 EF-Tu.GTP.asn1-tRNA + 147 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 63 EF-Tu.GTP.gln1-tRNA + 14 EF-Tu.GTP.gln2-tRNA + 112 EF-Tu.GTP.glu1-tRNA + 119 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyT-tRNA + 14 EF-Tu.GTP.glyU-tRNA + 21 EF-Tu.GTP.hisR-tRNA + 77 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.ile2-tRNA + 91 EF-Tu.GTP.leu1-tRNA + 35 EF-Tu.GTP.leu2-tRNA + 42 EF-Tu.GTP.leuU-tRNA + 7 EF-Tu.GTP.leuW-tRNA + 28 EF-Tu.GTP.leuZ-tRNA + 77 EF-Tu.GTP.lys1-tRNA + 35 EF-Tu.GTP.met1-tRNA + 56 EF-Tu.GTP.phe1-tRNA + 77 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.pro2-tRNA + 21 EF-Tu.GTP.proL-tRNA + 14 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.ser3-tRNA + 14 EF-Tu.GTP.serT-tRNA + 28 EF-Tu.GTP.serV-tRNA + 28 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 28 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 14 EF-Tu.GTP.trpT-tRNA + 56 EF-Tu.GTP.tyr1-tRNA + 49 EF-Tu.GTP.val1-tRNA + 42 EF-Tu.GTP.val2-tRNA + 42 EF-Tu.GTP.val3-tRNA + 8785 mg2 + 1 rib_ini_b3385_7 --> 1 rib_70_elo1_b3385_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_elo_b3385_7_rib2	Translation elongation 2 b3385 7 ribosome(s)	1750 h2o + 1 rib_70_elo1_b3385_7_cplx --> 1750 EF-G.GDP + 1750 EF-Tu.GDP + 161 ala1_tRNA + 35 ala2_tRNA + 70 arg1_tRNA + 7 argX_tRNA + 63 asn1_tRNA + 140 asp1_tRNA + 7 cysT_tRNA + 7 fmet_tRNA + 63 gln1_tRNA + 14 gln2_tRNA + 112 glu1_tRNA + 119 gly1_tRNA + 14 glyT_tRNA + 14 glyU_tRNA + 3500 h + 21 hisR_tRNA + 77 ile1_tRNA + 7 ile2_tRNA + 91 leu1_tRNA + 35 leu2_tRNA + 42 leuU_tRNA + 7 leuW_tRNA + 28 leuZ_tRNA + 77 lys1_tRNA + 35 met1_tRNA + 8785 mg2 + 56 phe1_tRNA + 3500 pi + 77 pro1_tRNA + 14 pro2_tRNA + 21 proL_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b3385_7_cplx + 7 ser2_tRNA + 7 ser3_tRNA + 14 serT_tRNA + 28 serV_tRNA + 28 thr1_tRNA + 7 thr2_tRNA + 28 thr3_tRNA + 7 thrU_tRNA + 14 trpT_tRNA + 56 tyr1_tRNA + 49 val1_tRNA + 42 val2_tRNA + 42 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109

tl_elo_b3386_13_rib1	Translation elongation 1 b3386 13 ribosome(s)	2912 EF-G.GTP + 195 EF-Tu.GTP.ala1-tRNA + 104 EF-Tu.GTP.ala2-tRNA + 130 EF-Tu.GTP.arg1-tRNA + 104 EF-Tu.GTP.asn1-tRNA + 260 EF-Tu.GTP.asp1-tRNA + 13 EF-Tu.GTP.cysT-tRNA + 39 EF-Tu.GTP.gln1-tRNA + 26 EF-Tu.GTP.gln2-tRNA + 143 EF-Tu.GTP.glu1-tRNA + 195 EF-Tu.GTP.gly1-tRNA + 13 EF-Tu.GTP.glyU-tRNA + 78 EF-Tu.GTP.hisR-tRNA + 221 EF-Tu.GTP.ile1-tRNA + 221 EF-Tu.GTP.leu1-tRNA + 26 EF-Tu.GTP.leu2-tRNA + 13 EF-Tu.GTP.leuW-tRNA + 156 EF-Tu.GTP.lys1-tRNA + 91 EF-Tu.GTP.met1-tRNA + 130 EF-Tu.GTP.phe1-tRNA + 13 EF-Tu.GTP.pro1-tRNA + 65 EF-Tu.GTP.pro2-tRNA + 39 EF-Tu.GTP.proL-tRNA + 39 EF-Tu.GTP.proM-tRNA + 39 EF-Tu.GTP.ser1-tRNA + 26 EF-Tu.GTP.ser2-tRNA + 26 EF-Tu.GTP.ser3-tRNA + 13 EF-Tu.GTP.serT-tRNA + 52 EF-Tu.GTP.serV-tRNA + 39 EF-Tu.GTP.thr1-tRNA + 26 EF-Tu.GTP.thr3-tRNA + 26 EF-Tu.GTP.thrU-tRNA + 78 EF-Tu.GTP.tyr1-tRNA + 169 EF-Tu.GTP.val1-tRNA + 78 EF-Tu.GTP.val2-tRNA + 26 EF-Tu.GTP.val3-tRNA + 14560 mg2 + 1 rib_ini_b3386_13 --> 1 rib_70_elo1_b3386_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_elo_b3386_13_rib2	Translation elongation 2 b3386 13 ribosome(s)	2899 h2o + 1 rib_70_elo1_b3386_13_cplx --> 2899 EF-G.GDP + 2899 EF-Tu.GDP + 195 ala1_tRNA + 104 ala2_tRNA + 130 arg1_tRNA + 104 asn1_tRNA + 260 asp1_tRNA + 13 cysT_tRNA + 13 fmet_tRNA + 39 gln1_tRNA + 26 gln2_tRNA + 130 glu1_tRNA + 195 gly1_tRNA + 13 glyU_tRNA + 5798 h + 78 hisR_tRNA + 221 ile1_tRNA + 221 leu1_tRNA + 26 leu2_tRNA + 13 leuW_tRNA + 156 lys1_tRNA + 91 met1_tRNA + 14560 mg2 + 130 phe1_tRNA + 5798 pi + 13 pro1_tRNA + 65 pro2_tRNA + 39 proL_tRNA + 39 proM_tRNA + 1 rib_70_elo2_b3386_13_cplx + 39 ser1_tRNA + 26 ser2_tRNA + 26 ser3_tRNA + 13 serT_tRNA + 52 serV_tRNA + 39 thr1_tRNA + 26 thr3_tRNA + 26 thrU_tRNA + 78 tyr1_tRNA + 169 val1_tRNA + 78 val2_tRNA + 26 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_elo_b3386_1_rib1	Translation elongation 1 b3386 1 ribosome(s)	224 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 20 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 11 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 17 EF-Tu.GTP.ile1-tRNA + 17 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 13 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 1120 mg2 + 1 rib_ini_b3386_1 --> 1 rib_70_elo1_b3386_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_elo_b3386_1_rib2	Translation elongation 2 b3386 1 ribosome(s)	223 h2o + 1 rib_70_elo1_b3386_1_cplx --> 223 EF-G.GDP + 223 EF-Tu.GDP + 15 ala1_tRNA + 8 ala2_tRNA + 10 arg1_tRNA + 8 asn1_tRNA + 20 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 2 gln2_tRNA + 10 glu1_tRNA + 15 gly1_tRNA + 1 glyU_tRNA + 446 h + 6 hisR_tRNA + 17 ile1_tRNA + 17 leu1_tRNA + 2 leu2_tRNA + 1 leuW_tRNA + 12 lys1_tRNA + 7 met1_tRNA + 1120 mg2 + 10 phe1_tRNA + 446 pi + 1 pro1_tRNA + 5 pro2_tRNA + 3 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3386_1_cplx + 3 ser1_tRNA + 2 ser2_tRNA + 2 ser3_tRNA + 1 serT_tRNA + 4 serV_tRNA + 3 thr1_tRNA + 2 thr3_tRNA + 2 thrU_tRNA + 6 tyr1_tRNA + 13 val1_tRNA + 6 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_elo_b3386_6_rib1	Translation elongation 1 b3386 6 ribosome(s)	1344 EF-G.GTP + 90 EF-Tu.GTP.ala1-tRNA + 48 EF-Tu.GTP.ala2-tRNA + 60 EF-Tu.GTP.arg1-tRNA + 48 EF-Tu.GTP.asn1-tRNA + 120 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 18 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 66 EF-Tu.GTP.glu1-tRNA + 90 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 36 EF-Tu.GTP.hisR-tRNA + 102 EF-Tu.GTP.ile1-tRNA + 102 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuW-tRNA + 72 EF-Tu.GTP.lys1-tRNA + 42 EF-Tu.GTP.met1-tRNA + 60 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 30 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proL-tRNA + 18 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serT-tRNA + 24 EF-Tu.GTP.serV-tRNA + 18 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.thrU-tRNA + 36 EF-Tu.GTP.tyr1-tRNA + 78 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 6720 mg2 + 1 rib_ini_b3386_6 --> 1 rib_70_elo1_b3386_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_elo_b3386_6_rib2	Translation elongation 2 b3386 6 ribosome(s)	1338 h2o + 1 rib_70_elo1_b3386_6_cplx --> 1338 EF-G.GDP + 1338 EF-Tu.GDP + 90 ala1_tRNA + 48 ala2_tRNA + 60 arg1_tRNA + 48 asn1_tRNA + 120 asp1_tRNA + 6 cysT_tRNA + 6 fmet_tRNA + 18 gln1_tRNA + 12 gln2_tRNA + 60 glu1_tRNA + 90 gly1_tRNA + 6 glyU_tRNA + 2676 h + 36 hisR_tRNA + 102 ile1_tRNA + 102 leu1_tRNA + 12 leu2_tRNA + 6 leuW_tRNA + 72 lys1_tRNA + 42 met1_tRNA + 6720 mg2 + 60 phe1_tRNA + 2676 pi + 6 pro1_tRNA + 30 pro2_tRNA + 18 proL_tRNA + 18 proM_tRNA + 1 rib_70_elo2_b3386_6_cplx + 18 ser1_tRNA + 12 ser2_tRNA + 12 ser3_tRNA + 6 serT_tRNA + 24 serV_tRNA + 18 thr1_tRNA + 12 thr3_tRNA + 12 thrU_tRNA + 36 tyr1_tRNA + 78 val1_tRNA + 36 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719

tl_elo_b3387_16_rib1	Translation elongation 1 b3387 16 ribosome(s)	4432 EF-G.GTP + 288 EF-Tu.GTP.ala1-tRNA + 128 EF-Tu.GTP.ala2-tRNA + 272 EF-Tu.GTP.arg1-tRNA + 32 EF-Tu.GTP.argX-tRNA + 240 EF-Tu.GTP.asn1-tRNA + 208 EF-Tu.GTP.asp1-tRNA + 80 EF-Tu.GTP.cysT-tRNA + 80 EF-Tu.GTP.gln1-tRNA + 32 EF-Tu.GTP.gln2-tRNA + 304 EF-Tu.GTP.glu1-tRNA + 160 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 32 EF-Tu.GTP.glyU-tRNA + 112 EF-Tu.GTP.hisR-tRNA + 128 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.ile2-tRNA + 208 EF-Tu.GTP.leu1-tRNA + 96 EF-Tu.GTP.leu2-tRNA + 80 EF-Tu.GTP.leuU-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 288 EF-Tu.GTP.lys1-tRNA + 48 EF-Tu.GTP.met1-tRNA + 272 EF-Tu.GTP.phe1-tRNA + 80 EF-Tu.GTP.pro1-tRNA + 32 EF-Tu.GTP.pro2-tRNA + 80 EF-Tu.GTP.proL-tRNA + 32 EF-Tu.GTP.proM-tRNA + 32 EF-Tu.GTP.ser1-tRNA + 48 EF-Tu.GTP.ser2-tRNA + 16 EF-Tu.GTP.ser3-tRNA + 16 EF-Tu.GTP.serT-tRNA + 128 EF-Tu.GTP.serV-tRNA + 32 EF-Tu.GTP.thr1-tRNA + 16 EF-Tu.GTP.thr2-tRNA + 64 EF-Tu.GTP.thr3-tRNA + 48 EF-Tu.GTP.thrU-tRNA + 32 EF-Tu.GTP.trpT-tRNA + 320 EF-Tu.GTP.tyr1-tRNA + 128 EF-Tu.GTP.val1-tRNA + 80 EF-Tu.GTP.val2-tRNA + 96 EF-Tu.GTP.val3-tRNA + 22160 mg2 + 1 rib_ini_b3387_16 --> 1 rib_70_elo1_b3387_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_elo_b3387_16_rib2	Translation elongation 2 b3387 16 ribosome(s)	4416 h2o + 1 rib_70_elo1_b3387_16_cplx --> 4416 EF-G.GDP + 4416 EF-Tu.GDP + 288 ala1_tRNA + 128 ala2_tRNA + 272 arg1_tRNA + 32 argX_tRNA + 240 asn1_tRNA + 208 asp1_tRNA + 80 cysT_tRNA + 16 fmet_tRNA + 80 gln1_tRNA + 32 gln2_tRNA + 304 glu1_tRNA + 160 gly1_tRNA + 16 glyT_tRNA + 32 glyU_tRNA + 8832 h + 112 hisR_tRNA + 128 ile1_tRNA + 16 ile2_tRNA + 208 leu1_tRNA + 96 leu2_tRNA + 80 leuU_tRNA + 32 leuZ_tRNA + 272 lys1_tRNA + 48 met1_tRNA + 22160 mg2 + 272 phe1_tRNA + 8832 pi + 80 pro1_tRNA + 32 pro2_tRNA + 80 proL_tRNA + 32 proM_tRNA + 1 rib_70_elo2_b3387_16_cplx + 32 ser1_tRNA + 48 ser2_tRNA + 16 ser3_tRNA + 16 serT_tRNA + 128 serV_tRNA + 32 thr1_tRNA + 16 thr2_tRNA + 64 thr3_tRNA + 48 thrU_tRNA + 32 trpT_tRNA + 320 tyr1_tRNA + 128 val1_tRNA + 80 val2_tRNA + 96 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_elo_b3387_1_rib1	Translation elongation 1 b3387 1 ribosome(s)	277 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 17 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 13 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 19 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 18 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 17 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 8 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 20 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1385 mg2 + 1 rib_ini_b3387_1 --> 1 rib_70_elo1_b3387_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_elo_b3387_1_rib2	Translation elongation 2 b3387 1 ribosome(s)	276 h2o + 1 rib_70_elo1_b3387_1_cplx --> 276 EF-G.GDP + 276 EF-Tu.GDP + 18 ala1_tRNA + 8 ala2_tRNA + 17 arg1_tRNA + 2 argX_tRNA + 15 asn1_tRNA + 13 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 2 gln2_tRNA + 19 glu1_tRNA + 10 gly1_tRNA + 1 glyT_tRNA + 2 glyU_tRNA + 552 h + 7 hisR_tRNA + 8 ile1_tRNA + 1 ile2_tRNA + 13 leu1_tRNA + 6 leu2_tRNA + 5 leuU_tRNA + 2 leuZ_tRNA + 17 lys1_tRNA + 3 met1_tRNA + 1385 mg2 + 17 phe1_tRNA + 552 pi + 5 pro1_tRNA + 2 pro2_tRNA + 5 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3387_1_cplx + 2 ser1_tRNA + 3 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 8 serV_tRNA + 2 thr1_tRNA + 1 thr2_tRNA + 4 thr3_tRNA + 3 thrU_tRNA + 2 trpT_tRNA + 20 tyr1_tRNA + 8 val1_tRNA + 5 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_elo_b3387_8_rib1	Translation elongation 1 b3387 8 ribosome(s)	2216 EF-G.GTP + 144 EF-Tu.GTP.ala1-tRNA + 64 EF-Tu.GTP.ala2-tRNA + 136 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.argX-tRNA + 120 EF-Tu.GTP.asn1-tRNA + 104 EF-Tu.GTP.asp1-tRNA + 40 EF-Tu.GTP.cysT-tRNA + 40 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.gln2-tRNA + 152 EF-Tu.GTP.glu1-tRNA + 80 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 16 EF-Tu.GTP.glyU-tRNA + 56 EF-Tu.GTP.hisR-tRNA + 64 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.ile2-tRNA + 104 EF-Tu.GTP.leu1-tRNA + 48 EF-Tu.GTP.leu2-tRNA + 40 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuZ-tRNA + 144 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 136 EF-Tu.GTP.phe1-tRNA + 40 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.pro2-tRNA + 40 EF-Tu.GTP.proL-tRNA + 16 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serT-tRNA + 64 EF-Tu.GTP.serV-tRNA + 16 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 32 EF-Tu.GTP.thr3-tRNA + 24 EF-Tu.GTP.thrU-tRNA + 16 EF-Tu.GTP.trpT-tRNA + 160 EF-Tu.GTP.tyr1-tRNA + 64 EF-Tu.GTP.val1-tRNA + 40 EF-Tu.GTP.val2-tRNA + 48 EF-Tu.GTP.val3-tRNA + 11080 mg2 + 1 rib_ini_b3387_8 --> 1 rib_70_elo1_b3387_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_elo_b3387_8_rib2	Translation elongation 2 b3387 8 ribosome(s)	2208 h2o + 1 rib_70_elo1_b3387_8_cplx --> 2208 EF-G.GDP + 2208 EF-Tu.GDP + 144 ala1_tRNA + 64 ala2_tRNA + 136 arg1_tRNA + 16 argX_tRNA + 120 asn1_tRNA + 104 asp1_tRNA + 40 cysT_tRNA + 8 fmet_tRNA + 40 gln1_tRNA + 16 gln2_tRNA + 152 glu1_tRNA + 80 gly1_tRNA + 8 glyT_tRNA + 16 glyU_tRNA + 4416 h + 56 hisR_tRNA + 64 ile1_tRNA + 8 ile2_tRNA + 104 leu1_tRNA + 48 leu2_tRNA + 40 leuU_tRNA + 16 leuZ_tRNA + 136 lys1_tRNA + 24 met1_tRNA + 11080 mg2 + 136 phe1_tRNA + 4416 pi + 40 pro1_tRNA + 16 pro2_tRNA + 40 proL_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b3387_8_cplx + 16 ser1_tRNA + 24 ser2_tRNA + 8 ser3_tRNA + 8 serT_tRNA + 64 serV_tRNA + 16 thr1_tRNA + 8 thr2_tRNA + 32 thr3_tRNA + 24 thrU_tRNA + 16 trpT_tRNA + 160 tyr1_tRNA + 64 val1_tRNA + 40 val2_tRNA + 48 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534

tl_elo_b3388_12_rib1	Translation elongation 1 b3388 12 ribosome(s)	5124 EF-G.GTP + 528 EF-Tu.GTP.ala1-tRNA + 60 EF-Tu.GTP.ala2-tRNA + 312 EF-Tu.GTP.arg1-tRNA + 252 EF-Tu.GTP.asn1-tRNA + 276 EF-Tu.GTP.asp1-tRNA + 228 EF-Tu.GTP.gln1-tRNA + 144 EF-Tu.GTP.gln2-tRNA + 408 EF-Tu.GTP.glu1-tRNA + 204 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyT-tRNA + 24 EF-Tu.GTP.glyU-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 132 EF-Tu.GTP.ile1-tRNA + 180 EF-Tu.GTP.leu1-tRNA + 48 EF-Tu.GTP.leu2-tRNA + 24 EF-Tu.GTP.leuU-tRNA + 24 EF-Tu.GTP.leuW-tRNA + 336 EF-Tu.GTP.lys1-tRNA + 36 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 252 EF-Tu.GTP.pro1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 72 EF-Tu.GTP.proL-tRNA + 120 EF-Tu.GTP.proM-tRNA + 84 EF-Tu.GTP.ser1-tRNA + 180 EF-Tu.GTP.ser2-tRNA + 60 EF-Tu.GTP.ser3-tRNA + 96 EF-Tu.GTP.serV-tRNA + 132 EF-Tu.GTP.thr1-tRNA + 156 EF-Tu.GTP.thr2-tRNA + 204 EF-Tu.GTP.thr3-tRNA + 36 EF-Tu.GTP.thrU-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 84 EF-Tu.GTP.tyr1-tRNA + 168 EF-Tu.GTP.val1-tRNA + 60 EF-Tu.GTP.val2-tRNA + 96 EF-Tu.GTP.val3-tRNA + 25620 mg2 + 1 rib_ini_b3388_12 --> 1 rib_70_elo1_b3388_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_elo_b3388_12_rib2	Translation elongation 2 b3388 12 ribosome(s)	5112 h2o + 1 rib_70_elo1_b3388_12_cplx --> 5112 EF-G.GDP + 5112 EF-Tu.GDP + 528 ala1_tRNA + 60 ala2_tRNA + 312 arg1_tRNA + 252 asn1_tRNA + 276 asp1_tRNA + 12 fmet_tRNA + 228 gln1_tRNA + 144 gln2_tRNA + 408 glu1_tRNA + 204 gly1_tRNA + 12 glyT_tRNA + 24 glyU_tRNA + 10224 h + 12 hisR_tRNA + 132 ile1_tRNA + 180 leu1_tRNA + 48 leu2_tRNA + 24 leuU_tRNA + 24 leuW_tRNA + 324 lys1_tRNA + 36 met1_tRNA + 25620 mg2 + 24 phe1_tRNA + 10224 pi + 252 pro1_tRNA + 24 pro2_tRNA + 72 proL_tRNA + 120 proM_tRNA + 1 rib_70_elo2_b3388_12_cplx + 84 ser1_tRNA + 180 ser2_tRNA + 60 ser3_tRNA + 96 serV_tRNA + 132 thr1_tRNA + 156 thr2_tRNA + 204 thr3_tRNA + 36 thrU_tRNA + 36 trpT_tRNA + 84 tyr1_tRNA + 168 val1_tRNA + 60 val2_tRNA + 96 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_elo_b3388_1_rib1	Translation elongation 1 b3388 1 ribosome(s)	427 EF-G.GTP + 44 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 26 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.asn1-tRNA + 23 EF-Tu.GTP.asp1-tRNA + 19 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 34 EF-Tu.GTP.glu1-tRNA + 17 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 28 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 21 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 15 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 13 EF-Tu.GTP.thr2-tRNA + 17 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 14 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 2135 mg2 + 1 rib_ini_b3388_1 --> 1 rib_70_elo1_b3388_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_elo_b3388_1_rib2	Translation elongation 2 b3388 1 ribosome(s)	426 h2o + 1 rib_70_elo1_b3388_1_cplx --> 426 EF-G.GDP + 426 EF-Tu.GDP + 44 ala1_tRNA + 5 ala2_tRNA + 26 arg1_tRNA + 21 asn1_tRNA + 23 asp1_tRNA + 1 fmet_tRNA + 19 gln1_tRNA + 12 gln2_tRNA + 34 glu1_tRNA + 17 gly1_tRNA + 1 glyT_tRNA + 2 glyU_tRNA + 852 h + 1 hisR_tRNA + 11 ile1_tRNA + 15 leu1_tRNA + 4 leu2_tRNA + 2 leuU_tRNA + 2 leuW_tRNA + 27 lys1_tRNA + 3 met1_tRNA + 2135 mg2 + 2 phe1_tRNA + 852 pi + 21 pro1_tRNA + 2 pro2_tRNA + 6 proL_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b3388_1_cplx + 7 ser1_tRNA + 15 ser2_tRNA + 5 ser3_tRNA + 8 serV_tRNA + 11 thr1_tRNA + 13 thr2_tRNA + 17 thr3_tRNA + 3 thrU_tRNA + 3 trpT_tRNA + 7 tyr1_tRNA + 14 val1_tRNA + 5 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_elo_b3388_25_rib1	Translation elongation 1 b3388 25 ribosome(s)	10675 EF-G.GTP + 1100 EF-Tu.GTP.ala1-tRNA + 125 EF-Tu.GTP.ala2-tRNA + 650 EF-Tu.GTP.arg1-tRNA + 525 EF-Tu.GTP.asn1-tRNA + 575 EF-Tu.GTP.asp1-tRNA + 475 EF-Tu.GTP.gln1-tRNA + 300 EF-Tu.GTP.gln2-tRNA + 850 EF-Tu.GTP.glu1-tRNA + 425 EF-Tu.GTP.gly1-tRNA + 25 EF-Tu.GTP.glyT-tRNA + 50 EF-Tu.GTP.glyU-tRNA + 25 EF-Tu.GTP.hisR-tRNA + 275 EF-Tu.GTP.ile1-tRNA + 375 EF-Tu.GTP.leu1-tRNA + 100 EF-Tu.GTP.leu2-tRNA + 50 EF-Tu.GTP.leuU-tRNA + 50 EF-Tu.GTP.leuW-tRNA + 700 EF-Tu.GTP.lys1-tRNA + 75 EF-Tu.GTP.met1-tRNA + 50 EF-Tu.GTP.phe1-tRNA + 525 EF-Tu.GTP.pro1-tRNA + 50 EF-Tu.GTP.pro2-tRNA + 150 EF-Tu.GTP.proL-tRNA + 250 EF-Tu.GTP.proM-tRNA + 175 EF-Tu.GTP.ser1-tRNA + 375 EF-Tu.GTP.ser2-tRNA + 125 EF-Tu.GTP.ser3-tRNA + 200 EF-Tu.GTP.serV-tRNA + 275 EF-Tu.GTP.thr1-tRNA + 325 EF-Tu.GTP.thr2-tRNA + 425 EF-Tu.GTP.thr3-tRNA + 75 EF-Tu.GTP.thrU-tRNA + 75 EF-Tu.GTP.trpT-tRNA + 175 EF-Tu.GTP.tyr1-tRNA + 350 EF-Tu.GTP.val1-tRNA + 125 EF-Tu.GTP.val2-tRNA + 200 EF-Tu.GTP.val3-tRNA + 53375 mg2 + 1 rib_ini_b3388_25 --> 1 rib_70_elo1_b3388_25_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_elo_b3388_25_rib2	Translation elongation 2 b3388 25 ribosome(s)	10650 h2o + 1 rib_70_elo1_b3388_25_cplx --> 10650 EF-G.GDP + 10650 EF-Tu.GDP + 1100 ala1_tRNA + 125 ala2_tRNA + 650 arg1_tRNA + 525 asn1_tRNA + 575 asp1_tRNA + 25 fmet_tRNA + 475 gln1_tRNA + 300 gln2_tRNA + 850 glu1_tRNA + 425 gly1_tRNA + 25 glyT_tRNA + 50 glyU_tRNA + 21300 h + 25 hisR_tRNA + 275 ile1_tRNA + 375 leu1_tRNA + 100 leu2_tRNA + 50 leuU_tRNA + 50 leuW_tRNA + 675 lys1_tRNA + 75 met1_tRNA + 53375 mg2 + 50 phe1_tRNA + 21300 pi + 525 pro1_tRNA + 50 pro2_tRNA + 150 proL_tRNA + 250 proM_tRNA + 1 rib_70_elo2_b3388_25_cplx + 175 ser1_tRNA + 375 ser2_tRNA + 125 ser3_tRNA + 200 serV_tRNA + 275 thr1_tRNA + 325 thr2_tRNA + 425 thr3_tRNA + 75 thrU_tRNA + 75 trpT_tRNA + 175 tyr1_tRNA + 350 val1_tRNA + 125 val2_tRNA + 200 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004

tl_elo_b3389_10_rib1	Translation elongation 1 b3389 10 ribosome(s)	3610 EF-G.GTP + 330 EF-Tu.GTP.ala1-tRNA + 60 EF-Tu.GTP.ala2-tRNA + 170 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argW-tRNA + 20 EF-Tu.GTP.argX-tRNA + 110 EF-Tu.GTP.asn1-tRNA + 150 EF-Tu.GTP.asp1-tRNA + 50 EF-Tu.GTP.cysT-tRNA + 80 EF-Tu.GTP.gln1-tRNA + 40 EF-Tu.GTP.gln2-tRNA + 240 EF-Tu.GTP.glu1-tRNA + 250 EF-Tu.GTP.gly1-tRNA + 20 EF-Tu.GTP.glyT-tRNA + 70 EF-Tu.GTP.glyU-tRNA + 70 EF-Tu.GTP.hisR-tRNA + 150 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.ile2-tRNA + 170 EF-Tu.GTP.leu1-tRNA + 60 EF-Tu.GTP.leu2-tRNA + 160 EF-Tu.GTP.leuU-tRNA + 100 EF-Tu.GTP.leuZ-tRNA + 130 EF-Tu.GTP.lys1-tRNA + 90 EF-Tu.GTP.met1-tRNA + 100 EF-Tu.GTP.phe1-tRNA + 90 EF-Tu.GTP.pro1-tRNA + 30 EF-Tu.GTP.pro2-tRNA + 20 EF-Tu.GTP.proL-tRNA + 20 EF-Tu.GTP.proM-tRNA + 30 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 50 EF-Tu.GTP.ser3-tRNA + 30 EF-Tu.GTP.serT-tRNA + 70 EF-Tu.GTP.serV-tRNA + 80 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 70 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.trpT-tRNA + 90 EF-Tu.GTP.tyr1-tRNA + 90 EF-Tu.GTP.val1-tRNA + 150 EF-Tu.GTP.val2-tRNA + 80 EF-Tu.GTP.val3-tRNA + 18050 mg2 + 1 rib_ini_b3389_10 --> 1 rib_70_elo1_b3389_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_elo_b3389_10_rib2	Translation elongation 2 b3389 10 ribosome(s)	3600 h2o + 1 rib_70_elo1_b3389_10_cplx --> 3600 EF-G.GDP + 3600 EF-Tu.GDP + 320 ala1_tRNA + 60 ala2_tRNA + 170 arg1_tRNA + 10 argW_tRNA + 20 argX_tRNA + 110 asn1_tRNA + 150 asp1_tRNA + 50 cysT_tRNA + 10 fmet_tRNA + 80 gln1_tRNA + 40 gln2_tRNA + 240 glu1_tRNA + 250 gly1_tRNA + 20 glyT_tRNA + 70 glyU_tRNA + 7200 h + 70 hisR_tRNA + 150 ile1_tRNA + 10 ile2_tRNA + 170 leu1_tRNA + 60 leu2_tRNA + 160 leuU_tRNA + 100 leuZ_tRNA + 130 lys1_tRNA + 90 met1_tRNA + 18050 mg2 + 100 phe1_tRNA + 7200 pi + 90 pro1_tRNA + 30 pro2_tRNA + 20 proL_tRNA + 20 proM_tRNA + 1 rib_70_elo2_b3389_10_cplx + 30 ser1_tRNA + 20 ser2_tRNA + 50 ser3_tRNA + 30 serT_tRNA + 70 serV_tRNA + 80 thr1_tRNA + 30 thr2_tRNA + 70 thr3_tRNA + 20 trpT_tRNA + 90 tyr1_tRNA + 90 val1_tRNA + 150 val2_tRNA + 80 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_elo_b3389_1_rib1	Translation elongation 1 b3389 1 ribosome(s)	361 EF-G.GTP + 33 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 17 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 2 EF-Tu.GTP.argX-tRNA + 11 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 25 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 17 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 15 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 1805 mg2 + 1 rib_ini_b3389_1 --> 1 rib_70_elo1_b3389_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_elo_b3389_1_rib2	Translation elongation 2 b3389 1 ribosome(s)	360 h2o + 1 rib_70_elo1_b3389_1_cplx --> 360 EF-G.GDP + 360 EF-Tu.GDP + 32 ala1_tRNA + 6 ala2_tRNA + 17 arg1_tRNA + 1 argW_tRNA + 2 argX_tRNA + 11 asn1_tRNA + 15 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 4 gln2_tRNA + 24 glu1_tRNA + 25 gly1_tRNA + 2 glyT_tRNA + 7 glyU_tRNA + 720 h + 7 hisR_tRNA + 15 ile1_tRNA + 1 ile2_tRNA + 17 leu1_tRNA + 6 leu2_tRNA + 16 leuU_tRNA + 10 leuZ_tRNA + 13 lys1_tRNA + 9 met1_tRNA + 1805 mg2 + 10 phe1_tRNA + 720 pi + 9 pro1_tRNA + 1 pro2_tRNA + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3389_1_cplx + 3 ser1_tRNA + 2 ser2_tRNA + 5 ser3_tRNA + 3 serT_tRNA + 7 serV_tRNA + 8 thr1_tRNA + 3 thr2_tRNA + 7 thr3_tRNA + 2 trpT_tRNA + 9 tyr1_tRNA + 9 val1_tRNA + 15 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_elo_b3389_21_rib1	Translation elongation 1 b3389 21 ribosome(s)	7581 EF-G.GTP + 693 EF-Tu.GTP.ala1-tRNA + 126 EF-Tu.GTP.ala2-tRNA + 357 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.argW-tRNA + 42 EF-Tu.GTP.argX-tRNA + 231 EF-Tu.GTP.asn1-tRNA + 315 EF-Tu.GTP.asp1-tRNA + 105 EF-Tu.GTP.cysT-tRNA + 168 EF-Tu.GTP.gln1-tRNA + 84 EF-Tu.GTP.gln2-tRNA + 504 EF-Tu.GTP.glu1-tRNA + 525 EF-Tu.GTP.gly1-tRNA + 42 EF-Tu.GTP.glyT-tRNA + 147 EF-Tu.GTP.glyU-tRNA + 147 EF-Tu.GTP.hisR-tRNA + 315 EF-Tu.GTP.ile1-tRNA + 21 EF-Tu.GTP.ile2-tRNA + 357 EF-Tu.GTP.leu1-tRNA + 126 EF-Tu.GTP.leu2-tRNA + 336 EF-Tu.GTP.leuU-tRNA + 210 EF-Tu.GTP.leuZ-tRNA + 273 EF-Tu.GTP.lys1-tRNA + 189 EF-Tu.GTP.met1-tRNA + 210 EF-Tu.GTP.phe1-tRNA + 189 EF-Tu.GTP.pro1-tRNA + 63 EF-Tu.GTP.pro2-tRNA + 42 EF-Tu.GTP.proL-tRNA + 42 EF-Tu.GTP.proM-tRNA + 63 EF-Tu.GTP.ser1-tRNA + 42 EF-Tu.GTP.ser2-tRNA + 105 EF-Tu.GTP.ser3-tRNA + 63 EF-Tu.GTP.serT-tRNA + 147 EF-Tu.GTP.serV-tRNA + 168 EF-Tu.GTP.thr1-tRNA + 63 EF-Tu.GTP.thr2-tRNA + 147 EF-Tu.GTP.thr3-tRNA + 42 EF-Tu.GTP.trpT-tRNA + 189 EF-Tu.GTP.tyr1-tRNA + 189 EF-Tu.GTP.val1-tRNA + 315 EF-Tu.GTP.val2-tRNA + 168 EF-Tu.GTP.val3-tRNA + 37905 mg2 + 1 rib_ini_b3389_21 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_elo_b3389_21_rib2	Translation elongation 2 b3389 21 ribosome(s)	7560 h2o + 1 rib_70_elo1_b3389_21_cplx --> 7560 EF-G.GDP + 7560 EF-Tu.GDP + 672 ala1_tRNA + 126 ala2_tRNA + 357 arg1_tRNA + 21 argW_tRNA + 42 argX_tRNA + 231 asn1_tRNA + 315 asp1_tRNA + 105 cysT_tRNA + 21 fmet_tRNA + 168 gln1_tRNA + 84 gln2_tRNA + 504 glu1_tRNA + 525 gly1_tRNA + 42 glyT_tRNA + 147 glyU_tRNA + 15120 h + 147 hisR_tRNA + 315 ile1_tRNA + 21 ile2_tRNA + 357 leu1_tRNA + 126 leu2_tRNA + 336 leuU_tRNA + 210 leuZ_tRNA + 273 lys1_tRNA + 189 met1_tRNA + 37905 mg2 + 210 phe1_tRNA + 15120 pi + 189 pro1_tRNA + 63 pro2_tRNA + 42 proL_tRNA + 42 proM_tRNA + 1 rib_70_elo2_b3389_21_cplx + 63 ser1_tRNA + 42 ser2_tRNA + 105 ser3_tRNA + 63 serT_tRNA + 147 serV_tRNA + 168 thr1_tRNA + 63 thr2_tRNA + 147 thr3_tRNA + 42 trpT_tRNA + 189 tyr1_tRNA + 189 val1_tRNA + 315 val2_tRNA + 168 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714

tl_elo_b3390_10_rib1	Translation elongation 1 b3390 10 ribosome(s)	1720 EF-G.GTP + 90 EF-Tu.GTP.ala1-tRNA + 30 EF-Tu.GTP.ala2-tRNA + 150 EF-Tu.GTP.arg1-tRNA + 80 EF-Tu.GTP.asn1-tRNA + 90 EF-Tu.GTP.asp1-tRNA + 40 EF-Tu.GTP.gln1-tRNA + 50 EF-Tu.GTP.gln2-tRNA + 210 EF-Tu.GTP.glu1-tRNA + 90 EF-Tu.GTP.gly1-tRNA + 20 EF-Tu.GTP.glyT-tRNA + 20 EF-Tu.GTP.glyU-tRNA + 20 EF-Tu.GTP.hisR-tRNA + 100 EF-Tu.GTP.ile1-tRNA + 60 EF-Tu.GTP.leu1-tRNA + 30 EF-Tu.GTP.leu2-tRNA + 40 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 100 EF-Tu.GTP.lys1-tRNA + 30 EF-Tu.GTP.met1-tRNA + 40 EF-Tu.GTP.phe1-tRNA + 40 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 30 EF-Tu.GTP.ser1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 30 EF-Tu.GTP.serV-tRNA + 40 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 30 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 50 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 70 EF-Tu.GTP.val3-tRNA + 8600 mg2 + 1 rib_ini_b3390_10 --> 1 rib_70_elo1_b3390_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_elo_b3390_10_rib2	Translation elongation 2 b3390 10 ribosome(s)	1710 h2o + 1 rib_70_elo1_b3390_10_cplx --> 1710 EF-G.GDP + 1710 EF-Tu.GDP + 90 ala1_tRNA + 30 ala2_tRNA + 150 arg1_tRNA + 70 asn1_tRNA + 90 asp1_tRNA + 10 fmet_tRNA + 40 gln1_tRNA + 50 gln2_tRNA + 210 glu1_tRNA + 90 gly1_tRNA + 20 glyT_tRNA + 20 glyU_tRNA + 3420 h + 20 hisR_tRNA + 100 ile1_tRNA + 60 leu1_tRNA + 30 leu2_tRNA + 40 leuU_tRNA + 20 leuZ_tRNA + 100 lys1_tRNA + 30 met1_tRNA + 8600 mg2 + 40 phe1_tRNA + 3420 pi + 40 pro1_tRNA + 10 pro2_tRNA + 1 rib_70_elo2_b3390_10_cplx + 30 ser1_tRNA + 10 ser2_tRNA + 30 serV_tRNA + 40 thr1_tRNA + 30 thr2_tRNA + 30 thr3_tRNA + 10 thrU_tRNA + 10 trpT_tRNA + 30 tyr1_tRNA + 50 val1_tRNA + 20 val2_tRNA + 70 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_elo_b3390_1_rib1	Translation elongation 1 b3390 1 ribosome(s)	172 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 21 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 860 mg2 + 1 rib_ini_b3390_1 --> 1 rib_70_elo1_b3390_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_elo_b3390_1_rib2	Translation elongation 2 b3390 1 ribosome(s)	171 h2o + 1 rib_70_elo1_b3390_1_cplx --> 171 EF-G.GDP + 171 EF-Tu.GDP + 9 ala1_tRNA + 3 ala2_tRNA + 15 arg1_tRNA + 7 asn1_tRNA + 9 asp1_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 5 gln2_tRNA + 21 glu1_tRNA + 9 gly1_tRNA + 2 glyT_tRNA + 2 glyU_tRNA + 342 h + 2 hisR_tRNA + 10 ile1_tRNA + 6 leu1_tRNA + 3 leu2_tRNA + 4 leuU_tRNA + 2 leuZ_tRNA + 10 lys1_tRNA + 3 met1_tRNA + 860 mg2 + 4 phe1_tRNA + 342 pi + 4 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b3390_1_cplx + 3 ser1_tRNA + 1 ser2_tRNA + 3 serV_tRNA + 4 thr1_tRNA + 3 thr2_tRNA + 3 thr3_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 3 tyr1_tRNA + 5 val1_tRNA + 2 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_elo_b3390_5_rib1	Translation elongation 1 b3390 5 ribosome(s)	860 EF-G.GTP + 45 EF-Tu.GTP.ala1-tRNA + 15 EF-Tu.GTP.ala2-tRNA + 75 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 45 EF-Tu.GTP.asp1-tRNA + 20 EF-Tu.GTP.gln1-tRNA + 25 EF-Tu.GTP.gln2-tRNA + 105 EF-Tu.GTP.glu1-tRNA + 45 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 10 EF-Tu.GTP.glyU-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 50 EF-Tu.GTP.ile1-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 15 EF-Tu.GTP.leu2-tRNA + 20 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 50 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 20 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 15 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 15 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 15 EF-Tu.GTP.thr2-tRNA + 15 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 25 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 35 EF-Tu.GTP.val3-tRNA + 4300 mg2 + 1 rib_ini_b3390_5 --> 1 rib_70_elo1_b3390_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_elo_b3390_5_rib2	Translation elongation 2 b3390 5 ribosome(s)	855 h2o + 1 rib_70_elo1_b3390_5_cplx --> 855 EF-G.GDP + 855 EF-Tu.GDP + 45 ala1_tRNA + 15 ala2_tRNA + 75 arg1_tRNA + 35 asn1_tRNA + 45 asp1_tRNA + 5 fmet_tRNA + 20 gln1_tRNA + 25 gln2_tRNA + 105 glu1_tRNA + 45 gly1_tRNA + 10 glyT_tRNA + 10 glyU_tRNA + 1710 h + 10 hisR_tRNA + 50 ile1_tRNA + 30 leu1_tRNA + 15 leu2_tRNA + 20 leuU_tRNA + 10 leuZ_tRNA + 50 lys1_tRNA + 15 met1_tRNA + 4300 mg2 + 20 phe1_tRNA + 1710 pi + 20 pro1_tRNA + 5 pro2_tRNA + 1 rib_70_elo2_b3390_5_cplx + 15 ser1_tRNA + 5 ser2_tRNA + 15 serV_tRNA + 20 thr1_tRNA + 15 thr2_tRNA + 15 thr3_tRNA + 5 thrU_tRNA + 5 trpT_tRNA + 15 tyr1_tRNA + 25 val1_tRNA + 10 val2_tRNA + 35 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_elo_b3406_1_rib1	Translation elongation 1 b3406 1 ribosome(s)	157 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 7 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 785 mg2 + 1 rib_ini_b3406_1 --> 1 rib_70_elo1_b3406_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545

tl_elo_b3406_1_rib2	Translation elongation 2 b3406 1 ribosome(s)	156 h2o + 1 rib_70_elo1_b3406_1_cplx --> 156 EF-G.GDP + 156 EF-Tu.GDP + 7 ala1_tRNA + 3 ala2_tRNA + 12 arg1_tRNA + 1 argX_tRNA + 7 asn1_tRNA + 10 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 1 gln2_tRNA + 16 glu1_tRNA + 7 gly1_tRNA + 2 glyU_tRNA + 312 h + 1 hisR_tRNA + 8 ile1_tRNA + 6 leu1_tRNA + 1 leu2_tRNA + 5 leuU_tRNA + 14 lys1_tRNA + 1 met1_tRNA + 785 mg2 + 4 phe1_tRNA + 312 pi + 2 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 1 rib_70_elo2_b3406_1_cplx + 2 ser1_tRNA + 1 ser2_tRNA + 3 serV_tRNA + 3 thr1_tRNA + 2 thr2_tRNA + 1 thr3_tRNA + 1 thrU_tRNA + 4 trpT_tRNA + 10 tyr1_tRNA + 7 val1_tRNA + 5 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_elo_b3406_4_rib1	Translation elongation 1 b3406 4 ribosome(s)	628 EF-G.GTP + 28 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 48 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argX-tRNA + 28 EF-Tu.GTP.asn1-tRNA + 40 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 64 EF-Tu.GTP.glu1-tRNA + 28 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 32 EF-Tu.GTP.ile1-tRNA + 24 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 20 EF-Tu.GTP.leuU-tRNA + 56 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 16 EF-Tu.GTP.trpT-tRNA + 40 EF-Tu.GTP.tyr1-tRNA + 28 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 3140 mg2 + 1 rib_ini_b3406_4 --> 1 rib_70_elo1_b3406_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_elo_b3406_4_rib2	Translation elongation 2 b3406 4 ribosome(s)	624 h2o + 1 rib_70_elo1_b3406_4_cplx --> 624 EF-G.GDP + 624 EF-Tu.GDP + 28 ala1_tRNA + 12 ala2_tRNA + 48 arg1_tRNA + 4 argX_tRNA + 28 asn1_tRNA + 40 asp1_tRNA + 4 cysT_tRNA + 4 fmet_tRNA + 12 gln1_tRNA + 4 gln2_tRNA + 64 glu1_tRNA + 28 gly1_tRNA + 8 glyU_tRNA + 1248 h + 4 hisR_tRNA + 32 ile1_tRNA + 24 leu1_tRNA + 4 leu2_tRNA + 20 leuU_tRNA + 56 lys1_tRNA + 4 met1_tRNA + 3140 mg2 + 16 phe1_tRNA + 1248 pi + 8 pro1_tRNA + 8 pro2_tRNA + 4 proL_tRNA + 1 rib_70_elo2_b3406_4_cplx + 8 ser1_tRNA + 4 ser2_tRNA + 12 serV_tRNA + 12 thr1_tRNA + 8 thr2_tRNA + 4 thr3_tRNA + 4 thrU_tRNA + 16 trpT_tRNA + 40 tyr1_tRNA + 28 val1_tRNA + 20 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_elo_b3406_9_rib1	Translation elongation 1 b3406 9 ribosome(s)	1413 EF-G.GTP + 63 EF-Tu.GTP.ala1-tRNA + 27 EF-Tu.GTP.ala2-tRNA + 108 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argX-tRNA + 63 EF-Tu.GTP.asn1-tRNA + 90 EF-Tu.GTP.asp1-tRNA + 9 EF-Tu.GTP.cysT-tRNA + 27 EF-Tu.GTP.gln1-tRNA + 9 EF-Tu.GTP.gln2-tRNA + 144 EF-Tu.GTP.glu1-tRNA + 63 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 72 EF-Tu.GTP.ile1-tRNA + 54 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 45 EF-Tu.GTP.leuU-tRNA + 126 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 36 EF-Tu.GTP.phe1-tRNA + 27 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.proL-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 27 EF-Tu.GTP.serV-tRNA + 27 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 90 EF-Tu.GTP.tyr1-tRNA + 63 EF-Tu.GTP.val1-tRNA + 45 EF-Tu.GTP.val2-tRNA + 18 EF-Tu.GTP.val3-tRNA + 7065 mg2 + 1 rib_ini_b3406_9 --> 1 rib_70_elo1_b3406_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_elo_b3406_9_rib2	Translation elongation 2 b3406 9 ribosome(s)	1404 h2o + 1 rib_70_elo1_b3406_9_cplx --> 1404 EF-G.GDP + 1404 EF-Tu.GDP + 63 ala1_tRNA + 27 ala2_tRNA + 108 arg1_tRNA + 9 argX_tRNA + 63 asn1_tRNA + 90 asp1_tRNA + 9 cysT_tRNA + 9 fmet_tRNA + 27 gln1_tRNA + 9 gln2_tRNA + 144 glu1_tRNA + 63 gly1_tRNA + 18 glyU_tRNA + 2808 h + 9 hisR_tRNA + 72 ile1_tRNA + 54 leu1_tRNA + 9 leu2_tRNA + 45 leuU_tRNA + 126 lys1_tRNA + 9 met1_tRNA + 7065 mg2 + 36 phe1_tRNA + 2808 pi + 18 pro1_tRNA + 18 pro2_tRNA + 9 proL_tRNA + 1 rib_70_elo2_b3406_9_cplx + 18 ser1_tRNA + 9 ser2_tRNA + 27 serV_tRNA + 27 thr1_tRNA + 18 thr2_tRNA + 9 thr3_tRNA + 9 thrU_tRNA + 36 trpT_tRNA + 90 tyr1_tRNA + 63 val1_tRNA + 45 val2_tRNA + 18 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_elo_b3461_16_rib1	Translation elongation 1 b3461 16 ribosome(s)	4528 EF-G.GTP + 448 EF-Tu.GTP.ala1-tRNA + 80 EF-Tu.GTP.ala2-tRNA + 320 EF-Tu.GTP.arg1-tRNA + 48 EF-Tu.GTP.argX-tRNA + 208 EF-Tu.GTP.asn1-tRNA + 368 EF-Tu.GTP.asp1-tRNA + 208 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.gln2-tRNA + 352 EF-Tu.GTP.glu1-tRNA + 192 EF-Tu.GTP.gly1-tRNA + 96 EF-Tu.GTP.hisR-tRNA + 192 EF-Tu.GTP.ile1-tRNA + 352 EF-Tu.GTP.leu1-tRNA + 64 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 256 EF-Tu.GTP.lys1-tRNA + 160 EF-Tu.GTP.met1-tRNA + 128 EF-Tu.GTP.phe1-tRNA + 64 EF-Tu.GTP.pro1-tRNA + 32 EF-Tu.GTP.proM-tRNA + 96 EF-Tu.GTP.ser1-tRNA + 48 EF-Tu.GTP.ser2-tRNA + 16 EF-Tu.GTP.ser3-tRNA + 32 EF-Tu.GTP.serT-tRNA + 64 EF-Tu.GTP.serV-tRNA + 96 EF-Tu.GTP.thr1-tRNA + 16 EF-Tu.GTP.thr2-tRNA + 32 EF-Tu.GTP.thr3-tRNA + 96 EF-Tu.GTP.trpT-tRNA + 112 EF-Tu.GTP.tyr1-tRNA + 128 EF-Tu.GTP.val1-tRNA + 48 EF-Tu.GTP.val2-tRNA + 112 EF-Tu.GTP.val3-tRNA + 22640 mg2 + 1 rib_ini_b3461_16 --> 1 rib_70_elo1_b3461_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_elo_b3461_16_rib2	Translation elongation 2 b3461 16 ribosome(s)	4512 h2o + 1 rib_70_elo1_b3461_16_cplx --> 4512 EF-G.GDP + 4512 EF-Tu.GDP + 432 ala1_tRNA + 80 ala2_tRNA + 320 arg1_tRNA + 48 argX_tRNA + 208 asn1_tRNA + 368 asp1_tRNA + 16 fmet_tRNA + 208 gln1_tRNA + 16 gln2_tRNA + 352 glu1_tRNA + 192 gly1_tRNA + 9024 h + 96 hisR_tRNA + 192 ile1_tRNA + 352 leu1_tRNA + 64 leu2_tRNA + 16 leuU_tRNA + 32 leuZ_tRNA + 256 lys1_tRNA + 160 met1_tRNA + 22640 mg2 + 128 phe1_tRNA + 9024 pi + 64 pro1_tRNA + 32 proM_tRNA + 1 rib_70_elo2_b3461_16_cplx + 96 ser1_tRNA + 48 ser2_tRNA + 16 ser3_tRNA + 32 serT_tRNA + 64 serV_tRNA + 96 thr1_tRNA + 16 thr2_tRNA + 32 thr3_tRNA + 96 trpT_tRNA + 112 tyr1_tRNA + 128 val1_tRNA + 48 val2_tRNA + 112 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209

tl_elo_b3461_1_rib1	Translation elongation 1 b3461 1 ribosome(s)	283 EF-G.GTP + 28 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argX-tRNA + 13 EF-Tu.GTP.asn1-tRNA + 23 EF-Tu.GTP.asp1-tRNA + 13 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 22 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 22 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 1415 mg2 + 1 rib_ini_b3461_1 --> 1 rib_70_elo1_b3461_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_elo_b3461_1_rib2	Translation elongation 2 b3461 1 ribosome(s)	282 h2o + 1 rib_70_elo1_b3461_1_cplx --> 282 EF-G.GDP + 282 EF-Tu.GDP + 27 ala1_tRNA + 5 ala2_tRNA + 20 arg1_tRNA + 3 argX_tRNA + 13 asn1_tRNA + 23 asp1_tRNA + 1 fmet_tRNA + 13 gln1_tRNA + 1 gln2_tRNA + 22 glu1_tRNA + 12 gly1_tRNA + 564 h + 6 hisR_tRNA + 12 ile1_tRNA + 22 leu1_tRNA + 4 leu2_tRNA + 1 leuU_tRNA + 2 leuZ_tRNA + 16 lys1_tRNA + 10 met1_tRNA + 1415 mg2 + 8 phe1_tRNA + 564 pi + 4 pro1_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3461_1_cplx + 6 ser1_tRNA + 3 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 4 serV_tRNA + 6 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 6 trpT_tRNA + 7 tyr1_tRNA + 8 val1_tRNA + 3 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_elo_b3461_8_rib1	Translation elongation 1 b3461 8 ribosome(s)	2264 EF-G.GTP + 224 EF-Tu.GTP.ala1-tRNA + 40 EF-Tu.GTP.ala2-tRNA + 160 EF-Tu.GTP.arg1-tRNA + 24 EF-Tu.GTP.argX-tRNA + 104 EF-Tu.GTP.asn1-tRNA + 184 EF-Tu.GTP.asp1-tRNA + 104 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 176 EF-Tu.GTP.glu1-tRNA + 96 EF-Tu.GTP.gly1-tRNA + 48 EF-Tu.GTP.hisR-tRNA + 96 EF-Tu.GTP.ile1-tRNA + 176 EF-Tu.GTP.leu1-tRNA + 32 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuZ-tRNA + 128 EF-Tu.GTP.lys1-tRNA + 80 EF-Tu.GTP.met1-tRNA + 64 EF-Tu.GTP.phe1-tRNA + 32 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.proM-tRNA + 48 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 16 EF-Tu.GTP.serT-tRNA + 32 EF-Tu.GTP.serV-tRNA + 48 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 16 EF-Tu.GTP.thr3-tRNA + 48 EF-Tu.GTP.trpT-tRNA + 56 EF-Tu.GTP.tyr1-tRNA + 64 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val2-tRNA + 56 EF-Tu.GTP.val3-tRNA + 11320 mg2 + 1 rib_ini_b3461_8 --> 1 rib_70_elo1_b3461_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_elo_b3461_8_rib2	Translation elongation 2 b3461 8 ribosome(s)	2256 h2o + 1 rib_70_elo1_b3461_8_cplx --> 2256 EF-G.GDP + 2256 EF-Tu.GDP + 216 ala1_tRNA + 40 ala2_tRNA + 160 arg1_tRNA + 24 argX_tRNA + 104 asn1_tRNA + 184 asp1_tRNA + 8 fmet_tRNA + 104 gln1_tRNA + 8 gln2_tRNA + 176 glu1_tRNA + 96 gly1_tRNA + 4512 h + 48 hisR_tRNA + 96 ile1_tRNA + 176 leu1_tRNA + 32 leu2_tRNA + 8 leuU_tRNA + 16 leuZ_tRNA + 128 lys1_tRNA + 80 met1_tRNA + 11320 mg2 + 64 phe1_tRNA + 4512 pi + 32 pro1_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b3461_8_cplx + 48 ser1_tRNA + 2 ser2_tRNA + 8 ser3_tRNA + 16 serT_tRNA + 32 serV_tRNA + 48 thr1_tRNA + 8 thr2_tRNA + 16 thr3_tRNA + 48 trpT_tRNA + 56 tyr1_tRNA + 64 val1_tRNA + 24 val2_tRNA + 56 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_elo_b3470_1_rib1	Translation elongation 1 b3470 1 ribosome(s)	80 EF-G.GTP + 2 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.asn1-tRNA + 7 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val3-tRNA + 400 mg2 + 1 rib_ini_b3470_1 --> 1 rib_70_elo1_b3470_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9
tl_elo_b3470_1_rib2	Translation elongation 2 b3470 1 ribosome(s)	79 h2o + 1 rib_70_elo1_b3470_1_cplx --> 79 EF-G.GDP + 79 EF-Tu.GDP + 2 ala1_tRNA + 2 ala2_tRNA + 6 arg1_tRNA + 1 asn1_tRNA + 7 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 5 glu1_tRNA + 3 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 158 h + 2 hisR_tRNA + 4 ile1_tRNA + 4 leu1_tRNA + 2 leu2_tRNA + 3 leuU_tRNA + 3 lys1_tRNA + 4 met1_tRNA + 400 mg2 + 3 phe1_tRNA + 158 pi + 3 pro1_tRNA + 4 pro2_tRNA + 1 rib_70_elo2_b3470_1_cplx + 1 ser1_tRNA + 1 serV_tRNA + 4 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 2 tyr1_tRNA + 3 val1_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9
tl_elo_b3470_2_rib1	Translation elongation 1 b3470 2 ribosome(s)	160 EF-G.GTP + 4 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val3-tRNA + 800 mg2 + 1 rib_ini_b3470_2 --> 1 rib_70_elo1_b3470_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9

tl_elo_b3470_2_rib2	Translation elongation 2 b3470 2 ribosome(s)	158 h2o + 1 rib_70_elo1_b3470_2_cplx --> 158 EF-G.GDP + 158 EF-Tu.GDP + 4 ala1_tRNA + 4 ala2_tRNA + 12 arg1_tRNA + 2 asn1_tRNA + 14 asp1_tRNA + 4 cysT_tRNA + 2 fmet_tRNA + 2 gln1_tRNA + 10 glu1_tRNA + 6 gly1_tRNA + 2 glyT_tRNA + 2 glyU_tRNA + 316 h + 4 hisR_tRNA + 8 ile1_tRNA + 8 leu1_tRNA + 4 leu2_tRNA + 6 leuU_tRNA + 6 lys1_tRNA + 8 met1_tRNA + 800 mg2 + 6 phe1_tRNA + 316 pi + 6 pro1_tRNA + 8 pro2_tRNA + 1 rib_70_elo2_b3470_2_cplx + 2 ser1_tRNA + 2 serV_tRNA + 8 thr1_tRNA + 2 thr2_tRNA + 4 thr3_tRNA + 2 thrU_tRNA + 4 tyr1_tRNA + 6 val1_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9
tl_elo_b3470_4_rib1	Translation elongation 1 b3470 4 ribosome(s)	320 EF-G.GTP + 8 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 28 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 16 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 16 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.serV-tRNA + 16 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1600 mg2 + 1 rib_ini_b3470_4 --> 1 rib_70_elo1_b3470_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9
tl_elo_b3470_4_rib2	Translation elongation 2 b3470 4 ribosome(s)	316 h2o + 1 rib_70_elo1_b3470_4_cplx --> 316 EF-G.GDP + 316 EF-Tu.GDP + 8 ala1_tRNA + 8 ala2_tRNA + 24 arg1_tRNA + 4 asn1_tRNA + 28 asp1_tRNA + 8 cysT_tRNA + 4 fmet_tRNA + 4 gln1_tRNA + 20 glu1_tRNA + 12 gly1_tRNA + 4 glyT_tRNA + 4 glyU_tRNA + 632 h + 8 hisR_tRNA + 16 ile1_tRNA + 16 leu1_tRNA + 8 leu2_tRNA + 12 leuU_tRNA + 12 lys1_tRNA + 16 met1_tRNA + 1600 mg2 + 12 phe1_tRNA + 632 pi + 12 pro1_tRNA + 16 pro2_tRNA + 1 rib_70_elo2_b3470_4_cplx + 4 ser1_tRNA + 4 serV_tRNA + 16 thr1_tRNA + 4 thr2_tRNA + 8 thr3_tRNA + 4 thrU_tRNA + 8 tyr1_tRNA + 12 val1_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9
tl_elo_b3559_1_rib1	Translation elongation 1 b3559 1 ribosome(s)	688 EF-G.GTP + 72 EF-Tu.GTP.ala1-tRNA + 13 EF-Tu.GTP.ala2-tRNA + 47 EF-Tu.GTP.arg1-tRNA + 24 EF-Tu.GTP.asn1-tRNA + 51 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 19 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 55 EF-Tu.GTP.glu1-tRNA + 35 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 32 EF-Tu.GTP.ile1-tRNA + 63 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 41 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 30 EF-Tu.GTP.phe1-tRNA + 27 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 7 EF-Tu.GTP.serV-tRNA + 23 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 13 EF-Tu.GTP.tyr1-tRNA + 26 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 17 EF-Tu.GTP.val3-tRNA + 3440 mg2 + 1 rib_ini_b3559_1 --> 1 rib_70_elo1_b3559_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.18E+01	4.18E+01	0	7.26E+01	72.62705	0	1.83E+00	1.827
tl_elo_b3559_1_rib2	Translation elongation 2 b3559 1 ribosome(s)	687 h2o + 1 rib_70_elo1_b3559_1_cplx --> 687 EF-G.GDP + 687 EF-Tu.GDP + 72 ala1_tRNA + 13 ala2_tRNA + 47 arg1_tRNA + 24 asn1_tRNA + 51 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 19 gln1_tRNA + 5 gln2_tRNA + 55 glu1_tRNA + 35 gly1_tRNA + 3 glyU_tRNA + 1374 h + 10 hisR_tRNA + 32 ile1_tRNA + 63 leu1_tRNA + 4 leu2_tRNA + 7 leuU_tRNA + 1 leuW_tRNA + 1 leuZ_tRNA + 41 lys1_tRNA + 15 met1_tRNA + 3440 mg2 + 30 phe1_tRNA + 1374 pi + 27 pro1_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3559_1_cplx + 4 ser1_tRNA + 6 ser2_tRNA + 4 ser3_tRNA + 7 serV_tRNA + 23 thr1_tRNA + 8 thr2_tRNA + 3 thr3_tRNA + 7 trpT_tRNA + 13 tyr1_tRNA + 26 val1_tRNA + 8 val2_tRNA + 17 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.18E+01	4.18E+01	0	7.26E+01	72.62705	0	1.83E+00	1.827
tl_elo_b3559_20_rib1	Translation elongation 1 b3559 20 ribosome(s)	13760 EF-G.GTP + 1440 EF-Tu.GTP.ala1-tRNA + 260 EF-Tu.GTP.ala2-tRNA + 940 EF-Tu.GTP.arg1-tRNA + 480 EF-Tu.GTP.asn1-tRNA + 1020 EF-Tu.GTP.asp1-tRNA + 60 EF-Tu.GTP.cysT-tRNA + 380 EF-Tu.GTP.gln1-tRNA + 120 EF-Tu.GTP.gln2-tRNA + 1100 EF-Tu.GTP.glu1-tRNA + 700 EF-Tu.GTP.gly1-tRNA + 60 EF-Tu.GTP.glyU-tRNA + 200 EF-Tu.GTP.hisR-tRNA + 640 EF-Tu.GTP.ile1-tRNA + 1260 EF-Tu.GTP.leu1-tRNA + 80 EF-Tu.GTP.leu2-tRNA + 140 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuW-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 820 EF-Tu.GTP.lys1-tRNA + 300 EF-Tu.GTP.met1-tRNA + 600 EF-Tu.GTP.phe1-tRNA + 540 EF-Tu.GTP.pro1-tRNA + 60 EF-Tu.GTP.proM-tRNA + 80 EF-Tu.GTP.ser1-tRNA + 120 EF-Tu.GTP.ser2-tRNA + 80 EF-Tu.GTP.ser3-tRNA + 140 EF-Tu.GTP.serV-tRNA + 460 EF-Tu.GTP.thr1-tRNA + 160 EF-Tu.GTP.thr2-tRNA + 60 EF-Tu.GTP.thr3-tRNA + 140 EF-Tu.GTP.trpT-tRNA + 260 EF-Tu.GTP.tyr1-tRNA + 520 EF-Tu.GTP.val1-tRNA + 160 EF-Tu.GTP.val2-tRNA + 340 EF-Tu.GTP.val3-tRNA + 68800 mg2 + 1 rib_ini_b3559_20 --> 1 rib_70_elo1_b3559_20_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	6.34E+01	63.37435	0	1.83E+00	1.827
tl_elo_b3559_20_rib2	Translation elongation 2 b3559 20 ribosome(s)	13740 h2o + 1 rib_70_elo1_b3559_20_cplx --> 13740 EF-G.GDP + 13740 EF-Tu.GDP + 1440 ala1_tRNA + 260 ala2_tRNA + 940 arg1_tRNA + 480 asn1_tRNA + 1020 asp1_tRNA + 60 cysT_tRNA + 20 fmet_tRNA + 380 gln1_tRNA + 100 gln2_tRNA + 1100 glu1_tRNA + 700 gly1_tRNA + 60 glyU_tRNA + 27480 h + 200 hisR_tRNA + 640 ile1_tRNA + 1260 leu1_tRNA + 80 leu2_tRNA + 140 leuU_tRNA + 20 leuW_tRNA + 20 leuZ_tRNA + 820 lys1_tRNA + 300 met1_tRNA + 68800 mg2 + 600 phe1_tRNA + 27480 pi + 540 pro1_tRNA + 60 proM_tRNA + 1 rib_70_elo2_b3559_20_cplx + 80 ser1_tRNA + 120 ser2_tRNA + 80 ser3_tRNA + 140 serV_tRNA + 460 thr1_tRNA + 160 thr2_tRNA + 60 thr3_tRNA + 140 trpT_tRNA + 260 tyr1_tRNA + 520 val1_tRNA + 160 val2_tRNA + 340 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	6.34E+01	63.37435	0	1.83E+00	1.827

tl_elo_b3559_40_rib1	Translation elongation 1 b3559 40 ribosome(s)	27520 EF-G.GTP + 2880 EF-Tu.GTP.ala1-tRNA + 520 EF-Tu.GTP.ala2-tRNA + 1880 EF-Tu.GTP.arg1-tRNA + 960 EF-Tu.GTP.asn1-tRNA + 2040 EF-Tu.GTP.asp1-tRNA + 120 EF-Tu.GTP.cysT-tRNA + 760 EF-Tu.GTP.gln1-tRNA + 240 EF-Tu.GTP.gln2-tRNA + 2200 EF-Tu.GTP.glu1-tRNA + 1400 EF-Tu.GTP.gly1-tRNA + 120 EF-Tu.GTP.glyU-tRNA + 400 EF-Tu.GTP.hisR-tRNA + 1280 EF-Tu.GTP.ile1-tRNA + 2520 EF-Tu.GTP.leu1-tRNA + 160 EF-Tu.GTP.leu2-tRNA + 280 EF-Tu.GTP.leuU-tRNA + 40 EF-Tu.GTP.leuW-tRNA + 40 EF-Tu.GTP.leuZ-tRNA + 1640 EF-Tu.GTP.lys1-tRNA + 600 EF-Tu.GTP.met1-tRNA + 1200 EF-Tu.GTP.phe1-tRNA + 1080 EF-Tu.GTP.pro1-tRNA + 120 EF-Tu.GTP.proM-tRNA + 160 EF-Tu.GTP.ser1-tRNA + 240 EF-Tu.GTP.ser2-tRNA + 160 EF-Tu.GTP.ser3-tRNA + 280 EF-Tu.GTP.serV-tRNA + 920 EF-Tu.GTP.thr1-tRNA + 320 EF-Tu.GTP.thr2-tRNA + 120 EF-Tu.GTP.thr3-tRNA + 280 EF-Tu.GTP.trpT-tRNA + 520 EF-Tu.GTP.tyr1-tRNA + 1040 EF-Tu.GTP.val1-tRNA + 320 EF-Tu.GTP.val2-tRNA + 680 EF-Tu.GTP.val3-tRNA + 137600 mg2 + 1 rib_ini_b3559_40 --> 1 rib_70_elo1_b3559_40_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.82E+01	1.82E+01	0	3.09E+01	30.87469	0	1.79E+00	1.787975
tl_elo_b3559_40_rib2	Translation elongation 2 b3559 40 ribosome(s)	27480 h2o + 1 rib_70_elo1_b3559_40_cplx --> 27480 EF-G.GDP + 27480 EF-Tu.GDP + 2880 ala1_tRNA + 520 ala2_tRNA + 1880 arg1_tRNA + 960 asn1_tRNA + 2040 asp1_tRNA + 120 cysT_tRNA + 40 fmet_tRNA + 760 gln1_tRNA + 200 gln2_tRNA + 2200 glu1_tRNA + 1400 gly1_tRNA + 120 glyU_tRNA + 54960 h + 400 hisR_tRNA + 1280 ile1_tRNA + 2520 leu1_tRNA + 160 leu2_tRNA + 280 leuU_tRNA + 40 leuW_tRNA + 40 leuZ_tRNA + 1640 lys1_tRNA + 600 met1_tRNA + 137600 mg2 + 1200 phe1_tRNA + 54960 pi + 1080 pro1_tRNA + 120 proM_tRNA + 1 rib_70_elo2_b3559_40_cplx + 160 ser1_tRNA + 240 ser2_tRNA + 160 ser3_tRNA + 280 serV_tRNA + 920 thr1_tRNA + 320 thr2_tRNA + 120 thr3_tRNA + 280 trpT_tRNA + 520 tyr1_tRNA + 1040 val1_tRNA + 320 val2_tRNA + 680 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.82E+01	1.82E+01	0	3.09E+01	30.87469	0	1.79E+00	1.787975
tl_elo_b3560_17_rib1	Translation elongation 1 b3560 17 ribosome(s)	5134 EF-G.GTP + 221 EF-Tu.GTP.ala1-tRNA + 119 EF-Tu.GTP.ala2-tRNA + 255 EF-Tu.GTP.arg1-tRNA + 17 EF-Tu.GTP.argW-tRNA + 187 EF-Tu.GTP.asn1-tRNA + 272 EF-Tu.GTP.asp1-tRNA + 85 EF-Tu.GTP.cysT-tRNA + 306 EF-Tu.GTP.gln1-tRNA + 34 EF-Tu.GTP.gln2-tRNA + 408 EF-Tu.GTP.glu1-tRNA + 323 EF-Tu.GTP.gly1-tRNA + 34 EF-Tu.GTP.glyT-tRNA + 17 EF-Tu.GTP.glyU-tRNA + 85 EF-Tu.GTP.hisR-tRNA + 204 EF-Tu.GTP.ile1-tRNA + 425 EF-Tu.GTP.leu1-tRNA + 34 EF-Tu.GTP.leu2-tRNA + 34 EF-Tu.GTP.leuU-tRNA + 34 EF-Tu.GTP.leuZ-tRNA + 187 EF-Tu.GTP.lys1-tRNA + 119 EF-Tu.GTP.met1-tRNA + 221 EF-Tu.GTP.phe1-tRNA + 170 EF-Tu.GTP.pro1-tRNA + 17 EF-Tu.GTP.pro2-tRNA + 17 EF-Tu.GTP.proL-tRNA + 85 EF-Tu.GTP.proM-tRNA + 51 EF-Tu.GTP.ser1-tRNA + 51 EF-Tu.GTP.ser2-tRNA + 17 EF-Tu.GTP.ser3-tRNA + 51 EF-Tu.GTP.serV-tRNA + 255 EF-Tu.GTP.thr1-tRNA + 51 EF-Tu.GTP.thr2-tRNA + 34 EF-Tu.GTP.thr3-tRNA + 102 EF-Tu.GTP.trpT-tRNA + 306 EF-Tu.GTP.tyr1-tRNA + 153 EF-Tu.GTP.val1-tRNA + 68 EF-Tu.GTP.val2-tRNA + 85 EF-Tu.GTP.val3-tRNA + 25670 mg2 + 1 rib_ini_b3560_17 --> 1 rib_70_elo1_b3560_17_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_elo_b3560_17_rib2	Translation elongation 2 b3560 17 ribosome(s)	5117 h2o + 1 rib_70_elo1_b3560_17_cplx --> 5117 EF-G.GDP + 5117 EF-Tu.GDP + 221 ala1_tRNA + 119 ala2_tRNA + 255 arg1_tRNA + 17 argW_tRNA + 187 asn1_tRNA + 272 asp1_tRNA + 85 cysT_tRNA + 17 fmet_tRNA + 306 gln1_tRNA + 34 gln2_tRNA + 408 glu1_tRNA + 323 gly1_tRNA + 34 glyT_tRNA + 17 glyU_tRNA + 10234 h + 85 hisR_tRNA + 204 ile1_tRNA + 425 leu1_tRNA + 34 leu2_tRNA + 34 leuU_tRNA + 34 leuZ_tRNA + 170 lys1_tRNA + 119 met1_tRNA + 25670 mg2 + 221 phe1_tRNA + 10234 pi + 170 pro1_tRNA + 17 pro2_tRNA + 17 proL_tRNA + 85 proM_tRNA + 1 rib_70_elo2_b3560_17_cplx + 51 ser1_tRNA + 51 ser2_tRNA + 17 ser3_tRNA + 51 serV_tRNA + 255 thr1_tRNA + 51 thr2_tRNA + 34 thr3_tRNA + 102 trpT_tRNA + 306 tyr1_tRNA + 153 val1_tRNA + 68 val2_tRNA + 85 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_elo_b3560_1_rib1	Translation elongation 1 b3560 1 ribosome(s)	302 EF-G.GTP + 13 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 11 EF-Tu.GTP.asn1-tRNA + 16 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 18 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 19 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 25 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 13 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1510 mg2 + 1 rib_ini_b3560_1 --> 1 rib_70_elo1_b3560_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_elo_b3560_1_rib2	Translation elongation 2 b3560 1 ribosome(s)	301 h2o + 1 rib_70_elo1_b3560_1_cplx --> 301 EF-G.GDP + 301 EF-Tu.GDP + 13 ala1_tRNA + 7 ala2_tRNA + 15 arg1_tRNA + 1 argW_tRNA + 11 asn1_tRNA + 16 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 18 gln1_tRNA + 2 gln2_tRNA + 24 glu1_tRNA + 19 gly1_tRNA + 2 glyT_tRNA + 1 glyU_tRNA + 602 h + 5 hisR_tRNA + 12 ile1_tRNA + 25 leu1_tRNA + 2 leu2_tRNA + 2 leuU_tRNA + 2 leuZ_tRNA + 10 lys1_tRNA + 7 met1_tRNA + 1510 mg2 + 13 phe1_tRNA + 602 pi + 10 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b3560_1_cplx + 3 ser1_tRNA + 3 ser2_tRNA + 1 ser3_tRNA + 3 serV_tRNA + 15 thr1_tRNA + 3 thr2_tRNA + 2 thr3_tRNA + 6 trpT_tRNA + 18 tyr1_tRNA + 9 val1_tRNA + 4 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207

tl_elo_b3560_8_rib1	Translation elongation 1 b3560 8 ribosome(s)	2416 EF-G.GTP + 104 EF-Tu.GTP.ala1-tRNA + 56 EF-Tu.GTP.ala2-tRNA + 120 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.argW-tRNA + 88 EF-Tu.GTP.asn1-tRNA + 128 EF-Tu.GTP.asp1-tRNA + 40 EF-Tu.GTP.cysT-tRNA + 144 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.gln2-tRNA + 192 EF-Tu.GTP.glu1-tRNA + 152 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 40 EF-Tu.GTP.hisR-tRNA + 96 EF-Tu.GTP.ile1-tRNA + 200 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuZ-tRNA + 88 EF-Tu.GTP.lys1-tRNA + 56 EF-Tu.GTP.met1-tRNA + 104 EF-Tu.GTP.phe1-tRNA + 80 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proL-tRNA + 40 EF-Tu.GTP.proM-tRNA + 24 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serV-tRNA + 120 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr2-tRNA + 16 EF-Tu.GTP.thr3-tRNA + 48 EF-Tu.GTP.trpT-tRNA + 144 EF-Tu.GTP.tyr1-tRNA + 72 EF-Tu.GTP.val1-tRNA + 32 EF-Tu.GTP.val2-tRNA + 40 EF-Tu.GTP.val3-tRNA + 12080 mg2 + 1 rib_ini_b3560_8 -> 1 rib_70_elo1_b3560_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_elo_b3560_8_rib2	Translation elongation 2 b3560 8 ribosome(s)	2408 h2o + 1 rib_70_elo1_b3560_8_cplx --> 2408 EF-G.GDP + 2408 EF-Tu.GDP + 104 ala1_tRNA + 56 ala2_tRNA + 120 arg1_tRNA + 8 argW_tRNA + 88 asn1_tRNA + 128 asp1_tRNA + 40 cysT_tRNA + 8 fmet_tRNA + 144 gln1_tRNA + 16 gln2_tRNA + 192 glu1_tRNA + 152 gly1_tRNA + 16 glyT_tRNA + 8 glyU_tRNA + 4816 h + 40 hisR_tRNA + 96 ile1_tRNA + 200 leu1_tRNA + 16 leu2_tRNA + 16 leuU_tRNA + 16 leuZ_tRNA + 80 lys1_tRNA + 56 met1_tRNA + 12080 mg2 + 104 phe1_tRNA + 4816 pi + 80 pro1_tRNA + 8 pro2_tRNA + 8 proL_tRNA + 40 proM_tRNA + 1 rib_70_elo2_b3560_8_cplx + 24 ser1_tRNA + 2 ser2_tRNA + 8 ser3_tRNA + 24 serV_tRNA + 120 thr1_tRNA + 24 thr2_tRNA + 16 thr3_tRNA + 48 trpT_tRNA + 144 tyr1_tRNA + 72 val1_tRNA + 32 val2_tRNA + 40 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_elo_b3590_18_rib1	Translation elongation 1 b3590 18 ribosome(s)	11034 EF-G.GTP + 864 EF-Tu.GTP.ala1-tRNA + 342 EF-Tu.GTP.ala2-tRNA + 846 EF-Tu.GTP.arg1-tRNA + 108 EF-Tu.GTP.argX-tRNA + 324 EF-Tu.GTP.asn1-tRNA + 756 EF-Tu.GTP.asp1-tRNA + 54 EF-Tu.GTP.cysT-tRNA + 414 EF-Tu.GTP.gln1-tRNA + 144 EF-Tu.GTP.gln2-tRNA + 774 EF-Tu.GTP.glu1-tRNA + 612 EF-Tu.GTP.gly1-tRNA + 126 EF-Tu.GTP.glyT-tRNA + 90 EF-Tu.GTP.glyU-tRNA + 414 EF-Tu.GTP.hisR-tRNA + 486 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.ile2-tRNA + 684 EF-Tu.GTP.leu1-tRNA + 198 EF-Tu.GTP.leu2-tRNA + 270 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuW-tRNA + 162 EF-Tu.GTP.leuZ-tRNA + 378 EF-Tu.GTP.lys1-tRNA + 234 EF-Tu.GTP.met1-tRNA + 288 EF-Tu.GTP.phe1-tRNA + 306 EF-Tu.GTP.pro1-tRNA + 72 EF-Tu.GTP.pro2-tRNA + 18 EF-Tu.GTP.proL-tRNA + 90 EF-Tu.GTP.proM-tRNA + 18 EF-Tu.GTP.ser1-tRNA + 54 EF-Tu.GTP.ser2-tRNA + 54 EF-Tu.GTP.serT-tRNA + 162 EF-Tu.GTP.serV-tRNA + 288 EF-Tu.GTP.thr1-tRNA + 90 EF-Tu.GTP.thr2-tRNA + 90 EF-Tu.GTP.thr3-tRNA + 108 EF-Tu.GTP.thrU-tRNA + 216 EF-Tu.GTP.trpT-tRNA + 180 EF-Tu.GTP.tyr1-tRNA + 360 EF-Tu.GTP.val1-tRNA + 126 EF-Tu.GTP.val2-tRNA + 198 EF-Tu.GTP.val3-tRNA + 55170 mg2 + 1 rib	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	7.61E-01	0.7611111	0	7.61E-01	0.7611111
tl_elo_b3590_18_rib2	Translation elongation 2 b3590 18 ribosome(s)	11016 h2o + 1 rib_70_elo1_b3590_18_cplx --> 11016 EF-G.GDP + 11016 EF-Tu.GDP + 864 ala1_tRNA + 342 ala2_tRNA + 846 arg1_tRNA + 108 argX_tRNA + 324 asn1_tRNA + 756 asp1_tRNA + 54 cysT_tRNA + 18 fmet_tRNA + 414 gln1_tRNA + 144 gln2_tRNA + 774 glu1_tRNA + 612 gly1_tRNA + 126 glyT_tRNA + 90 glyU_tRNA + 22032 h + 414 hisR_tRNA + 486 ile1_tRNA + 18 ile2_tRNA + 684 leu1_tRNA + 198 leu2_tRNA + 270 leuU_tRNA + 18 leuW_tRNA + 162 leuZ_tRNA + 360 lys1_tRNA + 234 met1_tRNA + 55170 mg2 + 288 phe1_tRNA + 22032 pi + 306 pro1_tRNA + 72 pro2_tRNA + 18 proL_tRNA + 90 proM_tRNA + 1 rib_70_elo2_b3590_18_cplx + 18 ser1_tRNA + 54 ser2_tRNA + 54 serT_tRNA + 162 serV_tRNA + 288 thr1_tRNA + 90 thr2_tRNA + 90 thr3_tRNA + 108 thrU_tRNA + 216 trpT_tRNA + 180 tyr1_tRNA + 360 val1_tRNA + 126 val2_tRNA + 19 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	7.61E-01	0.7611111	0	7.61E-01	0.7611111
tl_elo_b3590_1_rib1	Translation elongation 1 b3590 1 ribosome(s)	613 EF-G.GTP + 48 EF-Tu.GTP.ala1-tRNA + 19 EF-Tu.GTP.ala2-tRNA + 47 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argX-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 42 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 23 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 43 EF-Tu.GTP.glu1-tRNA + 34 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 23 EF-Tu.GTP.hisR-tRNA + 27 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 38 EF-Tu.GTP.leu1-tRNA + 11 EF-Tu.GTP.leu2-tRNA + 15 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 9 EF-Tu.GTP.leuZ-tRNA + 21 EF-Tu.GTP.lys1-tRNA + 13 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 17 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serT-tRNA + 9 EF-Tu.GTP.serV-tRNA + 16 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 11 EF-Tu.GTP.val3-tRNA + 3065 mg2 + 1 rib_ini_b3590_1 --> 1 rib_70_elo1_b3590_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.86E+01	3.86E+01	0	1.37E+01	13.7	0	1.86E+00	1.856
tl_elo_b3590_1_rib2	Translation elongation 2 b3590 1 ribosome(s)	612 h2o + 1 rib_70_elo1_b3590_1_cplx --> 612 EF-G.GDP + 612 EF-Tu.GDP + 48 ala1_tRNA + 19 ala2_tRNA + 47 arg1_tRNA + 6 argX_tRNA + 18 asn1_tRNA + 42 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 23 gln1_tRNA + 8 gln2_tRNA + 43 glu1_tRNA + 34 gly1_tRNA + 7 glyT_tRNA + 5 glyU_tRNA + 1224 h + 23 hisR_tRNA + 27 ile1_tRNA + 1 ile2_tRNA + 38 leu1_tRNA + 11 leu2_tRNA + 15 leuU_tRNA + 1 leuW_tRNA + 9 leuZ_tRNA + 20 lys1_tRNA + 13 met1_tRNA + 3065 mg2 + 16 phe1_tRNA + 1224 pi + 17 pro1_tRNA + 4 pro2_tRNA + 1 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b3590_1_cplx + 1 ser1_tRNA + 3 ser2_tRNA + 3 serT_tRNA + 9 serV_tRNA + 16 thr1_tRNA + 5 thr2_tRNA + 5 thr3_tRNA + 6 thrU_tRNA + 12 trpT_tRNA + 10 tyr1_tRNA + 20 val1_tRNA + 7 val2_tRNA + 11 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.86E+01	3.86E+01	0	1.37E+01	13.7	0	1.86E+00	1.856

tl_elo_b3590_36_rib1	Translation elongation 1 b3590 36 ribosome(s)	22068 EF-G.GTP + 1728 EF-Tu.GTP.ala1-tRNA + 684 EF-Tu.GTP.ala2-tRNA + 1692 EF-Tu.GTP.arg1-tRNA + 216 EF-Tu.GTP.argX-tRNA + 648 EF-Tu.GTP.asn1-tRNA + 1512 EF-Tu.GTP.asp1-tRNA + 108 EF-Tu.GTP.cysT-tRNA + 828 EF-Tu.GTP.gln1-tRNA + 288 EF-Tu.GTP.gln2-tRNA + 1548 EF-Tu.GTP.glu1-tRNA + 1224 EF-Tu.GTP.gly1-tRNA + 252 EF-Tu.GTP.glyT-tRNA + 180 EF-Tu.GTP.glyU-tRNA + 828 EF-Tu.GTP.hisR-tRNA + 972 EF-Tu.GTP.ile1-tRNA + 36 EF-Tu.GTP.ile2-tRNA + 1368 EF-Tu.GTP.leu1-tRNA + 396 EF-Tu.GTP.leu2-tRNA + 540 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuW-tRNA + 324 EF-Tu.GTP.leuZ-tRNA + 756 EF-Tu.GTP.lys1-tRNA + 468 EF-Tu.GTP.met1-tRNA + 576 EF-Tu.GTP.phe1-tRNA + 612 EF-Tu.GTP.pro1-tRNA + 144 EF-Tu.GTP.pro2-tRNA + 36 EF-Tu.GTP.proL-tRNA + 180 EF-Tu.GTP.proM-tRNA + 36 EF-Tu.GTP.ser1-tRNA + 108 EF-Tu.GTP.ser2-tRNA + 108 EF-Tu.GTP.serT-tRNA + 324 EF-Tu.GTP.serV-tRNA + 576 EF-Tu.GTP.thr1-tRNA + 180 EF-Tu.GTP.thr2-tRNA + 180 EF-Tu.GTP.thr3-tRNA + 216 EF-Tu.GTP.thrU-tRNA + 432 EF-Tu.GTP.trpT-tRNA + 360 EF-Tu.GTP.tyr1-tRNA + 720 EF-Tu.GTP.val1-tRNA + 252 EF-Tu.GTP.val2-tRNA + 396 EF-Tu.GTP.val3-tRNA + 110340 mg2 + 1 ri	irreversible	Translation	0.00E+00	1.00E+09	0	1.77E+01	1.77E+01	0	3.81E-01	0.3805556	0	3.81E-01	0.3805556
tl_elo_b3590_36_rib2	Translation elongation 2 b3590 36 ribosome(s)	22032 h2o + 1 rib_70_elo1_b3590_36_cplx --> 22032 EF-G.GDP + 22032 EF-Tu.GDP + 1728 ala1_tRNA + 684 ala2_tRNA + 1692 arg1_tRNA + 216 argX_tRNA + 648 asn1_tRNA + 1512 asp1_tRNA + 108 cysT_tRNA + 36 fmet_tRNA + 828 gln1_tRNA + 288 gln2_tRNA + 1548 glu1_tRNA + 1224 gly1_tRNA + 252 glyT_tRNA + 180 glyU_tRNA + 44064 h + 828 hisR_tRNA + 972 ile1_tRNA + 36 ile2_tRNA + 1368 leu1_tRNA + 396 leu2_tRNA + 540 leuU_tRNA + 36 leuW_tRNA + 324 leuZ_tRNA + 720 lys1_tRNA + 468 met1_tRNA + 110340 mg2 + 576 phe1_tRNA + 44064 pi + 612 pro1_tRNA + 144 pro2_tRNA + 36 proL_tRNA + 180 proM_tRNA + 1 rib_70_elo2_b3590_36_cplx + 36 ser1_tRNA + 108 ser2_tRNA + 108 serT_tRNA + 324 serV_tRNA + 576 thr1_tRNA + 180 thr2_tRNA + 180 thr3_tRNA + 216 thrU_tRNA + 432 trpT_tRNA + 360 tyr1_tRNA + 720 val1_tRNA + 252 val2_tRNA + 396 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.77E+01	1.77E+01	0	3.81E-01	0.3805556	0	3.81E-01	0.3805556
tl_elo_b3591_13_rib1	Translation elongation 1 b3591 13 ribosome(s)	6006 EF-G.GTP + 533 EF-Tu.GTP.ala1-tRNA + 169 EF-Tu.GTP.ala2-tRNA + 429 EF-Tu.GTP.arg1-tRNA + 39 EF-Tu.GTP.argX-tRNA + 143 EF-Tu.GTP.asn1-tRNA + 299 EF-Tu.GTP.asp1-tRNA + 78 EF-Tu.GTP.cysT-tRNA + 208 EF-Tu.GTP.gln1-tRNA + 78 EF-Tu.GTP.gln2-tRNA + 416 EF-Tu.GTP.glu1-tRNA + 247 EF-Tu.GTP.gly1-tRNA + 91 EF-Tu.GTP.glyT-tRNA + 65 EF-Tu.GTP.glyU-tRNA + 143 EF-Tu.GTP.hisR-tRNA + 221 EF-Tu.GTP.ile1-tRNA + 13 EF-Tu.GTP.ile2-tRNA + 299 EF-Tu.GTP.leu1-tRNA + 221 EF-Tu.GTP.leu2-tRNA + 195 EF-Tu.GTP.leuU-tRNA + 13 EF-Tu.GTP.leuW-tRNA + 156 EF-Tu.GTP.leuZ-tRNA + 169 EF-Tu.GTP.lys1-tRNA + 130 EF-Tu.GTP.met1-tRNA + 91 EF-Tu.GTP.phe1-tRNA + 130 EF-Tu.GTP.pro1-tRNA + 26 EF-Tu.GTP.pro2-tRNA + 52 EF-Tu.GTP.proL-tRNA + 52 EF-Tu.GTP.proM-tRNA + 39 EF-Tu.GTP.ser1-tRNA + 26 EF-Tu.GTP.ser2-tRNA + 52 EF-Tu.GTP.ser3-tRNA + 13 EF-Tu.GTP.serT-tRNA + 221 EF-Tu.GTP.serV-tRNA + 182 EF-Tu.GTP.thr1-tRNA + 39 EF-Tu.GTP.thr2-tRNA + 104 EF-Tu.GTP.thr3-tRNA + 26 EF-Tu.GTP.thrU-tRNA + 52 EF-Tu.GTP.trpT-tRNA + 117 EF-Tu.GTP.tyr1-tRNA + 286 EF-Tu.GTP.val1-tRNA + 65 EF-Tu.GTP.val2-tRNA + 78 EF-Tu.GTP.val3-tRNA + 30030 mg2 + 1	irreversible	Translation	0.00E+00	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606
tl_elo_b3591_13_rib2	Translation elongation 2 b3591 13 ribosome(s)	5993 h2o + 1 rib_70_elo1_b3591_13_cplx --> 5993 EF-G.GDP + 5993 EF-Tu.GDP + 533 ala1_tRNA + 169 ala2_tRNA + 429 arg1_tRNA + 39 argX_tRNA + 143 asn1_tRNA + 299 asp1_tRNA + 78 cysT_tRNA + 13 fmet_tRNA + 208 gln1_tRNA + 78 gln2_tRNA + 416 glu1_tRNA + 247 gly1_tRNA + 91 glyT_tRNA + 65 glyU_tRNA + 11986 h + 143 hisR_tRNA + 221 ile1_tRNA + 13 ile2_tRNA + 299 leu1_tRNA + 221 leu2_tRNA + 195 leuU_tRNA + 13 leuW_tRNA + 156 leuZ_tRNA + 156 lys1_tRNA + 130 met1_tRNA + 30030 mg2 + 91 phe1_tRNA + 11986 pi + 130 pro1_tRNA + 26 pro2_tRNA + 52 proL_tRNA + 52 proM_tRNA + 1 rib_70_elo2_b3591_13_cplx + 39 ser1_tRNA + 26 ser2_tRNA + 52 ser3_tRNA + 13 serT_tRNA + 221 serV_tRNA + 182 thr1_tRNA + 39 thr2_tRNA + 104 thr3_tRNA + 26 thrU_tRNA + 52 trpT_tRNA + 117 tyr1_tRNA + 286 val1_tRNA + 65 val2_tRNA + 78 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606
tl_elo_b3591_1_rib1	Translation elongation 1 b3591 1 ribosome(s)	462 EF-G.GTP + 41 EF-Tu.GTP.ala1-tRNA + 13 EF-Tu.GTP.ala2-tRNA + 33 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argX-tRNA + 11 EF-Tu.GTP.asn1-tRNA + 23 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 32 EF-Tu.GTP.glu1-tRNA + 19 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 17 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 23 EF-Tu.GTP.leu1-tRNA + 17 EF-Tu.GTP.leu2-tRNA + 15 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 17 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 22 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 2310 mg2 + 1 rib_ini_b3591_1 --> 1 rib_70_elo1	irreversible	Translation	0.00E+00	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606
tl_elo_b3591_1_rib2	Translation elongation 2 b3591 1 ribosome(s)	461 h2o + 1 rib_70_elo1_b3591_1_cplx --> 461 EF-G.GDP + 461 EF-Tu.GDP + 41 ala1_tRNA + 13 ala2_tRNA + 33 arg1_tRNA + 3 argX_tRNA + 11 asn1_tRNA + 23 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 16 gln1_tRNA + 6 gln2_tRNA + 32 glu1_tRNA + 19 gly1_tRNA + 7 glyT_tRNA + 5 glyU_tRNA + 922 h + 11 hisR_tRNA + 17 ile1_tRNA + 1 ile2_tRNA + 23 leu1_tRNA + 17 leu2_tRNA + 15 leuU_tRNA + 1 leuW_tRNA + 12 leuZ_tRNA + 12 lys1_tRNA + 10 met1_tRNA + 2310 mg2 + 7 phe1_tRNA + 922 pi + 10 pro1_tRNA + 2 pro2_tRNA + 4 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b3591_1_cplx + 3 ser1_tRNA + 2 ser2_tRNA + 4 ser3_tRNA + 1 serT_tRNA + 17 serV_tRNA + 14 thr1_tRNA + 3 thr2_tRNA + 8 thr3_tRNA + 2 thrU_tRNA + 4 trpT_tRNA + 9 tyr1_tRNA + 22 val1_tRNA + 5 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606

tl_elo_b3591_27_rib1	Translation elongation 1 b3591 27 ribosome(s)	12474 EF-G.GTP + 1107 EF-Tu.GTP.ala1-tRNA + 351 EF-Tu.GTP.ala2-tRNA + 891 EF-Tu.GTP.arg1-tRNA + 81 EF-Tu.GTP.argX-tRNA + 297 EF-Tu.GTP.asn1-tRNA + 621 EF-Tu.GTP.asp1-tRNA + 162 EF-Tu.GTP.cysT-tRNA + 432 EF-Tu.GTP.gln1-tRNA + 162 EF-Tu.GTP.gln2-tRNA + 864 EF-Tu.GTP.glu1-tRNA + 513 EF-Tu.GTP.gly1-tRNA + 189 EF-Tu.GTP.glyT-tRNA + 135 EF-Tu.GTP.glyU-tRNA + 297 EF-Tu.GTP.hisR-tRNA + 459 EF-Tu.GTP.ile1-tRNA + 27 EF-Tu.GTP.ile2-tRNA + 621 EF-Tu.GTP.leu1-tRNA + 459 EF-Tu.GTP.leu2-tRNA + 405 EF-Tu.GTP.leuU-tRNA + 27 EF-Tu.GTP.leuW-tRNA + 324 EF-Tu.GTP.leuZ-tRNA + 351 EF-Tu.GTP.lys1-tRNA + 270 EF-Tu.GTP.met1-tRNA + 189 EF-Tu.GTP.phe1-tRNA + 270 EF-Tu.GTP.pro1-tRNA + 54 EF-Tu.GTP.pro2-tRNA + 108 EF-Tu.GTP.proL-tRNA + 108 EF-Tu.GTP.proM-tRNA + 81 EF-Tu.GTP.ser1-tRNA + 54 EF-Tu.GTP.ser2-tRNA + 108 EF-Tu.GTP.ser3-tRNA + 27 EF-Tu.GTP.serT-tRNA + 459 EF-Tu.GTP.serV-tRNA + 378 EF-Tu.GTP.thr1-tRNA + 81 EF-Tu.GTP.thr2-tRNA + 216 EF-Tu.GTP.thr3-tRNA + 54 EF-Tu.GTP.thrU-tRNA + 108 EF-Tu.GTP.trpT-tRNA + 243 EF-Tu.GTP.tyr1-tRNA + 594 EF-Tu.GTP.val1-tRNA + 135 EF-Tu.GTP.val2-tRNA + 162 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606
tl_elo_b3591_27_rib2	Translation elongation 2 b3591 27 ribosome(s)	12447 h2o + 1 rib_70_elo1_b3591_27_cplx --> 12447 EF-G.GDP + 12447 EF-Tu.GDP + 1107 ala1_tRNA + 351 ala2_tRNA + 891 arg1_tRNA + 81 argX_tRNA + 297 asn1_tRNA + 621 asp1_tRNA + 162 cysT_tRNA + 27 fmet_tRNA + 432 gln1_tRNA + 162 gln2_tRNA + 864 glu1_tRNA + 513 gly1_tRNA + 189 glyT_tRNA + 135 glyU_tRNA + 24894 h + 297 hisR_tRNA + 459 ile1_tRNA + 27 ile2_tRNA + 621 leu1_tRNA + 459 leu2_tRNA + 405 leuU_tRNA + 27 leuW_tRNA + 324 leuZ_tRNA + 324 lys1_tRNA + 270 met1_tRNA + 62370 mg2 + 189 phe1_tRNA + 24894 pi + 270 pro1_tRNA + 54 pro2_tRNA + 108 proL_tRNA + 108 proM_tRNA + 1 rib_70_elo2_b3591_27_cplx + 81 ser1_tRNA + 54 ser2_tRNA + 108 ser3_tRNA + 27 serT_tRNA + 459 serV_tRNA + 378 thr1_tRNA + 81 thr2_tRNA + 216 thr3_tRNA + 54 thrU_tRNA + 108 trpT_tRNA + 243 tyr1_tRNA + 594 val1_tRNA + 135 val2_tRNA + 162 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606
tl_elo_b3635_15_rib1	Translation elongation 1 b3635 15 ribosome(s)	4020 EF-G.GTP + 225 EF-Tu.GTP.ala1-tRNA + 30 EF-Tu.GTP.ala2-tRNA + 180 EF-Tu.GTP.arg1-tRNA + 105 EF-Tu.GTP.argX-tRNA + 90 EF-Tu.GTP.asn1-tRNA + 150 EF-Tu.GTP.asp1-tRNA + 90 EF-Tu.GTP.cysT-tRNA + 120 EF-Tu.GTP.gln1-tRNA + 30 EF-Tu.GTP.gln2-tRNA + 315 EF-Tu.GTP.glu1-tRNA + 195 EF-Tu.GTP.gly1-tRNA + 30 EF-Tu.GTP.glyT-tRNA + 90 EF-Tu.GTP.glyU-tRNA + 150 EF-Tu.GTP.hisR-tRNA + 180 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.ile2-tRNA + 285 EF-Tu.GTP.leu1-tRNA + 75 EF-Tu.GTP.leu2-tRNA + 105 EF-Tu.GTP.leuU-tRNA + 60 EF-Tu.GTP.leuZ-tRNA + 240 EF-Tu.GTP.lys1-tRNA + 45 EF-Tu.GTP.met1-tRNA + 90 EF-Tu.GTP.phe1-tRNA + 150 EF-Tu.GTP.pro1-tRNA + 45 EF-Tu.GTP.pro2-tRNA + 30 EF-Tu.GTP.proL-tRNA + 30 EF-Tu.GTP.proM-tRNA + 15 EF-Tu.GTP.ser2-tRNA + 30 EF-Tu.GTP.ser3-tRNA + 60 EF-Tu.GTP.serT-tRNA + 120 EF-Tu.GTP.serV-tRNA + 75 EF-Tu.GTP.thr1-tRNA + 15 EF-Tu.GTP.thr2-tRNA + 60 EF-Tu.GTP.thr3-tRNA + 15 EF-Tu.GTP.thrU-tRNA + 75 EF-Tu.GTP.trpT-tRNA + 120 EF-Tu.GTP.tyr1-tRNA + 225 EF-Tu.GTP.val1-tRNA + 60 EF-Tu.GTP.val3-tRNA + 20100 mg2 + 1 rib_ini_b3635_15 --> 1 rib_70_elo1_b3635_15_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_elo_b3635_15_rib2	Translation elongation 2 b3635 15 ribosome(s)	4005 h2o + 1 rib_70_elo1_b3635_15_cplx --> 4005 EF-G.GDP + 4005 EF-Tu.GDP + 225 ala1_tRNA + 30 ala2_tRNA + 180 arg1_tRNA + 105 argX_tRNA + 90 asn1_tRNA + 150 asp1_tRNA + 90 cysT_tRNA + 15 fmet_tRNA + 120 gln1_tRNA + 30 gln2_tRNA + 315 glu1_tRNA + 195 gly1_tRNA + 30 glyT_tRNA + 90 glyU_tRNA + 8010 h + 150 hisR_tRNA + 180 ile1_tRNA + 15 ile2_tRNA + 285 leu1_tRNA + 75 leu2_tRNA + 105 leuU_tRNA + 60 leuZ_tRNA + 225 lys1_tRNA + 45 met1_tRNA + 20100 mg2 + 90 phe1_tRNA + 8010 pi + 150 pro1_tRNA + 45 pro2_tRNA + 30 proL_tRNA + 30 proM_tRNA + 1 rib_70_elo2_b3635_15_cplx + 15 ser2_tRNA + 30 ser3_tRNA + 60 serT_tRNA + 120 serV_tRNA + 75 thr1_tRNA + 15 thr2_tRNA + 60 thr3_tRNA + 15 thrU_tRNA + 75 trpT_tRNA + 120 tyr1_tRNA + 225 val1_tRNA + 60 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_elo_b3635_1_rib1	Translation elongation 1 b3635 1 ribosome(s)	268 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argX-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 21 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 19 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 8 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1340 mg2 + 1 rib_ini_b3635_1 --> 1 rib_70_elo1_b3635_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_elo_b3635_1_rib2	Translation elongation 2 b3635 1 ribosome(s)	267 h2o + 1 rib_70_elo1_b3635_1_cplx --> 267 EF-G.GDP + 267 EF-Tu.GDP + 15 ala1_tRNA + 2 ala2_tRNA + 12 arg1_tRNA + 7 argX_tRNA + 6 asn1_tRNA + 10 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 2 gln2_tRNA + 21 glu1_tRNA + 13 gly1_tRNA + 2 glyT_tRNA + 6 glyU_tRNA + 534 h + 10 hisR_tRNA + 12 ile1_tRNA + 1 ile2_tRNA + 19 leu1_tRNA + 5 leu2_tRNA + 7 leuU_tRNA + 4 leuZ_tRNA + 15 lys1_tRNA + 3 met1_tRNA + 1340 mg2 + 6 phe1_tRNA + 534 pi + 10 pro1_tRNA + 3 pro2_tRNA + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3635_1_cplx + 1 ser2_tRNA + 2 ser3_tRNA + 4 serT_tRNA + 8 serV_tRNA + 5 thr1_tRNA + 1 thr2_tRNA + 4 thr3_tRNA + 1 thrU_tRNA + 5 trpT_tRNA + 8 tyr1_tRNA + 15 val1_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082

tl_elo_b3635_7_rib1	Translation elongation 1 b3635 7 ribosome(s)	1876 EF-G.GTP + 105 EF-Tu.GTP.ala1-tRNA + 14 EF-Tu.GTP.ala2-tRNA + 84 EF-Tu.GTP.arg1-tRNA + 49 EF-Tu.GTP.argX-tRNA + 42 EF-Tu.GTP.asn1-tRNA + 70 EF-Tu.GTP.asp1-tRNA + 42 EF-Tu.GTP.cysT-tRNA + 56 EF-Tu.GTP.gln1-tRNA + 14 EF-Tu.GTP.gln2-tRNA + 147 EF-Tu.GTP.glu1-tRNA + 91 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyT-tRNA + 42 EF-Tu.GTP.glyU-tRNA + 70 EF-Tu.GTP.hisR-tRNA + 84 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.ile2-tRNA + 133 EF-Tu.GTP.leu1-tRNA + 35 EF-Tu.GTP.leu2-tRNA + 49 EF-Tu.GTP.leuU-tRNA + 28 EF-Tu.GTP.leuZ-tRNA + 112 EF-Tu.GTP.lys1-tRNA + 21 EF-Tu.GTP.met1-tRNA + 42 EF-Tu.GTP.phe1-tRNA + 70 EF-Tu.GTP.pro1-tRNA + 21 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proL-tRNA + 14 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 14 EF-Tu.GTP.ser3-tRNA + 28 EF-Tu.GTP.serT-tRNA + 56 EF-Tu.GTP.serV-tRNA + 35 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 28 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 35 EF-Tu.GTP.trpT-tRNA + 56 EF-Tu.GTP.tyr1-tRNA + 105 EF-Tu.GTP.val1-tRNA + 28 EF-Tu.GTP.val3-tRNA + 9380 mg2 + 1 rib_ini_b3635_7 --> 1 rib_70_elo1_b3635_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_elo_b3635_7_rib2	Translation elongation 2 b3635 7 ribosome(s)	1869 h2o + 1 rib_70_elo1_b3635_7_cplx --> 1869 EF-G.GDP + 1869 EF-Tu.GDP + 105 ala1_tRNA + 14 ala2_tRNA + 84 arg1_tRNA + 49 argX_tRNA + 42 asn1_tRNA + 70 asp1_tRNA + 42 cysT_tRNA + 7 fmet_tRNA + 56 gln1_tRNA + 14 gln2_tRNA + 147 glu1_tRNA + 91 gly1_tRNA + 14 glyT_tRNA + 42 glyU_tRNA + 3738 h + 70 hisR_tRNA + 84 ile1_tRNA + 7 ile2_tRNA + 133 leu1_tRNA + 35 leu2_tRNA + 49 leuU_tRNA + 28 leuZ_tRNA + 105 lys1_tRNA + 21 met1_tRNA + 9380 mg2 + 42 phe1_tRNA + 3738 pi + 70 pro1_tRNA + 21 pro2_tRNA + 14 proL_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b3635_7_cplx + 7 ser2_tRNA + 14 ser3_tRNA + 28 serT_tRNA + 56 serV_tRNA + 35 thr1_tRNA + 7 thr2_tRNA + 28 thr3_tRNA + 7 thrU_tRNA + 35 trpT_tRNA + 56 tyr1_tRNA + 105 val1_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_elo_b3636_1_rib1	Translation elongation 1 b3636 1 ribosome(s)	54 EF-G.GTP + 3 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.asn1-tRNA + 1 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.glu1-tRNA + 3 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 1 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val3-tRNA + 270 mg2 + 1 rib_ini_b3636_1 --> 1 rib_70_elo1_b3636_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	8.20E+01	82.041
tl_elo_b3636_1_rib2	Translation elongation 2 b3636 1 ribosome(s)	53 h2o + 1 rib_70_elo1_b3636_1_cplx --> 53 EF-G.GDP + 53 EF-Tu.GDP + 3 ala1_tRNA + 3 arg1_tRNA + 1 asn1_tRNA + 1 asp1_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 4 glu1_tRNA + 3 gly1_tRNA + 106 h + 2 hisR_tRNA + 4 ile1_tRNA + 3 leu1_tRNA + 1 lys1_tRNA + 270 mg2 + 2 phe1_tRNA + 106 pi + 1 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3636_1_cplx + 2 ser2_tRNA + 1 thr1_tRNA + 3 thr2_tRNA + 1 thr3_tRNA + 2 tyr1_tRNA + 1 val1_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	8.20E+01	82.041
tl_elo_b3636_3_rib1	Translation elongation 1 b3636 3 ribosome(s)	162 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val3-tRNA + 810 mg2 + 1 rib_ini_b3636_3 --> 1 rib_70_elo1_b3636_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3636_3_rib2	Translation elongation 2 b3636 3 ribosome(s)	159 h2o + 1 rib_70_elo1_b3636_3_cplx --> 159 EF-G.GDP + 159 EF-Tu.GDP + 9 ala1_tRNA + 9 arg1_tRNA + 3 asn1_tRNA + 3 asp1_tRNA + 3 fmet_tRNA + 3 gln1_tRNA + 12 glu1_tRNA + 9 gly1_tRNA + 318 h + 6 hisR_tRNA + 12 ile1_tRNA + 9 leu1_tRNA + 33 lys1_tRNA + 810 mg2 + 6 phe1_tRNA + 318 pi + 3 pro1_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3636_3_cplx + 6 ser2_tRNA + 3 thr1_tRNA + 9 thr2_tRNA + 3 thr3_tRNA + 6 tyr1_tRNA + 3 val1_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b3637_1_rib1	Translation elongation 1 b3637 1 ribosome(s)	77 EF-G.GTP + 4 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 2 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 4 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 2 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 385 mg2 + 1 rib_ini_b3637_1 --> 1 rib_70_elo1_b3637_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3637_1_rib2	Translation elongation 2 b3637 1 ribosome(s)	76 h2o + 1 rib_70_elo1_b3637_1_cplx --> 76 EF-G.GDP + 76 EF-Tu.GDP + 4 ala1_tRNA + 1 ala2_tRNA + 11 arg1_tRNA + 4 asn1_tRNA + 2 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 1 gln2_tRNA + 4 glu1_tRNA + 5 gly1_tRNA + 152 h + 3 hisR_tRNA + 2 ile1_tRNA + 6 leu1_tRNA + 7 lys1_tRNA + 1 met1_tRNA + 385 mg2 + 3 phe1_tRNA + 152 pi + 2 pro1_tRNA + 1 rib_70_elo2_b3637_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 1 serV_tRNA + 2 thr1_tRNA + 2 thr2_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 3 val1_tRNA + 2 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3637_2_rib1	Translation elongation 1 b3637 2 ribosome(s)	154 EF-G.GTP + 8 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 22 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 4 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 770 mg2 + 1 rib_ini_b3637_2 --> 1 rib_70_elo1_b3637_2_cp	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44

tl_elo_b3637_2_rib2	Translation elongation 2 b3637 2 ribosome(s)	152 h2o + 1 rib_70_elo1_b3637_2_cplx --> 152 EF-G.GDP + 152 EF-Tu.GDP + 8 ala1_tRNA + 2 ala2_tRNA + 22 arg1_tRNA + 8 asn1_tRNA + 4 asp1_tRNA + 2 cysT_tRNA + 2 fmet_tRNA + 2 gln2_tRNA + 8 glu1_tRNA + 10 gly1_tRNA + 304 h + 6 hisR_tRNA + 4 ile1_tRNA + 12 leu1_tRNA + 14 lys1_tRNA + 2 met1_tRNA + 770 mg2 + 6 phe1_tRNA + 304 pi + 4 pro1_tRNA + 1 rib_70_elo2_b3637_2_cplx + 4 ser1_tRNA + 4 ser2_tRNA + 2 serV_tRNA + 4 thr1_tRNA + 4 thr2_tRNA + 2 thrU_tRNA + 2 trpT_tRNA + 6 val1_tRNA + 4 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3637_4_rib1	Translation elongation 1 b3637 4 ribosome(s)	308 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 44 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.asn1-tRNA + 8 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 24 EF-Tu.GTP.leu1-tRNA + 28 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1540 mg2 + 1 rib_ini_b3637_4 --> 1 rib_70_elo1_b3637_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3637_4_rib2	Translation elongation 2 b3637 4 ribosome(s)	304 h2o + 1 rib_70_elo1_b3637_4_cplx --> 304 EF-G.GDP + 304 EF-Tu.GDP + 16 ala1_tRNA + 4 ala2_tRNA + 44 arg1_tRNA + 16 asn1_tRNA + 8 asp1_tRNA + 4 cysT_tRNA + 4 fmet_tRNA + 4 gln2_tRNA + 16 glu1_tRNA + 20 gly1_tRNA + 608 h + 12 hisR_tRNA + 8 ile1_tRNA + 24 leu1_tRNA + 28 lys1_tRNA + 4 met1_tRNA + 1540 mg2 + 12 phe1_tRNA + 608 pi + 8 pro1_tRNA + 1 rib_70_elo2_b3637_4_cplx + 8 ser1_tRNA + 8 ser2_tRNA + 4 serV_tRNA + 8 thr1_tRNA + 8 thr2_tRNA + 4 thrU_tRNA + 4 trpT_tRNA + 12 val1_tRNA + 8 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3638_13_rib1	Translation elongation 1 b3638 13 ribosome(s)	2873 EF-G.GTP + 130 EF-Tu.GTP.ala1-tRNA + 52 EF-Tu.GTP.ala2-tRNA + 130 EF-Tu.GTP.arg1-tRNA + 26 EF-Tu.GTP.argW-tRNA + 78 EF-Tu.GTP.argX-tRNA + 91 EF-Tu.GTP.asn1-tRNA + 78 EF-Tu.GTP.asp1-tRNA + 26 EF-Tu.GTP.cysT-tRNA + 52 EF-Tu.GTP.gln1-tRNA + 39 EF-Tu.GTP.gln2-tRNA + 273 EF-Tu.GTP.glu1-tRNA + 130 EF-Tu.GTP.gly1-tRNA + 39 EF-Tu.GTP.glyT-tRNA + 26 EF-Tu.GTP.glyU-tRNA + 104 EF-Tu.GTP.hisR-tRNA + 156 EF-Tu.GTP.ile1-tRNA + 65 EF-Tu.GTP.ile2-tRNA + 117 EF-Tu.GTP.leu1-tRNA + 26 EF-Tu.GTP.leu2-tRNA + 104 EF-Tu.GTP.leuU-tRNA + 26 EF-Tu.GTP.leuW-tRNA + 91 EF-Tu.GTP.leuZ-tRNA + 143 EF-Tu.GTP.lys1-tRNA + 91 EF-Tu.GTP.met1-tRNA + 143 EF-Tu.GTP.phe1-tRNA + 26 EF-Tu.GTP.pro1-tRNA + 39 EF-Tu.GTP.pro2-tRNA + 13 EF-Tu.GTP.proL-tRNA + 26 EF-Tu.GTP.ser1-tRNA + 39 EF-Tu.GTP.ser2-tRNA + 26 EF-Tu.GTP.ser3-tRNA + 13 EF-Tu.GTP.serT-tRNA + 91 EF-Tu.GTP.serV-tRNA + 39 EF-Tu.GTP.thr1-tRNA + 13 EF-Tu.GTP.thr2-tRNA + 78 EF-Tu.GTP.thr3-tRNA + 13 EF-Tu.GTP.trpT-tRNA + 65 EF-Tu.GTP.tyr1-tRNA + 78 EF-Tu.GTP.val1-tRNA + 26 EF-Tu.GTP.val2-tRNA + 52 EF-Tu.GTP.val3-tRNA + 14365 mg2 + 1 rib_ini_b3638_13 --> 1 rib_70_elo1_b3638_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_elo_b3638_13_rib2	Translation elongation 2 b3638 13 ribosome(s)	2860 h2o + 1 rib_70_elo1_b3638_13_cplx --> 2860 EF-G.GDP + 2860 EF-Tu.GDP + 130 ala1_tRNA + 52 ala2_tRNA + 130 arg1_tRNA + 26 argW_tRNA + 78 argX_tRNA + 91 asn1_tRNA + 78 asp1_tRNA + 26 cysT_tRNA + 13 fmet_tRNA + 52 gln1_tRNA + 39 gln2_tRNA + 273 glu1_tRNA + 130 gly1_tRNA + 39 glyT_tRNA + 26 glyU_tRNA + 5720 h + 104 hisR_tRNA + 143 ile1_tRNA + 65 ile2_tRNA + 117 leu1_tRNA + 26 leu2_tRNA + 104 leuU_tRNA + 26 leuW_tRNA + 91 leuZ_tRNA + 143 lys1_tRNA + 91 met1_tRNA + 14365 mg2 + 143 phe1_tRNA + 5720 pi + 26 pro1_tRNA + 39 pro2_tRNA + 13 proL_tRNA + 1 rib_70_elo2_b3638_13_cplx + 26 ser1_tRNA + 39 ser2_tRNA + 26 ser3_tRNA + 13 serT_tRNA + 91 serV_tRNA + 39 thr1_tRNA + 13 thr2_tRNA + 78 thr3_tRNA + 13 trpT_tRNA + 65 tyr1_tRNA + 78 val1_tRNA + 26 val2_tRNA + 52 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_elo_b3638_1_rib1	Translation elongation 1 b3638 1 ribosome(s)	221 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argW-tRNA + 6 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 21 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.ile2-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 7 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 11 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1105 mg2 + 1 rib_ini_b3638_1 --> 1 rib_70_elo1_b3638_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_elo_b3638_1_rib2	Translation elongation 2 b3638 1 ribosome(s)	220 h2o + 1 rib_70_elo1_b3638_1_cplx --> 220 EF-G.GDP + 220 EF-Tu.GDP + 10 ala1_tRNA + 4 ala2_tRNA + 10 arg1_tRNA + 2 argW_tRNA + 6 argX_tRNA + 7 asn1_tRNA + 6 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 3 gln2_tRNA + 21 glu1_tRNA + 10 gly1_tRNA + 3 glyT_tRNA + 2 glyU_tRNA + 440 h + 8 hisR_tRNA + 11 ile1_tRNA + 5 ile2_tRNA + 9 leu1_tRNA + 2 leu2_tRNA + 8 leuU_tRNA + 2 leuW_tRNA + 7 leuZ_tRNA + 11 lys1_tRNA + 7 met1_tRNA + 1105 mg2 + 11 phe1_tRNA + 440 pi + 2 pro1_tRNA + 3 pro2_tRNA + 1 proL_tRNA + 1 rib_70_elo2_b3638_1_cplx + 2 ser1_tRNA + 3 ser2_tRNA + 2 ser3_tRNA + 1 serT_tRNA + 7 serV_tRNA + 3 thr1_tRNA + 1 thr2_tRNA + 6 thr3_tRNA + 1 trpT_tRNA + 5 tyr1_tRNA + 6 val1_tRNA + 2 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144

tl_elo_b3638_6_rib1	Translation elongation 1 b3638 6 ribosome(s)	1326 EF-G.GTP + 60 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 60 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argW-tRNA + 36 EF-Tu.GTP.argX-tRNA + 42 EF-Tu.GTP.asn1-tRNA + 36 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 126 EF-Tu.GTP.glu1-tRNA + 60 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.glyU-tRNA + 48 EF-Tu.GTP.hisR-tRNA + 72 EF-Tu.GTP.ile1-tRNA + 30 EF-Tu.GTP.ile2-tRNA + 54 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 48 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuW-tRNA + 42 EF-Tu.GTP.leuZ-tRNA + 66 EF-Tu.GTP.lys1-tRNA + 42 EF-Tu.GTP.met1-tRNA + 66 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serT-tRNA + 42 EF-Tu.GTP.serV-tRNA + 18 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 36 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 36 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 24 EF-Tu.GTP.val3-tRNA + 6630 mg2 + 1 rib_ini_b3638_6 --> 1 rib_70_elo1_b3638_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_elo_b3638_6_rib2	Translation elongation 2 b3638 6 ribosome(s)	1320 h2o + 1 rib_70_elo1_b3638_6_cplx --> 1320 EF-G.GDP + 1320 EF-Tu.GDP + 60 ala1_tRNA + 24 ala2_tRNA + 60 arg1_tRNA + 12 argW_tRNA + 36 argX_tRNA + 42 asn1_tRNA + 36 asp1_tRNA + 12 cysT_tRNA + 6 fmet_tRNA + 24 gln1_tRNA + 18 gln2_tRNA + 126 glu1_tRNA + 60 gly1_tRNA + 18 glyT_tRNA + 12 glyU_tRNA + 2640 h + 48 hisR_tRNA + 66 ile1_tRNA + 30 ile2_tRNA + 54 leu1_tRNA + 12 leu2_tRNA + 48 leuU_tRNA + 12 leuW_tRNA + 42 leuZ_tRNA + 66 lys1_tRNA + 42 met1_tRNA + 6630 mg2 + 66 phe1_tRNA + 2640 pi + 12 pro1_tRNA + 18 pro2_tRNA + 6 proL_tRNA + 1 rib_70_elo2_b3638_6_cplx + 12 ser1_tRNA + 18 ser2_tRNA + 12 ser3_tRNA + 6 serT_tRNA + 42 serV_tRNA + 18 thr1_tRNA + 6 thr2_tRNA + 36 thr3_tRNA + 6 trpT_tRNA + 30 tyr1_tRNA + 36 val1_tRNA + 12 val2_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_elo_b3649_1_rib1	Translation elongation 1 b3649 1 ribosome(s)	90 EF-G.GTP + 8 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 3 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 1 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 450 mg2 + 1 rib_ini_b3649_1 --> 1 rib_70_elo1_b3649_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_elo_b3649_1_rib2	Translation elongation 2 b3649 1 ribosome(s)	89 h2o + 1 rib_70_elo1_b3649_1_cplx --> 89 EF-G.GDP + 89 EF-Tu.GDP + 8 ala1_tRNA + 3 ala2_tRNA + 9 arg1_tRNA + 4 asn1_tRNA + 5 asp1_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 2 gln2_tRNA + 12 glu1_tRNA + 4 gly1_tRNA + 1 glyT_tRNA + 178 h + 6 ile1_tRNA + 5 leu1_tRNA + 1 leuU_tRNA + 1 leuZ_tRNA + 3 lys1_tRNA + 1 met1_tRNA + 450 mg2 + 1 phe1_tRNA + 178 pi + 2 pro1_tRNA + 1 rib_70_elo2_b3649_1_cplx + 2 thr1_tRNA + 2 thr2_tRNA + 6 val1_tRNA + 1 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_elo_b3649_2_rib1	Translation elongation 1 b3649 2 ribosome(s)	180 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 6 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 900 mg2 + 1 rib_ini_b3649_2 --> 1 rib_70_elo1_b3649_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_elo_b3649_2_rib2	Translation elongation 2 b3649 2 ribosome(s)	178 h2o + 1 rib_70_elo1_b3649_2_cplx --> 178 EF-G.GDP + 178 EF-Tu.GDP + 16 ala1_tRNA + 6 ala2_tRNA + 18 arg1_tRNA + 8 asn1_tRNA + 10 asp1_tRNA + 2 fmet_tRNA + 14 gln1_tRNA + 4 gln2_tRNA + 24 glu1_tRNA + 8 gly1_tRNA + 2 glyT_tRNA + 356 h + 12 ile1_tRNA + 10 leu1_tRNA + 2 leuU_tRNA + 2 leuZ_tRNA + 6 lys1_tRNA + 2 met1_tRNA + 900 mg2 + 2 phe1_tRNA + 356 pi + 4 pro1_tRNA + 1 rib_70_elo2_b3649_2_cplx + 4 thr1_tRNA + 4 thr2_tRNA + 12 val1_tRNA + 2 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_elo_b3649_5_rib1	Translation elongation 1 b3649 5 ribosome(s)	450 EF-G.GTP + 40 EF-Tu.GTP.ala1-tRNA + 15 EF-Tu.GTP.ala2-tRNA + 50 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 25 EF-Tu.GTP.asp1-tRNA + 35 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 60 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 30 EF-Tu.GTP.ile1-tRNA + 25 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 15 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 30 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 15 EF-Tu.GTP.val3-tRNA + 2250 mg2 + 1 rib_ini_b3649_5 --> 1 rib_70_elo1_b3649_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_elo_b3649_5_rib2	Translation elongation 2 b3649 5 ribosome(s)	445 h2o + 1 rib_70_elo1_b3649_5_cplx --> 445 EF-G.GDP + 445 EF-Tu.GDP + 40 ala1_tRNA + 15 ala2_tRNA + 45 arg1_tRNA + 20 asn1_tRNA + 25 asp1_tRNA + 5 fmet_tRNA + 35 gln1_tRNA + 10 gln2_tRNA + 60 glu1_tRNA + 20 gly1_tRNA + 5 glyT_tRNA + 890 h + 30 ile1_tRNA + 25 leu1_tRNA + 5 leuU_tRNA + 5 leuZ_tRNA + 15 lys1_tRNA + 5 met1_tRNA + 2250 mg2 + 5 phe1_tRNA + 890 pi + 10 pro1_tRNA + 1 rib_70_elo2_b3649_5_cplx + 10 thr1_tRNA + 10 thr2_tRNA + 30 val1_tRNA + 5 val2_tRNA + 15 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592

tl_elo_b3650_1_rib1	Translation elongation 1 b3650 1 ribosome(s)	701 EF-G.GTP + 41 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 52 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 24 EF-Tu.GTP.asn1-tRNA + 34 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 22 EF-Tu.GTP.gln1-tRNA + 11 EF-Tu.GTP.gln2-tRNA + 51 EF-Tu.GTP.glu1-tRNA + 32 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 25 EF-Tu.GTP.hisR-tRNA + 52 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 38 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 19 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 41 EF-Tu.GTP.lys1-tRNA + 22 EF-Tu.GTP.met1-tRNA + 18 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 20 EF-Tu.GTP.serV-tRNA + 19 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 22 EF-Tu.GTP.tyr1-tRNA + 25 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 3505 mg2 + 1 rib_ini_b3650_1 --> 1 rib_70_elo1_b3650_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_elo_b3650_1_rib2	Translation elongation 2 b3650 1 ribosome(s)	700 h2o + 1 rib_70_elo1_b3650_1_cplx --> 700 EF-G.GDP + 700 EF-Tu.GDP + 41 ala1_tRNA + 20 ala2_tRNA + 52 arg1_tRNA + 1 argX_tRNA + 23 asn1_tRNA + 34 asp1_tRNA + 8 cysT_tRNA + 1 fmet_tRNA + 22 gln1_tRNA + 11 gln2_tRNA + 51 glu1_tRNA + 32 gly1_tRNA + 3 glyT_tRNA + 5 glyU_tRNA + 1400 h + 25 hisR_tRNA + 52 ile1_tRNA + 1 ile2_tRNA + 38 leu1_tRNA + 5 leu2_tRNA + 19 leuU_tRNA + 1 leuZ_tRNA + 41 lys1_tRNA + 22 met1_tRNA + 3505 mg2 + 18 phe1_tRNA + 1400 pi + 18 pro1_tRNA + 4 pro2_tRNA + 6 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b3650_1_cplx + 3 ser1_tRNA + 4 ser2_tRNA + 8 ser3_tRNA + 2 serT_tRNA + 20 serV_tRNA + 19 thr1_tRNA + 4 thr2_tRNA + 9 thr3_tRNA + 2 thrU_tRNA + 4 trpT_tRNA + 22 tyr1_tRNA + 25 val1_tRNA + 12 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_elo_b3650_20_rib1	Translation elongation 1 b3650 20 ribosome(s)	14020 EF-G.GTP + 820 EF-Tu.GTP.ala1-tRNA + 400 EF-Tu.GTP.ala2-tRNA + 1040 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.argX-tRNA + 480 EF-Tu.GTP.asn1-tRNA + 680 EF-Tu.GTP.asp1-tRNA + 160 EF-Tu.GTP.cysT-tRNA + 440 EF-Tu.GTP.gln1-tRNA + 220 EF-Tu.GTP.gln2-tRNA + 1020 EF-Tu.GTP.glu1-tRNA + 640 EF-Tu.GTP.gly1-tRNA + 60 EF-Tu.GTP.glyT-tRNA + 100 EF-Tu.GTP.glyU-tRNA + 500 EF-Tu.GTP.hisR-tRNA + 1040 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.ile2-tRNA + 760 EF-Tu.GTP.leu1-tRNA + 100 EF-Tu.GTP.leu2-tRNA + 380 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 820 EF-Tu.GTP.lys1-tRNA + 440 EF-Tu.GTP.met1-tRNA + 360 EF-Tu.GTP.phe1-tRNA + 360 EF-Tu.GTP.pro1-tRNA + 80 EF-Tu.GTP.pro2-tRNA + 120 EF-Tu.GTP.proL-tRNA + 80 EF-Tu.GTP.proM-tRNA + 60 EF-Tu.GTP.ser1-tRNA + 80 EF-Tu.GTP.ser2-tRNA + 160 EF-Tu.GTP.ser3-tRNA + 40 EF-Tu.GTP.serT-tRNA + 400 EF-Tu.GTP.serV-tRNA + 380 EF-Tu.GTP.thr1-tRNA + 80 EF-Tu.GTP.thr2-tRNA + 180 EF-Tu.GTP.thr3-tRNA + 40 EF-Tu.GTP.thrU-tRNA + 80 EF-Tu.GTP.trpT-tRNA + 440 EF-Tu.GTP.tyr1-tRNA + 500 EF-Tu.GTP.val1-tRNA + 240 EF-Tu.GTP.val2-tRNA + 180 EF-Tu.GTP.val3-tRNA + 70100 mg2 + 1 rib	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_elo_b3650_20_rib2	Translation elongation 2 b3650 20 ribosome(s)	14000 h2o + 1 rib_70_elo1_b3650_20_cplx --> 14000 EF-G.GDP + 14000 EF-Tu.GDP + 820 ala1_tRNA + 400 ala2_tRNA + 1040 arg1_tRNA + 20 argX_tRNA + 460 asn1_tRNA + 680 asp1_tRNA + 160 cysT_tRNA + 20 fmet_tRNA + 440 gln1_tRNA + 220 gln2_tRNA + 1020 glu1_tRNA + 640 gly1_tRNA + 60 glyT_tRNA + 100 glyU_tRNA + 28000 h + 500 hisR_tRNA + 1040 ile1_tRNA + 20 ile2_tRNA + 760 leu1_tRNA + 100 leu2_tRNA + 380 leuU_tRNA + 20 leuZ_tRNA + 820 lys1_tRNA + 440 met1_tRNA + 70100 mg2 + 360 phe1_tRNA + 28000 pi + 360 pro1_tRNA + 80 pro2_tRNA + 120 proL_tRNA + 80 proM_tRNA + 1 rib_70_elo2_b3650_20_cplx + 60 ser1_tRNA + 80 ser2_tRNA + 160 ser3_tRNA + 40 serT_tRNA + 400 serV_tRNA + 380 thr1_tRNA + 80 thr2_tRNA + 180 thr3_tRNA + 40 thrU_tRNA + 80 trpT_tRNA + 440 tyr1_tRNA + 500 val1_tRNA + 240 val2_tRNA + 180 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_elo_b3650_41_rib1	Translation elongation 1 b3650 41 ribosome(s)	28741 EF-G.GTP + 1681 EF-Tu.GTP.ala1-tRNA + 820 EF-Tu.GTP.ala2-tRNA + 2132 EF-Tu.GTP.arg1-tRNA + 41 EF-Tu.GTP.argX-tRNA + 984 EF-Tu.GTP.asn1-tRNA + 1394 EF-Tu.GTP.asp1-tRNA + 328 EF-Tu.GTP.cysT-tRNA + 902 EF-Tu.GTP.gln1-tRNA + 451 EF-Tu.GTP.gln2-tRNA + 2091 EF-Tu.GTP.glu1-tRNA + 1312 EF-Tu.GTP.gly1-tRNA + 123 EF-Tu.GTP.glyT-tRNA + 205 EF-Tu.GTP.glyU-tRNA + 1025 EF-Tu.GTP.hisR-tRNA + 2132 EF-Tu.GTP.ile1-tRNA + 41 EF-Tu.GTP.ile2-tRNA + 1558 EF-Tu.GTP.leu1-tRNA + 205 EF-Tu.GTP.leu2-tRNA + 779 EF-Tu.GTP.leuU-tRNA + 41 EF-Tu.GTP.leuZ-tRNA + 1681 EF-Tu.GTP.lys1-tRNA + 902 EF-Tu.GTP.met1-tRNA + 738 EF-Tu.GTP.phe1-tRNA + 738 EF-Tu.GTP.pro1-tRNA + 164 EF-Tu.GTP.pro2-tRNA + 246 EF-Tu.GTP.proL-tRNA + 164 EF-Tu.GTP.proM-tRNA + 123 EF-Tu.GTP.ser1-tRNA + 164 EF-Tu.GTP.ser2-tRNA + 328 EF-Tu.GTP.ser3-tRNA + 82 EF-Tu.GTP.serT-tRNA + 820 EF-Tu.GTP.serV-tRNA + 779 EF-Tu.GTP.thr1-tRNA + 164 EF-Tu.GTP.thr2-tRNA + 369 EF-Tu.GTP.thr3-tRNA + 82 EF-Tu.GTP.thrU-tRNA + 164 EF-Tu.GTP.trpT-tRNA + 902 EF-Tu.GTP.tyr1-tRNA + 1025 EF-Tu.GTP.val1-tRNA + 492 EF-Tu.GTP.val2-tRNA + 369 EF-Tu.GTP.val3-tRNA + 143705 mg2 + 1 ri	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_elo_b3650_41_rib2	Translation elongation 2 b3650 41 ribosome(s)	28700 h2o + 1 rib_70_elo1_b3650_41_cplx --> 28700 EF-G.GDP + 28700 EF-Tu.GDP + 1681 ala1_tRNA + 820 ala2_tRNA + 2132 arg1_tRNA + 41 argX_tRNA + 943 asn1_tRNA + 1394 asp1_tRNA + 328 cysT_tRNA + 41 fmet_tRNA + 902 gln1_tRNA + 451 gln2_tRNA + 2091 glu1_tRNA + 1312 gly1_tRNA + 123 glyT_tRNA + 205 glyU_tRNA + 57400 h + 1025 hisR_tRNA + 2132 ile1_tRNA + 41 ile2_tRNA + 1558 leu1_tRNA + 205 leu2_tRNA + 779 leuU_tRNA + 41 leuZ_tRNA + 1681 lys1_tRNA + 902 met1_tRNA + 143705 mg2 + 738 phe1_tRNA + 57400 pi + 738 pro1_tRNA + 164 pro2_tRNA + 246 proL_tRNA + 164 proM_tRNA + 1 rib_70_elo2_b3650_41_cplx + 123 ser1_tRNA + 164 ser2_tRNA + 328 ser3_tRNA + 82 serT_tRNA + 820 serV_tRNA + 779 thr1_tRNA + 164 thr2_tRNA + 369 thr3_tRNA + 82 thrU_tRNA + 164 trpT_tRNA + 902 tyr1_tRNA + 1025 val1_tRNA + 492 val2_tRNA + 369 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712

tl_elo_b3651_13_rib1	Translation elongation 1 b3651 13 ribosome(s)	2964 EF-G.GTP + 260 EF-Tu.GTP.ala1-tRNA + 117 EF-Tu.GTP.ala2-tRNA + 156 EF-Tu.GTP.arg1-tRNA + 13 EF-Tu.GTP.argW-tRNA + 26 EF-Tu.GTP.argX-tRNA + 104 EF-Tu.GTP.asn1-tRNA + 130 EF-Tu.GTP.asp1-tRNA + 39 EF-Tu.GTP.cysT-tRNA + 169 EF-Tu.GTP.gln1-tRNA + 52 EF-Tu.GTP.gln2-tRNA + 169 EF-Tu.GTP.glu1-tRNA + 169 EF-Tu.GTP.gly1-tRNA + 13 EF-Tu.GTP.glyT-tRNA + 13 EF-Tu.GTP.glyU-tRNA + 104 EF-Tu.GTP.hisR-tRNA + 182 EF-Tu.GTP.ile1-tRNA + 104 EF-Tu.GTP.leu1-tRNA + 52 EF-Tu.GTP.leu2-tRNA + 65 EF-Tu.GTP.leuU-tRNA + 91 EF-Tu.GTP.lys1-tRNA + 143 EF-Tu.GTP.met1-tRNA + 26 EF-Tu.GTP.phe1-tRNA + 52 EF-Tu.GTP.pro1-tRNA + 52 EF-Tu.GTP.pro2-tRNA + 13 EF-Tu.GTP.proL-tRNA + 13 EF-Tu.GTP.proM-tRNA + 13 EF-Tu.GTP.ser1-tRNA + 26 EF-Tu.GTP.ser2-tRNA + 26 EF-Tu.GTP.ser3-tRNA + 13 EF-Tu.GTP.serT-tRNA + 52 EF-Tu.GTP.serV-tRNA + 78 EF-Tu.GTP.thr1-tRNA + 26 EF-Tu.GTP.thr2-tRNA + 26 EF-Tu.GTP.thr3-tRNA + 26 EF-Tu.GTP.thrU-tRNA + 52 EF-Tu.GTP.trpT-tRNA + 78 EF-Tu.GTP.tyr1-tRNA + 65 EF-Tu.GTP.val1-tRNA + 91 EF-Tu.GTP.val2-tRNA + 65 EF-Tu.GTP.val3-tRNA + 14820 mg2 + 1 rib_ini_b3651_13 --> 1 rib_70_elo1_b3651_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_elo_b3651_13_rib2	Translation elongation 2 b3651 13 ribosome(s)	2951 h2o + 1 rib_70_elo1_b3651_13_cplx --> 2951 EF-G.GDP + 2951 EF-Tu.GDP + 260 ala1_tRNA + 117 ala2_tRNA + 156 arg1_tRNA + 13 argW_tRNA + 26 argX_tRNA + 104 asn1_tRNA + 130 asp1_tRNA + 39 cysT_tRNA + 13 fmet_tRNA + 169 gln1_tRNA + 52 gln2_tRNA + 169 glu1_tRNA + 169 gly1_tRNA + 13 glyT_tRNA + 5902 h + 104 hisR_tRNA + 182 ile1_tRNA + 104 leu1_tRNA + 52 leu2_tRNA + 65 leuU_tRNA + 91 lys1_tRNA + 143 met1_tRNA + 14820 mg2 + 26 phe1_tRNA + 5902 pi + 52 pro1_tRNA + 52 pro2_tRNA + 13 proL_tRNA + 13 proM_tRNA + 1 rib_70_elo2_b3651_13_cplx + 13 ser1_tRNA + 26 ser2_tRNA + 26 ser3_tRNA + 13 serT_tRNA + 52 serV_tRNA + 78 thr1_tRNA + 26 thr2_tRNA + 26 thr3_tRNA + 26 thrU_tRNA + 52 trpT_tRNA + 78 tyr1_tRNA + 65 val1_tRNA + 91 val2_tRNA + 65 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_elo_b3651_1_rib1	Translation elongation 1 b3651 1 ribosome(s)	228 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 2 EF-Tu.GTP.argX-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 13 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 13 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 14 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 11 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1140 mg2 + 1 rib_ini_b3651_1 --> 1 rib_70_elo1_b3651_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_elo_b3651_1_rib2	Translation elongation 2 b3651 1 ribosome(s)	227 h2o + 1 rib_70_elo1_b3651_1_cplx --> 227 EF-G.GDP + 227 EF-Tu.GDP + 20 ala1_tRNA + 9 ala2_tRNA + 12 arg1_tRNA + 1 argW_tRNA + 2 argX_tRNA + 8 asn1_tRNA + 10 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 13 gln1_tRNA + 4 gln2_tRNA + 13 glu1_tRNA + 13 gly1_tRNA + 1 glyT_tRNA + 454 h + 8 hisR_tRNA + 14 ile1_tRNA + 8 leu1_tRNA + 4 leu2_tRNA + 5 leuU_tRNA + 7 lys1_tRNA + 11 met1_tRNA + 1140 mg2 + 2 phe1_tRNA + 454 pi + 4 pro1_tRNA + 4 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3651_1_cplx + 1 ser1_tRNA + 2 ser2_tRNA + 2 ser3_tRNA + 1 serT_tRNA + 4 serV_tRNA + 6 thr1_tRNA + 2 thr2_tRNA + 2 thr3_tRNA + 2 thrU_tRNA + 4 trpT_tRNA + 6 tyr1_tRNA + 5 val1_tRNA + 7 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_elo_b3651_6_rib1	Translation elongation 1 b3651 6 ribosome(s)	1368 EF-G.GTP + 120 EF-Tu.GTP.ala1-tRNA + 54 EF-Tu.GTP.ala2-tRNA + 72 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argW-tRNA + 12 EF-Tu.GTP.argX-tRNA + 48 EF-Tu.GTP.asn1-tRNA + 60 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.cysT-tRNA + 78 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 78 EF-Tu.GTP.glu1-tRNA + 78 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 48 EF-Tu.GTP.hisR-tRNA + 84 EF-Tu.GTP.ile1-tRNA + 48 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.leu2-tRNA + 30 EF-Tu.GTP.leuU-tRNA + 42 EF-Tu.GTP.lys1-tRNA + 66 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serT-tRNA + 24 EF-Tu.GTP.serV-tRNA + 36 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.thrU-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 36 EF-Tu.GTP.tyr1-tRNA + 30 EF-Tu.GTP.val1-tRNA + 42 EF-Tu.GTP.val2-tRNA + 30 EF-Tu.GTP.val3-tRNA + 6840 mg2 + 1 rib_ini_b3651_6 --> 1 rib_70_elo1_b3651_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_elo_b3651_6_rib2	Translation elongation 2 b3651 6 ribosome(s)	1362 h2o + 1 rib_70_elo1_b3651_6_cplx --> 1362 EF-G.GDP + 1362 EF-Tu.GDP + 120 ala1_tRNA + 54 ala2_tRNA + 72 arg1_tRNA + 6 argW_tRNA + 12 argX_tRNA + 48 asn1_tRNA + 60 asp1_tRNA + 18 cysT_tRNA + 6 fmet_tRNA + 78 gln1_tRNA + 24 gln2_tRNA + 78 glu1_tRNA + 78 gly1_tRNA + 6 glyT_tRNA + 2724 h + 48 hisR_tRNA + 84 ile1_tRNA + 48 leu1_tRNA + 24 leu2_tRNA + 30 leuU_tRNA + 42 lys1_tRNA + 66 met1_tRNA + 6840 mg2 + 12 phe1_tRNA + 2724 pi + 24 pro1_tRNA + 24 pro2_tRNA + 6 proL_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b3651_6_cplx + 6 ser1_tRNA + 12 ser2_tRNA + 12 ser3_tRNA + 6 serT_tRNA + 24 serV_tRNA + 36 thr1_tRNA + 12 thr2_tRNA + 12 thr3_tRNA + 12 thrU_tRNA + 24 trpT_tRNA + 36 tyr1_tRNA + 30 val1_tRNA + 42 val2_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892

tl_elo_b3652_1_rib1	Translation elongation 1 b3652 1 ribosome(s)	692 EF-G.GTP + 51 EF-Tu.GTP.ala1-tRNA + 26 EF-Tu.GTP.ala2-tRNA + 42 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argX-tRNA + 19 EF-Tu.GTP.asn1-tRNA + 26 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 37 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 49 EF-Tu.GTP.glu1-tRNA + 43 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 23 EF-Tu.GTP.hisR-tRNA + 30 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 45 EF-Tu.GTP.leu1-tRNA + 11 EF-Tu.GTP.leu2-tRNA + 21 EF-Tu.GTP.leuU-tRNA + 7 EF-Tu.GTP.leuW-tRNA + 11 EF-Tu.GTP.leuZ-tRNA + 26 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 15 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 12 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 22 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 29 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 3460 mg2 + 1 rib_ini_b3652_1 --> 1 rib_70_elo1	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_elo_b3652_1_rib2	Translation elongation 2 b3652 1 ribosome(s)	691 h2o + 1 rib_70_elo1_b3652_1_cplx --> 691 EF-G.GDP + 691 EF-Tu.GDP + 50 ala1_tRNA + 26 ala2_tRNA + 42 arg1_tRNA + 4 argX_tRNA + 19 asn1_tRNA + 26 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 37 gln1_tRNA + 7 gln2_tRNA + 49 glu1_tRNA + 43 gly1_tRNA + 3 glyT_tRNA + 3 glyU_tRNA + 1382 h + 23 hisR_tRNA + 30 ile1_tRNA + 3 ile2_tRNA + 45 leu1_tRNA + 11 leu2_tRNA + 21 leuU_tRNA + 7 leuW_tRNA + 11 leuZ_tRNA + 26 lys1_tRNA + 20 met1_tRNA + 3460 mg2 + 15 phe1_tRNA + 1382 pi + 20 pro1_tRNA + 4 pro2_tRNA + 3 proL_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b3652_1_cplx + 4 ser1_tRNA + 2 ser2_tRNA + 4 ser3_tRNA + 1 serT_tRNA + 12 serV_tRNA + 14 thr1_tRNA + 4 thr2_tRNA + 22 thr3_tRNA + 3 thrU_tRNA + 6 trpT_tRNA + 12 tyr1_tRNA + 29 val1_tRNA + 5 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_elo_b3652_20_rib1	Translation elongation 1 b3652 20 ribosome(s)	13840 EF-G.GTP + 1020 EF-Tu.GTP.ala1-tRNA + 520 EF-Tu.GTP.ala2-tRNA + 840 EF-Tu.GTP.arg1-tRNA + 80 EF-Tu.GTP.argX-tRNA + 380 EF-Tu.GTP.asn1-tRNA + 520 EF-Tu.GTP.asp1-tRNA + 120 EF-Tu.GTP.cysT-tRNA + 740 EF-Tu.GTP.gln1-tRNA + 140 EF-Tu.GTP.gln2-tRNA + 980 EF-Tu.GTP.glu1-tRNA + 860 EF-Tu.GTP.gly1-tRNA + 60 EF-Tu.GTP.glyT-tRNA + 60 EF-Tu.GTP.glyU-tRNA + 460 EF-Tu.GTP.hisR-tRNA + 600 EF-Tu.GTP.ile1-tRNA + 60 EF-Tu.GTP.ile2-tRNA + 900 EF-Tu.GTP.leu1-tRNA + 220 EF-Tu.GTP.leu2-tRNA + 420 EF-Tu.GTP.leuU-tRNA + 140 EF-Tu.GTP.leuW-tRNA + 220 EF-Tu.GTP.leuZ-tRNA + 520 EF-Tu.GTP.lys1-tRNA + 400 EF-Tu.GTP.met1-tRNA + 300 EF-Tu.GTP.phe1-tRNA + 400 EF-Tu.GTP.pro1-tRNA + 80 EF-Tu.GTP.pro2-tRNA + 60 EF-Tu.GTP.proL-tRNA + 200 EF-Tu.GTP.proM-tRNA + 80 EF-Tu.GTP.ser1-tRNA + 40 EF-Tu.GTP.ser2-tRNA + 80 EF-Tu.GTP.ser3-tRNA + 20 EF-Tu.GTP.serT-tRNA + 240 EF-Tu.GTP.serV-tRNA + 280 EF-Tu.GTP.thr1-tRNA + 80 EF-Tu.GTP.thr2-tRNA + 440 EF-Tu.GTP.thr3-tRNA + 60 EF-Tu.GTP.thrU-tRNA + 120 EF-Tu.GTP.trpT-tRNA + 240 EF-Tu.GTP.tyr1-tRNA + 580 EF-Tu.GTP.val1-tRNA + 100 EF-Tu.GTP.val2-tRNA + 180 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_elo_b3652_20_rib2	Translation elongation 2 b3652 20 ribosome(s)	13820 h2o + 1 rib_70_elo1_b3652_20_cplx --> 13820 EF-G.GDP + 13820 EF-Tu.GDP + 1000 ala1_tRNA + 520 ala2_tRNA + 840 arg1_tRNA + 80 argX_tRNA + 380 asn1_tRNA + 520 asp1_tRNA + 120 cysT_tRNA + 20 fmet_tRNA + 740 gln1_tRNA + 140 gln2_tRNA + 980 glu1_tRNA + 860 gly1_tRNA + 60 glyT_tRNA + 60 glyU_tRNA + 27640 h + 460 hisR_tRNA + 600 ile1_tRNA + 60 ile2_tRNA + 900 leu1_tRNA + 220 leu2_tRNA + 420 leuU_tRNA + 140 leuW_tRNA + 220 leuZ_tRNA + 520 lys1_tRNA + 400 met1_tRNA + 69200 mg2 + 300 phe1_tRNA + 27640 pi + 400 pro1_tRNA + 80 pro2_tRNA + 60 proL_tRNA + 200 proM_tRNA + 1 rib_70_elo2_b3652_20_cplx + 80 ser1_tRNA + 40 ser2_tRNA + 80 ser3_tRNA + 20 serT_tRNA + 240 serV_tRNA + 280 thr1_tRNA + 80 thr2_tRNA + 440 thr3_tRNA + 60 thrU_tRNA + 120 trpT_tRNA + 240 tyr1_tRNA + 580 val1_tRNA + 100 val2_tRNA + 180 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_elo_b3652_40_rib1	Translation elongation 1 b3652 40 ribosome(s)	27680 EF-G.GTP + 2040 EF-Tu.GTP.ala1-tRNA + 1040 EF-Tu.GTP.ala2-tRNA + 1680 EF-Tu.GTP.arg1-tRNA + 160 EF-Tu.GTP.argX-tRNA + 760 EF-Tu.GTP.asn1-tRNA + 1040 EF-Tu.GTP.asp1-tRNA + 240 EF-Tu.GTP.cysT-tRNA + 1480 EF-Tu.GTP.gln1-tRNA + 280 EF-Tu.GTP.gln2-tRNA + 1960 EF-Tu.GTP.glu1-tRNA + 1720 EF-Tu.GTP.gly1-tRNA + 120 EF-Tu.GTP.glyT-tRNA + 120 EF-Tu.GTP.glyU-tRNA + 920 EF-Tu.GTP.hisR-tRNA + 1200 EF-Tu.GTP.ile1-tRNA + 120 EF-Tu.GTP.ile2-tRNA + 1800 EF-Tu.GTP.leu1-tRNA + 440 EF-Tu.GTP.leu2-tRNA + 840 EF-Tu.GTP.leuU-tRNA + 280 EF-Tu.GTP.leuW-tRNA + 440 EF-Tu.GTP.leuZ-tRNA + 1040 EF-Tu.GTP.lys1-tRNA + 800 EF-Tu.GTP.met1-tRNA + 600 EF-Tu.GTP.phe1-tRNA + 800 EF-Tu.GTP.pro1-tRNA + 160 EF-Tu.GTP.pro2-tRNA + 120 EF-Tu.GTP.proL-tRNA + 400 EF-Tu.GTP.proM-tRNA + 160 EF-Tu.GTP.ser1-tRNA + 80 EF-Tu.GTP.ser2-tRNA + 160 EF-Tu.GTP.ser3-tRNA + 40 EF-Tu.GTP.serT-tRNA + 480 EF-Tu.GTP.serV-tRNA + 560 EF-Tu.GTP.thr1-tRNA + 160 EF-Tu.GTP.thr2-tRNA + 880 EF-Tu.GTP.thr3-tRNA + 120 EF-Tu.GTP.thrU-tRNA + 240 EF-Tu.GTP.trpT-tRNA + 480 EF-Tu.GTP.tyr1-tRNA + 1160 EF-Tu.GTP.val1-tRNA + 200 EF-Tu.GTP.val2-tRNA + 360 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_elo_b3652_40_rib2	Translation elongation 2 b3652 40 ribosome(s)	27640 h2o + 1 rib_70_elo1_b3652_40_cplx --> 27640 EF-G.GDP + 27640 EF-Tu.GDP + 2000 ala1_tRNA + 1040 ala2_tRNA + 1680 arg1_tRNA + 160 argX_tRNA + 760 asn1_tRNA + 1040 asp1_tRNA + 240 cysT_tRNA + 40 fmet_tRNA + 1480 gln1_tRNA + 280 gln2_tRNA + 1960 glu1_tRNA + 1720 gly1_tRNA + 120 glyT_tRNA + 120 glyU_tRNA + 55280 h + 920 hisR_tRNA + 1200 ile1_tRNA + 120 ile2_tRNA + 1800 leu1_tRNA + 440 leu2_tRNA + 840 leuU_tRNA + 280 leuW_tRNA + 440 leuZ_tRNA + 1040 lys1_tRNA + 800 met1_tRNA + 138400 mg2 + 600 phe1_tRNA + 55280 pi + 800 pro1_tRNA + 160 pro2_tRNA + 120 proL_tRNA + 400 proM_tRNA + rib_70_elo2_b3652_40_cplx + 160 ser1_tRNA + 80 ser2_tRNA + 160 ser3_tRNA + 40 serT_tRNA + 480 serV_tRNA + 560 thr1_tRNA + 160 thr2_tRNA + 880 thr3_tRNA + 120 thrU_tRNA + 240 trpT_tRNA + 480 tyr1_tRNA + 1160 val1_tRNA + 200 val2_tRNA + 360 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802

tl_elo_b3703_1_rib1	Translation elongation 1 b3703 1 ribosome(s)	45 EF-G.GTP + 5 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 3 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 3 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val3-tRNA + 225 mg2 + 1 rib_ini_b3703_1 --> 1 rib_70_elo1_b3703_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3703_1_rib2	Translation elongation 2 b3703 1 ribosome(s)	44 h2o + 1 rib_70_elo1_b3703_1_cplx --> 44 EF-G.GDP + 44 EF-Tu.GDP + 5 ala1_tRNA + 11 arg1_tRNA + 2 asn1_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 1 gln2_tRNA + 3 gly1_tRNA + 88 h + 1 hisR_tRNA + 3 leu1_tRNA + 4 lys1_tRNA + 1 met1_tRNA + 225 mg2 + 2 phe1_tRNA + 88 pi + 1 pro1_tRNA + 1 rib_70_elo2_b3703_1_cpl + 3 ser2_tRNA + 1 thr1_tRNA + 2 thr2_tRNA + 1 val1_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b3703_2_rib1	Translation elongation 1 b3703 2 ribosome(s)	90 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 22 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val3-tRNA + 450 mg2 + 1 rib_ini_b3703_2 --> 1 rib_70_elo1_b3703_2_cp	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3703_2_rib2	Translation elongation 2 b3703 2 ribosome(s)	88 h2o + 1 rib_70_elo1_b3703_2_cplx --> 88 EF-G.GDP + 88 EF-Tu.GDP + 10 ala1_tRNA + 22 arg1_tRNA + 4 asn1_tRNA + 2 fmet_tRNA + 2 gln1_tRNA + 2 gln2_tRNA + 6 gly1_tRNA + 176 h + 2 hisR_tRNA + 6 leu1_tRNA + 8 lys1_tRNA + 2 met1_tRNA + 450 mg2 + 4 phe1_tRNA + 176 pi + 2 pro1_tRNA + 1 rib_70_elo2_b3703_2_cplx + 6 ser2_tRNA + 2 thr1_tRNA + 4 thr2_tRNA + 2 val1_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3704_1_rib1	Translation elongation 1 b3704 1 ribosome(s)	118 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 2 EF-Tu.GTP.argX-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 3 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 590 mg2 + 1 rib_ini_b3704_1 --> 1 rib_70_elo1_b3704_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	5.43E+01	54.28861	0	1.08E+01	10.8499
tl_elo_b3704_1_rib2	Translation elongation 2 b3704 1 ribosome(s)	117 h2o + 1 rib_70_elo1_b3704_1_cplx --> 117 EF-G.GDP + 117 EF-Tu.GDP + 7 ala1_tRNA + 3 ala2_tRNA + 15 arg1_tRNA + 1 argW_tRNA + 2 argX_tRNA + 4 asn1_tRNA + 3 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 4 gln2_tRNA + 6 glu1_tRNA + 3 gly1_tRNA + 3 glyU_tRNA + 234 h + 4 hisR_tRNA + 4 ile1_tRNA + 5 leu1_tRNA + 2 leu2_tRNA + 6 leuU_tRNA + 3 leuZ_tRNA + 7 lys1_tRNA + 1 met1_tRNA + 590 mg2 + 6 phe1_tRNA + 234 pi + 2 pro1_tRNA + 3 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3704_1_cplx + 2 ser3_tRNA + 2 serV_tRNA + 1 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 2 thrU_tRNA + 1 trpT_tRNA + 3 val1_tRNA + 2 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	5.43E+01	54.28861	0	1.08E+01	10.8499
tl_elo_b3704_3_rib1	Translation elongation 1 b3704 3 ribosome(s)	354 EF-G.GTP + 21 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 45 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argW-tRNA + 6 EF-Tu.GTP.argX-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyU-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 18 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuZ-tRNA + 21 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 18 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 6 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 1770 mg2 + 1 rib_ini_b3704_3 --> 1 rib_70_elo1_b3704_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.96E+01	19.61562	0	3.62E+00	3.616633
tl_elo_b3704_3_rib2	Translation elongation 2 b3704 3 ribosome(s)	351 h2o + 1 rib_70_elo1_b3704_3_cplx --> 351 EF-G.GDP + 351 EF-Tu.GDP + 21 ala1_tRNA + 9 ala2_tRNA + 45 arg1_tRNA + 3 argW_tRNA + 6 argX_tRNA + 12 asn1_tRNA + 9 asp1_tRNA + 3 cysT_tRNA + 3 fmet_tRNA + 6 gln1_tRNA + 12 gln2_tRNA + 18 glu1_tRNA + 9 gly1_tRNA + 9 glyU_tRNA + 702 h + 12 hisR_tRNA + 12 ile1_tRNA + 15 leu1_tRNA + 6 leu2_tRNA + 18 leuU_tRNA + 9 leuZ_tRNA + 21 lys1_tRNA + 3 met1_tRNA + 1770 mg2 + 18 phe1_tRNA + 702 pi + 6 pro1_tRNA + 9 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b3704_3_cplx + 6 ser3_tRNA + 6 serV_tRNA + 3 thr1_tRNA + 3 thr2_tRNA + 6 thr3_tRNA + 6 thrU_tRNA + 3 trpT_tRNA + 9 val1_tRNA + 6 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.96E+01	19.61562	0	3.62E+00	3.616633

tl_elo_b3704_7_rib1	Translation elongation 1 b3704 7 ribosome(s)	826 EF-G.GTP + 49 EF-Tu.GTP.ala1-tRNA + 21 EF-Tu.GTP.ala2-tRNA + 105 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argW-tRNA + 14 EF-Tu.GTP.argX-tRNA + 28 EF-Tu.GTP.asn1-tRNA + 21 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 14 EF-Tu.GTP.gln1-tRNA + 28 EF-Tu.GTP.gln2-tRNA + 42 EF-Tu.GTP.glu1-tRNA + 21 EF-Tu.GTP.gly1-tRNA + 21 EF-Tu.GTP.glyU-tRNA + 28 EF-Tu.GTP.hisR-tRNA + 28 EF-Tu.GTP.ile1-tRNA + 35 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leu2-tRNA + 42 EF-Tu.GTP.leuU-tRNA + 21 EF-Tu.GTP.leuZ-tRNA + 49 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 42 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.pro1-tRNA + 21 EF-Tu.GTP.proL-tRNA + 7 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 14 EF-Tu.GTP.ser3-tRNA + 14 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 14 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.thrU-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 21 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 21 EF-Tu.GTP.val3-tRNA + 4130 mg2 + 1 rib_ini_b3704_7 --> 1 rib_70_elo1_b3704_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.02E+01	4.02E+01	0	8.47E+00	8.465205	0	1.55E+00	1.549986
tl_elo_b3704_7_rib2	Translation elongation 2 b3704 7 ribosome(s)	819 h2o + 1 rib_70_elo1_b3704_7_cplx --> 819 EF-G.GDP + 819 EF-Tu.GDP + 49 ala1_tRNA + 21 ala2_tRNA + 105 arg1_tRNA + 7 argW_tRNA + 14 argX_tRNA + 28 asn1_tRNA + 21 asp1_tRNA + 7 cysT_tRNA + 7 fmet_tRNA + 14 gln1_tRNA + 28 gln2_tRNA + 42 glu1_tRNA + 21 gly1_tRNA + 21 glyU_tRNA + 1638 h + 28 hisR_tRNA + 28 ile1_tRNA + 35 leu1_tRNA + 14 leu2_tRNA + 42 leuU_tRNA + 21 leuZ_tRNA + 49 lys1_tRNA + 7 met1_tRNA + 4130 mg2 + 42 phe1_tRNA + 1638 pi + 14 pro1_tRNA + 21 proL_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b3704_7_cplx + 14 ser3_tRNA + 14 serV_tRNA + 7 thr1_tRNA + 7 thr2_tRNA + 14 thr3_tRNA + 14 thrU_tRNA + 7 trpT_tRNA + 21 val1_tRNA + 14 val2_tRNA + 21 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.02E+01	4.02E+01	0	8.47E+00	8.465205	0	1.55E+00	1.549986
tl_elo_b3706_13_rib1	Translation elongation 1 b3706 13 ribosome(s)	5889 EF-G.GTP + 390 EF-Tu.GTP.ala1-tRNA + 312 EF-Tu.GTP.ala2-tRNA + 364 EF-Tu.GTP.arg1-tRNA + 13 EF-Tu.GTP.argW-tRNA + 39 EF-Tu.GTP.argX-tRNA + 169 EF-Tu.GTP.asn1-tRNA + 429 EF-Tu.GTP.asp1-tRNA + 13 EF-Tu.GTP.cysT-tRNA + 182 EF-Tu.GTP.gln1-tRNA + 52 EF-Tu.GTP.gln2-tRNA + 468 EF-Tu.GTP.glu1-tRNA + 364 EF-Tu.GTP.gly1-tRNA + 91 EF-Tu.GTP.glyT-tRNA + 78 EF-Tu.GTP.glyU-tRNA + 130 EF-Tu.GTP.hisR-tRNA + 429 EF-Tu.GTP.ile1-tRNA + 364 EF-Tu.GTP.leu1-tRNA + 65 EF-Tu.GTP.leu2-tRNA + 169 EF-Tu.GTP.leuU-tRNA + 52 EF-Tu.GTP.leuW-tRNA + 65 EF-Tu.GTP.leuZ-tRNA + 182 EF-Tu.GTP.lys1-tRNA + 78 EF-Tu.GTP.met1-tRNA + 208 EF-Tu.GTP.phe1-tRNA + 117 EF-Tu.GTP.pro1-tRNA + 65 EF-Tu.GTP.pro2-tRNA + 26 EF-Tu.GTP.proL-tRNA + 13 EF-Tu.GTP.proM-tRNA + 65 EF-Tu.GTP.ser1-tRNA + 78 EF-Tu.GTP.ser3-tRNA + 13 EF-Tu.GTP.serT-tRNA + 130 EF-Tu.GTP.serV-tRNA + 143 EF-Tu.GTP.thr1-tRNA + 52 EF-Tu.GTP.thr2-tRNA + 39 EF-Tu.GTP.thr3-tRNA + 26 EF-Tu.GTP.thrU-tRNA + 52 EF-Tu.GTP.trpT-tRNA + 39 EF-Tu.GTP.tyr1-tRNA + 247 EF-Tu.GTP.val1-tRNA + 26 EF-Tu.GTP.val2-tRNA + 52 EF-Tu.GTP.val3-tRNA + 29445 mg2 + 1 rib_ini_b3706_13 --> 1 rib_70_elo1_b3706_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_elo_b3706_13_rib2	Translation elongation 2 b3706 13 ribosome(s)	5876 h2o + 1 rib_70_elo1_b3706_13_cplx --> 5876 EF-G.GDP + 5876 EF-Tu.GDP + 390 ala1_tRNA + 312 ala2_tRNA + 364 arg1_tRNA + 13 argW_tRNA + 39 argX_tRNA + 169 asn1_tRNA + 429 asp1_tRNA + 13 cysT_tRNA + 13 fmet_tRNA + 182 gln1_tRNA + 52 gln2_tRNA + 468 glu1_tRNA + 364 gly1_tRNA + 91 glyT_tRNA + 78 glyU_tRNA + 11752 h + 130 hisR_tRNA + 429 ile1_tRNA + 364 leu1_tRNA + 65 leu2_tRNA + 169 leuU_tRNA + 52 leuW_tRNA + 65 leuZ_tRNA + 169 lys1_tRNA + 78 met1_tRNA + 29445 mg2 + 208 phe1_tRNA + 11752 pi + 117 pro1_tRNA + 65 pro2_tRNA + 26 proL_tRNA + 13 proM_tRNA + 1 rib_70_elo2_b3706_13_cplx + 65 ser1_tRNA + 78 ser3_tRNA + 13 serT_tRNA + 130 serV_tRNA + 143 thr1_tRNA + 52 thr2_tRNA + 39 thr3_tRNA + 26 thrU_tRNA + 52 trpT_tRNA + 39 tyr1_tRNA + 247 val1_tRNA + 26 val2_tRNA + 52 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_elo_b3706_1_rib1	Translation elongation 1 b3706 1 ribosome(s)	453 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 28 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 3 EF-Tu.GTP.argX-tRNA + 13 EF-Tu.GTP.asn1-tRNA + 33 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 14 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 36 EF-Tu.GTP.glu1-tRNA + 28 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 33 EF-Tu.GTP.ile1-tRNA + 28 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 13 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 14 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 10 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 19 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 2265 mg2 + 1 rib_ini_b3706_1 --> 1 rib_70_elo1_b3706_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_elo_b3706_1_rib2	Translation elongation 2 b3706 1 ribosome(s)	452 h2o + 1 rib_70_elo1_b3706_1_cplx --> 452 EF-G.GDP + 452 EF-Tu.GDP + 30 ala1_tRNA + 24 ala2_tRNA + 28 arg1_tRNA + 1 argW_tRNA + 3 argX_tRNA + 13 asn1_tRNA + 33 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 14 gln1_tRNA + 4 gln2_tRNA + 36 glu1_tRNA + 28 gly1_tRNA + 7 glyT_tRNA + 6 glyU_tRNA + 904 h + 10 hisR_tRNA + 33 ile1_tRNA + 28 leu1_tRNA + 5 leu2_tRNA + 13 leuU_tRNA + 4 leuW_tRNA + 5 leuZ_tRNA + 13 lys1_tRNA + 6 met1_tRNA + 2265 mg2 + 16 phe1_tRNA + 904 pi + 9 pro1_tRNA + 5 pro2_tRNA + 2 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3706_1_cplx + 5 ser1_tRNA + 6 ser3_tRNA + 1 serT_tRNA + 10 serV_tRNA + 11 thr1_tRNA + 4 thr2_tRNA + 3 thr3_tRNA + 2 thrU_tRNA + 4 trpT_tRNA + 3 tyr1_tRNA + 19 val1_tRNA + 2 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343

tl_elo_b3706_26_rib1	Translation elongation 1 b3706 26 ribosome(s)	11778 EF-G.GTP + 780 EF-Tu.GTP.ala1-tRNA + 624 EF-Tu.GTP.ala2-tRNA + 728 EF-Tu.GTP.arg1-tRNA + 26 EF-Tu.GTP.argW-tRNA + 78 EF-Tu.GTP.argX-tRNA + 338 EF-Tu.GTP.asn1-tRNA + 858 EF-Tu.GTP.asp1-tRNA + 26 EF-Tu.GTP.cysT-tRNA + 364 EF-Tu.GTP.gln1-tRNA + 104 EF-Tu.GTP.gln2-tRNA + 936 EF-Tu.GTP.glu1-tRNA + 728 EF-Tu.GTP.gly1-tRNA + 182 EF-Tu.GTP.glyT-tRNA + 156 EF-Tu.GTP.glyU-tRNA + 260 EF-Tu.GTP.hisR-tRNA + 858 EF-Tu.GTP.ile1-tRNA + 728 EF-Tu.GTP.leu1-tRNA + 130 EF-Tu.GTP.leu2-tRNA + 338 EF-Tu.GTP.leuU-tRNA + 104 EF-Tu.GTP.leuW-tRNA + 130 EF-Tu.GTP.leuZ-tRNA + 364 EF-Tu.GTP.lys1-tRNA + 156 EF-Tu.GTP.met1-tRNA + 416 EF-Tu.GTP.phe1-tRNA + 234 EF-Tu.GTP.pro1-tRNA + 130 EF-Tu.GTP.pro2-tRNA + 52 EF-Tu.GTP.proL-tRNA + 26 EF-Tu.GTP.proM-tRNA + 130 EF-Tu.GTP.ser1-tRNA + 156 EF-Tu.GTP.ser3-tRNA + 26 EF-Tu.GTP.serT-tRNA + 260 EF-Tu.GTP.serV-tRNA + 286 EF-Tu.GTP.thr1-tRNA + 104 EF-Tu.GTP.thr2-tRNA + 78 EF-Tu.GTP.thr3-tRNA + 52 EF-Tu.GTP.thrU-tRNA + 104 EF-Tu.GTP.trpT-tRNA + 78 EF-Tu.GTP.tyr1-tRNA + 494 EF-Tu.GTP.val1-tRNA + 52 EF-Tu.GTP.val2-tRNA + 104 EF-Tu.GTP.val3-tRNA + 58890 mg2 + 1 rib_ini_b3706_26 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_elo_b3706_26_rib2	Translation elongation 2 b3706 26 ribosome(s)	11752 h2o + 1 rib_70_elo1_b3706_26_cplx --> 11752 EF-G.GDP + 11752 EF-Tu.GDP + 780 ala1_tRNA + 624 ala2_tRNA + 728 arg1_tRNA + 26 argW_tRNA + 78 argX_tRNA + 338 asn1_tRNA + 858 asp1_tRNA + 26 cysT_tRNA + 26 fmet_tRNA + 364 gln1_tRNA + 104 gln2_tRNA + 936 glu1_tRNA + 728 gly1_tRNA + 182 glyT_tRNA + 156 glyU_tRNA + 23504 h + 260 hisR_tRNA + 858 ile1_tRNA + 728 leu1_tRNA + 130 leu2_tRNA + 338 leuU_tRNA + 104 leuW_tRNA + 130 leuZ_tRNA + 338 lys1_tRNA + 156 met1_tRNA + 58890 mg2 + 416 phe1_tRNA + 23504 pi + 234 pro1_tRNA + 130 pro2_tRNA + 52 proL_tRNA + 26 proM_tRNA + 1 rib_70_elo2_b3706_26_cplx + 130 ser1_tRNA + 156 ser3_tRNA + 26 serT_tRNA + 260 serV_tRNA + 286 thr1_tRNA + 104 thr2_tRNA + 78 thr3_tRNA + 52 thrU_tRNA + 104 trpT_tRNA + 78 tyr1_tRNA + 494 val1_tRNA + 52 val2_tRNA + 104 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_elo_b3740_12_rib1	Translation elongation 1 b3740 12 ribosome(s)	2472 EF-G.GTP + 84 EF-Tu.GTP.ala1-tRNA + 48 EF-Tu.GTP.ala2-tRNA + 108 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argW-tRNA + 12 EF-Tu.GTP.argX-tRNA + 108 EF-Tu.GTP.asn1-tRNA + 120 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 72 EF-Tu.GTP.gln1-tRNA + 48 EF-Tu.GTP.gln2-tRNA + 192 EF-Tu.GTP.glu1-tRNA + 108 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.glyU-tRNA + 96 EF-Tu.GTP.hisR-tRNA + 144 EF-Tu.GTP.ile1-tRNA + 156 EF-Tu.GTP.leu1-tRNA + 36 EF-Tu.GTP.leu2-tRNA + 132 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 132 EF-Tu.GTP.lys1-tRNA + 48 EF-Tu.GTP.met1-tRNA + 84 EF-Tu.GTP.phe1-tRNA + 36 EF-Tu.GTP.pro1-tRNA + 48 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proL-tRNA + 72 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serT-tRNA + 60 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr2-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 60 EF-Tu.GTP.tyr1-tRNA + 168 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val2-tRNA + 24 EF-Tu.GTP.val3-tRNA + 12360 mg2 + 1 rib_ini_b3740_12 --> 1 rib_70_elo1_b3740_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_elo_b3740_12_rib2	Translation elongation 2 b3740 12 ribosome(s)	2460 h2o + 1 rib_70_elo1_b3740_12_cplx --> 2460 EF-G.GDP + 2460 EF-Tu.GDP + 84 ala1_tRNA + 48 ala2_tRNA + 108 arg1_tRNA + 12 argW_tRNA + 12 argX_tRNA + 108 asn1_tRNA + 120 asp1_tRNA + 12 cysT_tRNA + 12 fmet_tRNA + 72 gln1_tRNA + 48 gln2_tRNA + 192 glu1_tRNA + 108 gly1_tRNA + 24 glyT_tRNA + 12 glyU_tRNA + 4920 h + 96 hisR_tRNA + 132 ile1_tRNA + 156 leu1_tRNA + 36 leu2_tRNA + 132 leuU_tRNA + 12 leuZ_tRNA + 132 lys1_tRNA + 48 met1_tRNA + 12360 mg2 + 84 phe1_tRNA + 4920 pi + 36 pro1_tRNA + 48 pro2_tRNA + 12 proL_tRNA + 72 proM_tRNA + 1 rib_70_elo2_b3740_12_cplx + 12 ser1_tRNA + 24 ser2_tRNA + 24 ser3_tRNA + 24 serT_tRNA + 60 serV_tRNA + 24 thr1_tRNA + 24 thr2_tRNA + 24 trpT_tRNA + 60 tyr1_tRNA + 168 val1_tRNA + 36 val2_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_elo_b3740_1_rib1	Translation elongation 1 b3740 1 ribosome(s)	206 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 9 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.argX-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 14 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 1030 mg2 + 1 rib_ini_b3740_1 --> 1 rib_70_elo1_b3740_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_elo_b3740_1_rib2	Translation elongation 2 b3740 1 ribosome(s)	205 h2o + 1 rib_70_elo1_b3740_1_cplx --> 205 EF-G.GDP + 205 EF-Tu.GDP + 7 ala1_tRNA + 4 ala2_tRNA + 9 arg1_tRNA + 1 argW_tRNA + 1 argX_tRNA + 9 asn1_tRNA + 10 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 4 gln2_tRNA + 16 glu1_tRNA + 9 gly1_tRNA + 2 glyT_tRNA + 1 glyU_tRNA + 410 h + 8 hisR_tRNA + 11 ile1_tRNA + 13 leu1_tRNA + 3 leu2_tRNA + 11 leuU_tRNA + 1 leuZ_tRNA + 11 lys1_tRNA + 4 met1_tRNA + 1030 mg2 + 7 phe1_tRNA + 410 pi + 3 pro1_tRNA + 4 pro2_tRNA + 1 proL_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b3740_1_cplx + 1 ser1_tRNA + 2 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 5 serV_tRNA + 2 thr1_tRNA + 2 thr2_tRNA + 2 trpT_tRNA + 5 tyr1_tRNA + 14 val1_tRNA + 3 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867

tl_elo_b3740_6_rib1	Translation elongation 1 b3740 6 ribosome(s)	1236 EF-G.GTP + 42 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 54 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argW-tRNA + 6 EF-Tu.GTP.argX-tRNA + 54 EF-Tu.GTP.asn1-tRNA + 60 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 36 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 96 EF-Tu.GTP.glu1-tRNA + 54 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 48 EF-Tu.GTP.hisR-tRNA + 72 EF-Tu.GTP.ile1-tRNA + 78 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.leu2-tRNA + 66 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 66 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 42 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 36 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 12 EF-Tu.GTP.serT-tRNA + 30 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 84 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 6180 mg2 + 1 rib_ini_b3740_6 --> 1 rib_70_elo1_b3740_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_elo_b3740_6_rib2	Translation elongation 2 b3740 6 ribosome(s)	1230 h2o + 1 rib_70_elo1_b3740_6_cplx --> 1230 EF-G.GDP + 1230 EF-Tu.GDP + 42 ala1_tRNA + 24 ala2_tRNA + 54 arg1_tRNA + 6 argW_tRNA + 6 argX_tRNA + 54 asn1_tRNA + 60 asp1_tRNA + 6 cysT_tRNA + 6 fmet_tRNA + 36 gln1_tRNA + 24 gln2_tRNA + 96 glu1_tRNA + 54 gly1_tRNA + 12 glyT_tRNA + 6 glyU_tRNA + 2460 h + 48 hisR_tRNA + 66 ile1_tRNA + 78 leu1_tRNA + 18 leu2_tRNA + 66 leuU_tRNA + 6 leuZ_tRNA + 66 lys1_tRNA + 24 met1_tRNA + 6180 mg2 + 42 phe1_tRNA + 2460 pi + 18 pro1_tRNA + 24 pro2_tRNA + 6 proL_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b3740_6_cplx + 6 ser1_tRNA + 12 ser2_tRNA + 12 ser3_tRNA + 12 serT_tRNA + 30 serV_tRNA + 12 thr1_tRNA + 12 thr2_tRNA + 12 trpT_tRNA + 30 tyr1_tRNA + 84 val1_tRNA + 18 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_elo_b3741_18_rib1	Translation elongation 1 b3741 18 ribosome(s)	11304 EF-G.GTP + 864 EF-Tu.GTP.ala1-tRNA + 270 EF-Tu.GTP.ala2-tRNA + 810 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argU-tRNA + 18 EF-Tu.GTP.argW-tRNA + 450 EF-Tu.GTP.asn1-tRNA + 612 EF-Tu.GTP.asp1-tRNA + 72 EF-Tu.GTP.cysT-tRNA + 486 EF-Tu.GTP.gln1-tRNA + 144 EF-Tu.GTP.gln2-tRNA + 756 EF-Tu.GTP.glu1-tRNA + 666 EF-Tu.GTP.gly1-tRNA + 90 EF-Tu.GTP.glyT-tRNA + 144 EF-Tu.GTP.glyU-tRNA + 198 EF-Tu.GTP.hisR-tRNA + 666 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.ile2-tRNA + 648 EF-Tu.GTP.leu1-tRNA + 90 EF-Tu.GTP.leu2-tRNA + 270 EF-Tu.GTP.leuU-tRNA + 72 EF-Tu.GTP.leuW-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 432 EF-Tu.GTP.lys1-tRNA + 306 EF-Tu.GTP.met1-tRNA + 360 EF-Tu.GTP.phe1-tRNA + 414 EF-Tu.GTP.pro1-tRNA + 72 EF-Tu.GTP.pro2-tRNA + 36 EF-Tu.GTP.proL-tRNA + 90 EF-Tu.GTP.proM-tRNA + 108 EF-Tu.GTP.ser1-tRNA + 144 EF-Tu.GTP.ser2-tRNA + 108 EF-Tu.GTP.ser3-tRNA + 180 EF-Tu.GTP.serV-tRNA + 288 EF-Tu.GTP.thr1-tRNA + 162 EF-Tu.GTP.thr2-tRNA + 108 EF-Tu.GTP.thr3-tRNA + 72 EF-Tu.GTP.thrU-tRNA + 72 EF-Tu.GTP.trpT-tRNA + 306 EF-Tu.GTP.tyr1-tRNA + 360 EF-Tu.GTP.val1-tRNA + 144 EF-Tu.GTP.val2-tRNA + 144 EF-Tu.GTP.val3-tRNA + 56520 mg2 + 1 rib	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_elo_b3741_18_rib2	Translation elongation 2 b3741 18 ribosome(s)	11286 h2o + 1 rib_70_elo1_b3741_18_cplx --> 11286 EF-G.GDP + 11286 EF-Tu.GDP + 846 ala1_tRNA + 270 ala2_tRNA + 810 arg1_tRNA + 18 argU_tRNA + 18 argW_tRNA + 450 asn1_tRNA + 612 asp1_tRNA + 72 cysT_tRNA + 18 fmet_tRNA + 486 gln1_tRNA + 144 gln2_tRNA + 756 glu1_tRNA + 666 gly1_tRNA + 90 glyT_tRNA + 144 glyU_tRNA + 22572 h + 198 hisR_tRNA + 666 ile1_tRNA + 18 ile2_tRNA + 648 leu1_tRNA + 90 leu2_tRNA + 270 leuU_tRNA + 72 leuW_tRNA + 36 leuZ_tRNA + 432 lys1_tRNA + 306 met1_tRNA + 56520 mg2 + 360 phe1_tRNA + 22572 pi + 414 pro1_tRNA + 72 pro2_tRNA + 36 proL_tRNA + 90 proM_tRNA + 1 rib_70_elo2_b3741_18_cplx + 108 ser1_tRNA + 144 ser2_tRNA + 108 ser3_tRNA + 180 serV_tRNA + 288 thr1_tRNA + 162 thr2_tRNA + 108 thr3_tRNA + 72 thrU_tRNA + 72 trpT_tRNA + 306 tyr1_tRNA + 360 val1_tRNA + 144 val2_tRNA + 144 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_elo_b3741_1_rib1	Translation elongation 1 b3741 1 ribosome(s)	628 EF-G.GTP + 48 EF-Tu.GTP.ala1-tRNA + 15 EF-Tu.GTP.ala2-tRNA + 45 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argW-tRNA + 25 EF-Tu.GTP.asn1-tRNA + 34 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 27 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 42 EF-Tu.GTP.glu1-tRNA + 37 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 37 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 36 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 15 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuW-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 24 EF-Tu.GTP.lys1-tRNA + 17 EF-Tu.GTP.met1-tRNA + 20 EF-Tu.GTP.phe1-tRNA + 23 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serV-tRNA + 16 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 17 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 3140 mg2 + 1 rib_ini_b3741_1 --> 1 rib_70_elo1_b3741_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_elo_b3741_1_rib2	Translation elongation 2 b3741 1 ribosome(s)	627 h2o + 1 rib_70_elo1_b3741_1_cplx --> 627 EF-G.GDP + 627 EF-Tu.GDP + 47 ala1_tRNA + 15 ala2_tRNA + 45 arg1_tRNA + 1 argU_tRNA + 1 argW_tRNA + 25 asn1_tRNA + 34 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 27 gln1_tRNA + 8 gln2_tRNA + 42 glu1_tRNA + 37 gly1_tRNA + 5 glyT_tRNA + 8 glyU_tRNA + 1254 h + 11 hisR_tRNA + 37 ile1_tRNA + 1 ile2_tRNA + 36 leu1_tRNA + 5 leu2_tRNA + 15 leuU_tRNA + 4 leuW_tRNA + 2 leuZ_tRNA + 24 lys1_tRNA + 17 met1_tRNA + 3140 mg2 + 20 phe1_tRNA + 1254 pi + 23 pro1_tRNA + 4 pro2_tRNA + 2 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b3741_1_cplx + 6 ser1_tRNA + 8 ser2_tRNA + 6 ser3_tRNA + 10 serV_tRNA + 16 thr1_tRNA + 9 thr2_tRNA + 6 thr3_tRNA + 4 thrU_tRNA + 4 trpT_tRNA + 17 tyr1_tRNA + 20 val1_tRNA + 8 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987

tl_elo_b3741_37_rib1	Translation elongation 1 b3741 37 ribosome(s)	23236 EF-G.GTP + 1776 EF-Tu.GTP.ala1-tRNA + 555 EF-Tu.GTP.ala2-tRNA + 1665 EF-Tu.GTP.arg1-tRNA + 37 EF-Tu.GTP.argU-tRNA + 37 EF-Tu.GTP.argW-tRNA + 925 EF-Tu.GTP.asn1-tRNA + 1258 EF-Tu.GTP.asp1-tRNA + 148 EF-Tu.GTP.cysT-tRNA + 999 EF-Tu.GTP.gln1-tRNA + 296 EF-Tu.GTP.gln2-tRNA + 1554 EF-Tu.GTP.glu1-tRNA + 1369 EF-Tu.GTP.gly1-tRNA + 185 EF-Tu.GTP.glyT-tRNA + 296 EF-Tu.GTP.glyU-tRNA + 407 EF-Tu.GTP.hisR-tRNA + 1369 EF-Tu.GTP.ile1-tRNA + 37 EF-Tu.GTP.ile2-tRNA + 1332 EF-Tu.GTP.leu1-tRNA + 185 EF-Tu.GTP.leu2-tRNA + 555 EF-Tu.GTP.leuU-tRNA + 148 EF-Tu.GTP.leuW-tRNA + 74 EF-Tu.GTP.leuZ-tRNA + 888 EF-Tu.GTP.lys1-tRNA + 629 EF-Tu.GTP.met1-tRNA + 740 EF-Tu.GTP.phe1-tRNA + 851 EF-Tu.GTP.pro1-tRNA + 148 EF-Tu.GTP.pro2-tRNA + 74 EF-Tu.GTP.proL-tRNA + 185 EF-Tu.GTP.proM-tRNA + 222 EF-Tu.GTP.ser1-tRNA + 296 EF-Tu.GTP.ser2-tRNA + 222 EF-Tu.GTP.ser3-tRNA + 370 EF-Tu.GTP.serV-tRNA + 592 EF-Tu.GTP.thr1-tRNA + 333 EF-Tu.GTP.thr2-tRNA + 222 EF-Tu.GTP.thr3-tRNA + 148 EF-Tu.GTP.thrU-tRNA + 148 EF-Tu.GTP.trpT-tRNA + 629 EF-Tu.GTP.tyr1-tRNA + 740 EF-Tu.GTP.val1-tRNA + 296 EF-Tu.GTP.val2-tRNA + 296 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_elo_b3741_37_rib2	Translation elongation 2 b3741 37 ribosome(s)	23199 h2o + 1 rib_70_elo1_b3741_37_cplx --> 23199 EF-G.GDP + 23199 EF-Tu.GDP + 1739 ala1_tRNA + 555 ala2_tRNA + 1665 arg1_tRNA + 37 argU_tRNA + 37 argW_tRNA + 925 asn1_tRNA + 1258 asp1_tRNA + 148 cysT_tRNA + 37 fmet_tRNA + 999 gln1_tRNA + 296 gln2_tRNA + 1554 glu1_tRNA + 1369 gly1_tRNA + 185 glyT_tRNA + 296 glyU_tRNA + 46398 h + 407 hisR_tRNA + 1369 ile1_tRNA + 37 ile2_tRNA + 1332 leu1_tRNA + 185 leu2_tRNA + 555 leuU_tRNA + 148 leuW_tRNA + 74 leuZ_tRNA + 888 lys1_tRNA + 629 met1_tRNA + 116180 mg2 + 740 phe1_tRNA + 46398 pi + 851 pro1_tRNA + 148 pro2_tRNA + 74 proL_tRNA + 185 proM_tRNA + 1 rib_70_elo2_b3741_37_cplx + 222 ser1_tRNA + 296 ser2_tRNA + 222 ser3_tRNA + 370 serV_tRNA + 592 thr1_tRNA + 333 thr2_tRNA + 222 thr3_tRNA + 148 thrU_tRNA + 148 trpT_tRNA + 629 tyr1_tRNA + 740 val1_tRNA + 296 val2_tRNA + 296 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_elo_b3780_12_rib1	Translation elongation 1 b3780 12 ribosome(s)	5040 EF-G.GTP + 300 EF-Tu.GTP.ala1-tRNA + 192 EF-Tu.GTP.ala2-tRNA + 372 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.argU-tRNA + 12 EF-Tu.GTP.argX-tRNA + 180 EF-Tu.GTP.asn1-tRNA + 300 EF-Tu.GTP.asp1-tRNA + 48 EF-Tu.GTP.cysT-tRNA + 144 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 336 EF-Tu.GTP.glu1-tRNA + 324 EF-Tu.GTP.gly1-tRNA + 48 EF-Tu.GTP.glyU-tRNA + 192 EF-Tu.GTP.hisR-tRNA + 300 EF-Tu.GTP.ile1-tRNA + 300 EF-Tu.GTP.leu1-tRNA + 72 EF-Tu.GTP.leu2-tRNA + 144 EF-Tu.GTP.leuU-tRNA + 60 EF-Tu.GTP.leuZ-tRNA + 240 EF-Tu.GTP.lys1-tRNA + 96 EF-Tu.GTP.met1-tRNA + 156 EF-Tu.GTP.phe1-tRNA + 168 EF-Tu.GTP.pro1-tRNA + 48 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proL-tRNA + 24 EF-Tu.GTP.proM-tRNA + 24 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.ser3-tRNA + 36 EF-Tu.GTP.serT-tRNA + 60 EF-Tu.GTP.serV-tRNA + 96 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr2-tRNA + 144 EF-Tu.GTP.thr3-tRNA + 60 EF-Tu.GTP.thrU-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 156 EF-Tu.GTP.tyr1-tRNA + 144 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val2-tRNA + 60 EF-Tu.GTP.val3-tRNA + 25200 mg2 + 1 rib_ini_b3780_12 --> 1 rib_70_elo1_b3780_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	3.98E+01	39.7843	0	4.10E+00	4.096
tl_elo_b3780_12_rib2	Translation elongation 2 b3780 12 ribosome(s)	5028 h2o + 1 rib_70_elo1_b3780_12_cplx --> 5028 EF-G.GDP + 5028 EF-Tu.GDP + 300 ala1_tRNA + 192 ala2_tRNA + 372 arg1_tRNA + 12 argU_tRNA + 12 argX_tRNA + 180 asn1_tRNA + 300 asp1_tRNA + 48 cysT_tRNA + 12 fmet_tRNA + 144 gln1_tRNA + 24 gln2_tRNA + 336 glu1_tRNA + 312 gly1_tRNA + 48 glyU_tRNA + 10056 h + 192 hisR_tRNA + 300 ile1_tRNA + 300 leu1_tRNA + 72 leu2_tRNA + 144 leuU_tRNA + 60 leuZ_tRNA + 240 lys1_tRNA + 96 met1_tRNA + 25200 mg2 + 156 phe1_tRNA + 10056 pi + 168 pro1_tRNA + 48 pro2_tRNA + 24 proL_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b3780_12_cplx + 24 ser1_tRNA + 36 ser2_tRNA + 12 ser3_tRNA + 36 serT_tRNA + 60 serV_tRNA + 96 thr1_tRNA + 24 thr2_tRNA + 144 thr3_tRNA + 60 thrU_tRNA + 36 trpT_tRNA + 156 tyr1_tRNA + 144 val1_tRNA + 36 val2_tRNA + 60 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	3.98E+01	39.7843	0	4.10E+00	4.096
tl_elo_b3780_1_rib1	Translation elongation 1 b3780 1 ribosome(s)	420 EF-G.GTP + 25 EF-Tu.GTP.ala1-tRNA + 16 EF-Tu.GTP.ala2-tRNA + 31 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 1 EF-Tu.GTP.argX-tRNA + 15 EF-Tu.GTP.asn1-tRNA + 25 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 28 EF-Tu.GTP.glu1-tRNA + 27 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 25 EF-Tu.GTP.ile1-tRNA + 25 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 13 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 13 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 2100 mg2 + 1 rib_ini_b3780_1 --> 1 rib_70_elo1_b3780_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.69E+01	9.69E+01	0	1.62E+02	162.3678	0	4.10E+00	4.096
tl_elo_b3780_1_rib2	Translation elongation 2 b3780 1 ribosome(s)	419 h2o + 1 rib_70_elo1_b3780_1_cplx --> 419 EF-G.GDP + 419 EF-Tu.GDP + 25 ala1_tRNA + 16 ala2_tRNA + 31 arg1_tRNA + 1 argU_tRNA + 1 argX_tRNA + 15 asn1_tRNA + 25 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 12 gln1_tRNA + 2 gln2_tRNA + 28 glu1_tRNA + 26 gly1_tRNA + 4 glyU_tRNA + 838 h + 16 hisR_tRNA + 25 ile1_tRNA + 25 leu1_tRNA + 6 leu2_tRNA + 12 leuU_tRNA + 5 leuZ_tRNA + 20 lys1_tRNA + 8 met1_tRNA + 2100 mg2 + 13 phe1_tRNA + 838 pi + 14 pro1_tRNA + 4 pro2_tRNA + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3780_1_cplx + 2 ser1_tRNA + 3 ser2_tRNA + 1 ser3_tRNA + 3 serT_tRNA + 5 serV_tRNA + 8 thr1_tRNA + 2 thr2_tRNA + 12 thr3_tRNA + 5 thrU_tRNA + 3 trpT_tRNA + 13 tyr1_tRNA + 12 val1_tRNA + 3 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.69E+01	9.69E+01	0	1.62E+02	162.3678	0	4.10E+00	4.096

tl_elo_b3780_24_rib1	Translation elongation 1 b3780 24 ribosome(s)	10080 EF-G.GTP + 600 EF-Tu.GTP.ala1-tRNA + 384 EF-Tu.GTP.ala2-tRNA + 744 EF-Tu.GTP.arg1-tRNA + 24 EF-Tu.GTP.argU-tRNA + 24 EF-Tu.GTP.argX-tRNA + 360 EF-Tu.GTP.asn1-tRNA + 600 EF-Tu.GTP.asp1-tRNA + 96 EF-Tu.GTP.cysT-tRNA + 288 EF-Tu.GTP.gln1-tRNA + 48 EF-Tu.GTP.gln2-tRNA + 672 EF-Tu.GTP.glu1-tRNA + 648 EF-Tu.GTP.gly1-tRNA + 96 EF-Tu.GTP.glyU-tRNA + 384 EF-Tu.GTP.hisR-tRNA + 600 EF-Tu.GTP.ile1-tRNA + 600 EF-Tu.GTP.leu1-tRNA + 144 EF-Tu.GTP.leu2-tRNA + 288 EF-Tu.GTP.leuU-tRNA + 120 EF-Tu.GTP.leuZ-tRNA + 480 EF-Tu.GTP.lys1-tRNA + 192 EF-Tu.GTP.met1-tRNA + 312 EF-Tu.GTP.phe1-tRNA + 336 EF-Tu.GTP.pro1-tRNA + 96 EF-Tu.GTP.pro2-tRNA + 48 EF-Tu.GTP.proL-tRNA + 48 EF-Tu.GTP.proM-tRNA + 48 EF-Tu.GTP.ser1-tRNA + 72 EF-Tu.GTP.ser2-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 72 EF-Tu.GTP.serT-tRNA + 120 EF-Tu.GTP.serV-tRNA + 192 EF-Tu.GTP.thr1-tRNA + 48 EF-Tu.GTP.thr2-tRNA + 288 EF-Tu.GTP.thr3-tRNA + 120 EF-Tu.GTP.thrU-tRNA + 72 EF-Tu.GTP.trpT-tRNA + 312 EF-Tu.GTP.tyr1-tRNA + 288 EF-Tu.GTP.val1-tRNA + 72 EF-Tu.GTP.val2-tRNA + 120 EF-Tu.GTP.val3-tRNA + 50400 mg2 + 1 rib_ini_b3780_24 --> 1 rib_70_elo1_b3780_24_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.83E+01	1.83E+01	0	1.99E+01	19.89215	0	2.40E+00	2.401208
tl_elo_b3780_24_rib2	Translation elongation 2 b3780 24 ribosome(s)	10056 h2o + 1 rib_70_elo1_b3780_24_cplx --> 10056 EF-G.GDP + 10056 EF-Tu.GDP + 600 ala1_tRNA + 384 ala2_tRNA + 744 arg1_tRNA + 24 argU_tRNA + 24 argX_tRNA + 360 asn1_tRNA + 600 asp1_tRNA + 96 cysT_tRNA + 24 fmet_tRNA + 288 gln1_tRNA + 48 gln2_tRNA + 672 glu1_tRNA + 624 gly1_tRNA + 96 glyU_tRNA + 20112 h + 384 hisR_tRNA + 600 ile1_tRNA + 600 leu1_tRNA + 144 leu2_tRNA + 288 leuU_tRNA + 120 leuZ_tRNA + 480 lys1_tRNA + 192 met1_tRNA + 50400 mg2 + 312 phe1_tRNA + 20112 pi + 336 pro1_tRNA + 96 pro2_tRNA + 48 proL_tRNA + 48 proM_tRNA + 1 rib_70_elo2_b3780_24_cplx + 48 ser1_tRNA + 72 ser2_tRNA + 24 ser3_tRNA + 72 serT_tRNA + 120 serV_tRNA + 192 thr1_tRNA + 48 thr2_tRNA + 288 thr3_tRNA + 120 thrU_tRNA + 72 trpT_tRNA + 312 tyr1_tRNA + 288 val1_tRNA + 72 val2_tRNA + 120 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.83E+01	1.83E+01	0	1.99E+01	19.89215	0	2.40E+00	2.401208
tl_elo_b3782_1_rib1	Translation elongation 1 b3782 1 ribosome(s)	32 EF-G.GTP + 1 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.asn1-tRNA + 1 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.glu1-tRNA + 1 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 1 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 1 EF-Tu.GTP.val1-tRNA + 160 mg2 + 1 rib_ini_b3782_1 --> 1 rib_70_elo1_b3782_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+02	1.72E+02	0	2.38E+02	238.0054	0	8.50E+01	85.007
tl_elo_b3782_1_rib2	Translation elongation 2 b3782 1 ribosome(s)	31 h2o + 1 rib_70_elo1_b3782_1_cplx --> 31 EF-G.GDP + 31 EF-Tu.GDP + 1 ala1_tRNA + 3 arg1_tRNA + 1 argW_tRNA + 1 asn1_tRNA + 1 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 1 glu1_tRNA + 1 gly1_tRNA + 62 h + 1 ile1_tRNA + 1 leuU_tRNA + 1 lys1_tRNA + 1 met1_tRNA + 160 mg2 + 1 phe1_tRNA + 62 pi + 1 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b3782_1_cplx + 4 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 3 serV_tRNA + 1 thr1_tRNA + 1 tyr1_tRNA + 1 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+02	1.72E+02	0	2.38E+02	238.0054	0	8.50E+01	85.007
tl_elo_b3783_12_rib1	Translation elongation 1 b3783 12 ribosome(s)	5016 EF-G.GTP + 288 EF-Tu.GTP.ala1-tRNA + 84 EF-Tu.GTP.ala2-tRNA + 360 EF-Tu.GTP.arg1-tRNA + 252 EF-Tu.GTP.asn1-tRNA + 276 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 120 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 432 EF-Tu.GTP.glu1-tRNA + 324 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.glyU-tRNA + 96 EF-Tu.GTP.hisR-tRNA + 360 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.ile2-tRNA + 336 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.leu2-tRNA + 132 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 336 EF-Tu.GTP.lys1-tRNA + 180 EF-Tu.GTP.met1-tRNA + 192 EF-Tu.GTP.phe1-tRNA + 144 EF-Tu.GTP.pro1-tRNA + 48 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proL-tRNA + 48 EF-Tu.GTP.ser1-tRNA + 108 EF-Tu.GTP.ser2-tRNA + 36 EF-Tu.GTP.serT-tRNA + 60 EF-Tu.GTP.serV-tRNA + 156 EF-Tu.GTP.thr1-tRNA + 72 EF-Tu.GTP.thr2-tRNA + 36 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.thrU-tRNA + 12 EF-Tu.GTP.trpT-tRNA + 84 EF-Tu.GTP.tyr1-tRNA + 120 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 168 EF-Tu.GTP.val3-tRNA + 25080 mg2 + 1 rib_ini_b3783_12 --> 1 rib_70_elo1_b3783_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_elo_b3783_12_rib2	Translation elongation 2 b3783 12 ribosome(s)	5004 h2o + 1 rib_70_elo1_b3783_12_cplx --> 5004 EF-G.GDP + 5004 EF-Tu.GDP + 288 ala1_tRNA + 84 ala2_tRNA + 360 arg1_tRNA + 252 asn1_tRNA + 276 asp1_tRNA + 12 cysT_tRNA + 12 fmet_tRNA + 120 gln1_tRNA + 12 gln2_tRNA + 432 glu1_tRNA + 324 gly1_tRNA + 12 glyT_tRNA + 12 glyU_tRNA + 10008 h + 96 hisR_tRNA + 360 ile1_tRNA + 12 ile2_tRNA + 336 leu1_tRNA + 24 leu2_tRNA + 132 leuU_tRNA + 36 leuZ_tRNA + 336 lys1_tRNA + 180 met1_tRNA + 25080 mg2 + 192 phe1_tRNA + 10008 pi + 144 pro1_tRNA + 48 pro2_tRNA + 12 proL_tRNA + 1 rib_70_elo2_b3783_12_cplx + 48 ser1_tRNA + 108 ser2_tRNA + 24 serT_tRNA + 60 serV_tRNA + 156 thr1_tRNA + 72 thr2_tRNA + 36 thr3_tRNA + 12 thrU_tRNA + 12 trpT_tRNA + 84 tyr1_tRNA + 120 val1_tRNA + 12 val2_tRNA + 168 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107

tl_elo_b3783_1_rib1	Translation elongation 1 b3783 1 ribosome(s)	418 EF-G.GTP + 24 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 30 EF-Tu.GTP.arg1-tRNA + 21 EF-Tu.GTP.asn1-tRNA + 23 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 36 EF-Tu.GTP.glu1-tRNA + 27 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 30 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 28 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 28 EF-Tu.GTP.lys1-tRNA + 15 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 13 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 14 EF-Tu.GTP.val3-tRNA + 2090 mg2 + 1 rib_ini_b3783_1 --> 1 rib_70_elo1_b3783_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_elo_b3783_1_rib2	Translation elongation 2 b3783 1 ribosome(s)	417 h2o + 1 rib_70_elo1_b3783_1_cplx --> 417 EF-G.GDP + 417 EF-Tu.GDP + 24 ala1_tRNA + 7 ala2_tRNA + 30 arg1_tRNA + 21 asn1_tRNA + 23 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 10 gln1_tRNA + 1 gln2_tRNA + 36 glu1_tRNA + 27 gly1_tRNA + 1 glyT_tRNA + 1 glyU_tRNA + 834 h + 8 hisR_tRNA + 30 ile1_tRNA + 1 ile2_tRNA + 28 leu1_tRNA + 2 leu2_tRNA + 11 leuU_tRNA + 3 leuZ_tRNA + 28 lys1_tRNA + 15 met1_tRNA + 2090 mg2 + 16 phe1_tRNA + 834 pi + 12 pro1_tRNA + 4 pro2_tRNA + 1 proL_tRNA + 1 rib_70_elo2_b3783_1_cplx + 4 ser1_tRNA + 9 ser2_tRNA + 2 serT_tRNA + 5 serV_tRNA + 13 thr1_tRNA + 6 thr2_tRNA + 3 thr3_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 7 tyr1_tRNA + 10 val1_tRNA + 1 val2_tRNA + 14 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_elo_b3783_24_rib1	Translation elongation 1 b3783 24 ribosome(s)	10032 EF-G.GTP + 576 EF-Tu.GTP.ala1-tRNA + 168 EF-Tu.GTP.ala2-tRNA + 720 EF-Tu.GTP.arg1-tRNA + 504 EF-Tu.GTP.asn1-tRNA + 552 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.cysT-tRNA + 240 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 864 EF-Tu.GTP.glu1-tRNA + 648 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.glyT-tRNA + 24 EF-Tu.GTP.glyU-tRNA + 192 EF-Tu.GTP.hisR-tRNA + 720 EF-Tu.GTP.ile1-tRNA + 24 EF-Tu.GTP.ile2-tRNA + 672 EF-Tu.GTP.leu1-tRNA + 48 EF-Tu.GTP.leu2-tRNA + 264 EF-Tu.GTP.leuU-tRNA + 72 EF-Tu.GTP.leuZ-tRNA + 672 EF-Tu.GTP.lys1-tRNA + 360 EF-Tu.GTP.met1-tRNA + 384 EF-Tu.GTP.phe1-tRNA + 288 EF-Tu.GTP.pro1-tRNA + 96 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proL-tRNA + 96 EF-Tu.GTP.ser1-tRNA + 216 EF-Tu.GTP.ser2-tRNA + 72 EF-Tu.GTP.serT-tRNA + 120 EF-Tu.GTP.serV-tRNA + 312 EF-Tu.GTP.thr1-tRNA + 144 EF-Tu.GTP.thr2-tRNA + 72 EF-Tu.GTP.thr3-tRNA + 24 EF-Tu.GTP.thrU-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 168 EF-Tu.GTP.tyr1-tRNA + 240 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val2-tRNA + 336 EF-Tu.GTP.val3-tRNA + 50160 mg2 + 1 rib_ini_b3783_24 --> 1 rib_70_elo1_b3783_24_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_elo_b3783_24_rib2	Translation elongation 2 b3783 24 ribosome(s)	10008 h2o + 1 rib_70_elo1_b3783_24_cplx --> 10008 EF-G.GDP + 10008 EF-Tu.GDP + 576 ala1_tRNA + 168 ala2_tRNA + 720 arg1_tRNA + 504 asn1_tRNA + 552 asp1_tRNA + 24 cysT_tRNA + 24 fmet_tRNA + 240 gln1_tRNA + 24 gln2_tRNA + 864 glu1_tRNA + 648 gly1_tRNA + 24 glyT_tRNA + 24 glyU_tRNA + 20016 h + 192 hisR_tRNA + 720 ile1_tRNA + 24 ile2_tRNA + 672 leu1_tRNA + 48 leu2_tRNA + 264 leuU_tRNA + 72 leuZ_tRNA + 672 lys1_tRNA + 360 met1_tRNA + 50160 mg2 + 384 phe1_tRNA + 20016 pi + 288 pro1_tRNA + 96 pro2_tRNA + 24 proL_tRNA + 1 rib_70_elo2_b3783_24_cplx + 96 ser1_tRNA + 216 ser2_tRNA + 48 serT_tRNA + 120 serV_tRNA + 312 thr1_tRNA + 144 thr2_tRNA + 72 thr3_tRNA + 24 thrU_tRNA + 24 trpT_tRNA + 168 tyr1_tRNA + 240 val1_tRNA + 24 val2_tRNA + 336 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_elo_b3885_11_rib1	Translation elongation 1 b3885 11 ribosome(s)	2178 EF-G.GTP + 143 EF-Tu.GTP.ala1-tRNA + 44 EF-Tu.GTP.ala2-tRNA + 110 EF-Tu.GTP.arg1-tRNA + 77 EF-Tu.GTP.asn1-tRNA + 154 EF-Tu.GTP.asp1-tRNA + 22 EF-Tu.GTP.cysT-tRNA + 77 EF-Tu.GTP.gln1-tRNA + 11 EF-Tu.GTP.gln2-tRNA + 165 EF-Tu.GTP.glu1-tRNA + 44 EF-Tu.GTP.gly1-tRNA + 22 EF-Tu.GTP.glyT-tRNA + 44 EF-Tu.GTP.glyU-tRNA + 110 EF-Tu.GTP.hisR-tRNA + 143 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.ile2-tRNA + 110 EF-Tu.GTP.leu1-tRNA + 11 EF-Tu.GTP.leu2-tRNA + 33 EF-Tu.GTP.leuU-tRNA + 22 EF-Tu.GTP.leuW-tRNA + 33 EF-Tu.GTP.leuZ-tRNA + 77 EF-Tu.GTP.lys1-tRNA + 44 EF-Tu.GTP.met1-tRNA + 132 EF-Tu.GTP.phe1-tRNA + 66 EF-Tu.GTP.pro1-tRNA + 11 EF-Tu.GTP.pro2-tRNA + 11 EF-Tu.GTP.proL-tRNA + 11 EF-Tu.GTP.ser1-tRNA + 11 EF-Tu.GTP.ser2-tRNA + 22 EF-Tu.GTP.ser3-tRNA + 11 EF-Tu.GTP.serT-tRNA + 66 EF-Tu.GTP.serV-tRNA + 66 EF-Tu.GTP.thr1-tRNA + 22 EF-Tu.GTP.thr3-tRNA + 33 EF-Tu.GTP.trpT-tRNA + 66 EF-Tu.GTP.tyr1-tRNA + 99 EF-Tu.GTP.val1-tRNA + 22 EF-Tu.GTP.val2-tRNA + 22 EF-Tu.GTP.val3-tRNA + 10890 mg2 + 1 rib_ini_b3885_11 --> 1 rib_70_elo1_b3885_11_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_elo_b3885_11_rib2	Translation elongation 2 b3885 11 ribosome(s)	2167 h2o + 1 rib_70_elo1_b3885_11_cplx --> 2167 EF-G.GDP + 2167 EF-Tu.GDP + 143 ala1_tRNA + 44 ala2_tRNA + 110 arg1_tRNA + 77 asn1_tRNA + 154 asp1_tRNA + 11 cysT_tRNA + 11 fmet_tRNA + 77 gln1_tRNA + 11 gln2_tRNA + 165 glu1_tRNA + 44 gly1_tRNA + 22 glyT_tRNA + 44 glyU_tRNA + 4334 h + 110 hisR_tRNA + 143 ile1_tRNA + 11 ile2_tRNA + 110 leu1_tRNA + 11 leu2_tRNA + 33 leuU_tRNA + 22 leuW_tRNA + 33 leuZ_tRNA + 77 lys1_tRNA + 44 met1_tRNA + 10890 mg2 + 132 phe1_tRNA + 4334 pi + 66 pro1_tRNA + 11 pro2_tRNA + 11 proL_tRNA + 1 rib_70_elo2_b3885_11_cplx + 11 ser1_tRNA + 11 ser2_tRNA + 22 ser3_tRNA + 11 serT_tRNA + 66 serV_tRNA + 66 thr1_tRNA + 22 thr3_tRNA + 33 trpT_tRNA + 66 tyr1_tRNA + 99 val1_tRNA + 22 val2_tRNA + 22 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474

tl_elo_b3885_1_rib1	Translation elongation 1 b3885 1 ribosome(s)	198 EF-G.GTP + 13 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 15 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 10 EF-Tu.GTP.hisR-tRNA + 13 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 7 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 9 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 990 mg2 + 1 rib_ini_b3885_1 --> 1 rib_70_elo1_b3885_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_elo_b3885_1_rib2	Translation elongation 2 b3885 1 ribosome(s)	197 h2o + 1 rib_70_elo1_b3885_1_cplx --> 197 EF-G.GDP + 197 EF-Tu.GDP + 13 ala1_tRNA + 4 ala2_tRNA + 10 arg1_tRNA + 7 asn1_tRNA + 14 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 1 gln2_tRNA + 15 glu1_tRNA + 4 gly1_tRNA + 2 glyT_tRNA + 4 glyU_tRNA + 394 h + 10 hisR_tRNA + 13 ile1_tRNA + 1 ile2_tRNA + 10 leu1_tRNA + 1 leu2_tRNA + 3 leuU_tRNA + 2 leuW_tRNA + 3 leuZ_tRNA + 7 lys1_tRNA + 4 met1_tRNA + 990 mg2 + 12 phe1_tRNA + 394 pi + 6 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 1 rib_70_elo2_b3885_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 2 ser3_tRNA + 1 serT_tRNA + 6 serV_tRNA + 6 thr1_tRNA + 2 thr3_tRNA + 3 trpT_tRNA + 6 tyr1_tRNA + 9 val1_tRNA + 2 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_elo_b3885_5_rib1	Translation elongation 1 b3885 5 ribosome(s)	990 EF-G.GTP + 65 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 50 EF-Tu.GTP.arg1-tRNA + 35 EF-Tu.GTP.asn1-tRNA + 70 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.cysT-tRNA + 35 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 75 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 20 EF-Tu.GTP.glyU-tRNA + 50 EF-Tu.GTP.hisR-tRNA + 65 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.ile2-tRNA + 50 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 15 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuW-tRNA + 15 EF-Tu.GTP.leuZ-tRNA + 35 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 60 EF-Tu.GTP.phe1-tRNA + 30 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serT-tRNA + 30 EF-Tu.GTP.serV-tRNA + 30 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 15 EF-Tu.GTP.trpT-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 45 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 4950 mg2 + 1 rib_ini_b3885_5 --> 1 rib_70_elo1_b3885_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_elo_b3885_5_rib2	Translation elongation 2 b3885 5 ribosome(s)	985 h2o + 1 rib_70_elo1_b3885_5_cplx --> 985 EF-G.GDP + 985 EF-Tu.GDP + 65 ala1_tRNA + 20 ala2_tRNA + 50 arg1_tRNA + 35 asn1_tRNA + 70 asp1_tRNA + 5 cysT_tRNA + 5 fmet_tRNA + 35 gln1_tRNA + 5 gln2_tRNA + 75 glu1_tRNA + 20 gly1_tRNA + 10 glyT_tRNA + 20 glyU_tRNA + 1970 h + 50 hisR_tRNA + 65 ile1_tRNA + 5 ile2_tRNA + 50 leu1_tRNA + 5 leu2_tRNA + 15 leuU_tRNA + 10 leuW_tRNA + 15 leuZ_tRNA + 35 lys1_tRNA + 20 met1_tRNA + 4950 mg2 + 60 phe1_tRNA + 1970 pi + 30 pro1_tRNA + 5 pro2_tRNA + 5 proL_tRNA + 1 rib_70_elo2_b3885_5_cplx + 5 ser1_tRNA + 5 ser2_tRNA + 10 ser3_tRNA + 5 serT_tRNA + 30 serV_tRNA + 30 thr1_tRNA + 10 thr3_tRNA + 15 trpT_tRNA + 30 tyr1_tRNA + 45 val1_tRNA + 10 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_elo_b3886_17_rib1	Translation elongation 1 b3886 17 ribosome(s)	4913 EF-G.GTP + 340 EF-Tu.GTP.ala1-tRNA + 187 EF-Tu.GTP.ala2-tRNA + 204 EF-Tu.GTP.arg1-tRNA + 17 EF-Tu.GTP.argW-tRNA + 17 EF-Tu.GTP.argX-tRNA + 153 EF-Tu.GTP.asn1-tRNA + 187 EF-Tu.GTP.asp1-tRNA + 34 EF-Tu.GTP.cysT-tRNA + 68 EF-Tu.GTP.gln1-tRNA + 68 EF-Tu.GTP.gln2-tRNA + 153 EF-Tu.GTP.glu1-tRNA + 102 EF-Tu.GTP.gly1-tRNA + 17 EF-Tu.GTP.glyT-tRNA + 85 EF-Tu.GTP.glyU-tRNA + 34 EF-Tu.GTP.hisR-tRNA + 408 EF-Tu.GTP.ile1-tRNA + 238 EF-Tu.GTP.leu1-tRNA + 153 EF-Tu.GTP.leu2-tRNA + 204 EF-Tu.GTP.leuU-tRNA + 85 EF-Tu.GTP.leuW-tRNA + 68 EF-Tu.GTP.leuZ-tRNA + 170 EF-Tu.GTP.lys1-tRNA + 102 EF-Tu.GTP.met1-tRNA + 272 EF-Tu.GTP.phe1-tRNA + 68 EF-Tu.GTP.pro1-tRNA + 51 EF-Tu.GTP.pro2-tRNA + 34 EF-Tu.GTP.proL-tRNA + 51 EF-Tu.GTP.proM-tRNA + 102 EF-Tu.GTP.ser1-tRNA + 51 EF-Tu.GTP.ser3-tRNA + 34 EF-Tu.GTP.serT-tRNA + 119 EF-Tu.GTP.serV-tRNA + 136 EF-Tu.GTP.thr1-tRNA + 68 EF-Tu.GTP.thr2-tRNA + 17 EF-Tu.GTP.thr3-tRNA + 34 EF-Tu.GTP.thrU-tRNA + 187 EF-Tu.GTP.trpT-tRNA + 204 EF-Tu.GTP.tyr1-tRNA + 119 EF-Tu.GTP.val1-tRNA + 136 EF-Tu.GTP.val2-tRNA + 136 EF-Tu.GTP.val3-tRNA + 24565 mg2 + 1 rib_ini_b3886_17 --> 1 rib_70_elo1_b3886_17_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284
tl_elo_b3886_17_rib2	Translation elongation 2 b3886 17 ribosome(s)	4896 h2o + 1 rib_70_elo1_b3886_17_cplx --> 4896 EF-G.GDP + 4896 EF-Tu.GDP + 340 ala1_tRNA + 187 ala2_tRNA + 204 arg1_tRNA + 17 argW_tRNA + 17 argX_tRNA + 153 asn1_tRNA + 187 asp1_tRNA + 34 cysT_tRNA + 17 fmet_tRNA + 68 gln1_tRNA + 68 gln2_tRNA + 153 glu1_tRNA + 102 gly1_tRNA + 17 glyT_tRNA + 85 glyU_tRNA + 9792 h + 34 hisR_tRNA + 408 ile1_tRNA + 238 leu1_tRNA + 153 leu2_tRNA + 204 leuU_tRNA + 85 leuW_tRNA + 68 leuZ_tRNA + 170 lys1_tRNA + 102 met1_tRNA + 24565 mg2 + 272 phe1_tRNA + 9792 pi + 68 pro1_tRNA + 51 pro2_tRNA + 34 proL_tRNA + 34 proM_tRNA + 1 rib_70_elo2_b3886_17_cplx + 102 ser1_tRNA + 51 ser3_tRNA + 34 serT_tRNA + 119 serV_tRNA + 136 thr1_tRNA + 68 thr2_tRNA + 17 thr3_tRNA + 34 thrU_tRNA + 187 trpT_tRNA + 204 tyr1_tRNA + 119 val1_tRNA + 136 val2_tRNA + 136 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284

tl_elo_b3886_1_rib1	Translation elongation 1 b3886 1 ribosome(s)	289 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.argX-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 11 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 9 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 24 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuW-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 11 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 1445 mg2 + 1 rib_ini_b3886_1 --> 1 rib_70_elo1_b3886_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284
tl_elo_b3886_1_rib2	Translation elongation 2 b3886 1 ribosome(s)	288 h2o + 1 rib_70_elo1_b3886_1_cplx --> 288 EF-G.GDP + 288 EF-Tu.GDP + 20 ala1_tRNA + 11 ala2_tRNA + 12 arg1_tRNA + 1 argW_tRNA + 1 argX_tRNA + 9 asn1_tRNA + 11 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 4 gln2_tRNA + 9 glu1_tRNA + 6 gly1_tRNA + 1 glyT_tRNA + 5 glyU_tRNA + 576 h + 2 hisR_tRNA + 24 ile1_tRNA + 14 leu1_tRNA + 9 leu2_tRNA + 12 leuU_tRNA + 5 leuW_tRNA + 4 leuZ_tRNA + 10 lys1_tRNA + 6 met1_tRNA + 1445 mg2 + 16 phe1_tRNA + 576 pi + 4 pro1_tRNA + 1 pro2_tRNA + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3886_1_cplx + 6 ser1_tRNA + 3 ser3_tRNA + 2 serT_tRNA + 7 serV_tRNA + 8 thr1_tRNA + 4 thr2_tRNA + 1 thr3_tRNA + 2 thrU_tRNA + 11 trpT_tRNA + 12 tyr1_tRNA + 7 val1_tRNA + 8 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284
tl_elo_b3886_8_rib1	Translation elongation 1 b3886 8 ribosome(s)	2312 EF-G.GTP + 160 EF-Tu.GTP.ala1-tRNA + 88 EF-Tu.GTP.ala2-tRNA + 96 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.argW-tRNA + 8 EF-Tu.GTP.argX-tRNA + 72 EF-Tu.GTP.asn1-tRNA + 88 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.cysT-tRNA + 32 EF-Tu.GTP.gln1-tRNA + 32 EF-Tu.GTP.gln2-tRNA + 72 EF-Tu.GTP.glu1-tRNA + 48 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 40 EF-Tu.GTP.glyU-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 192 EF-Tu.GTP.ile1-tRNA + 112 EF-Tu.GTP.leu1-tRNA + 72 EF-Tu.GTP.leu2-tRNA + 96 EF-Tu.GTP.leuU-tRNA + 40 EF-Tu.GTP.leuW-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 80 EF-Tu.GTP.lys1-tRNA + 48 EF-Tu.GTP.met1-tRNA + 128 EF-Tu.GTP.phe1-tRNA + 32 EF-Tu.GTP.pro1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 16 EF-Tu.GTP.proL-tRNA + 24 EF-Tu.GTP.proM-tRNA + 48 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser3-tRNA + 16 EF-Tu.GTP.serT-tRNA + 56 EF-Tu.GTP.serV-tRNA + 64 EF-Tu.GTP.thr1-tRNA + 32 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 88 EF-Tu.GTP.trpT-tRNA + 96 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 64 EF-Tu.GTP.val2-tRNA + 64 EF-Tu.GTP.val3-tRNA + 11560 mg2 + 1 rib_ini_b3886_8 --> 1 rib_70_elo1_b3886_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284
tl_elo_b3886_8_rib2	Translation elongation 2 b3886 8 ribosome(s)	2304 h2o + 1 rib_70_elo1_b3886_8_cplx --> 2304 EF-G.GDP + 2304 EF-Tu.GDP + 160 ala1_tRNA + 88 ala2_tRNA + 96 arg1_tRNA + 8 argW_tRNA + 8 argX_tRNA + 72 asn1_tRNA + 88 asp1_tRNA + 16 cysT_tRNA + 8 fmet_tRNA + 32 gln1_tRNA + 32 gln2_tRNA + 72 glu1_tRNA + 48 gly1_tRNA + 8 glyT_tRNA + 40 glyU_tRNA + 4608 h + 16 hisR_tRNA + 192 ile1_tRNA + 112 leu1_tRNA + 72 leu2_tRNA + 96 leuU_tRNA + 40 leuW_tRNA + 32 leuZ_tRNA + 80 lys1_tRNA + 48 met1_tRNA + 11560 mg2 + 128 phe1_tRNA + 4608 pi + 32 pro1_tRNA + 24 pro2_tRNA + 16 proL_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b3886_8_cplx + 48 ser1_tRNA + 24 ser3_tRNA + 16 serT_tRNA + 56 serV_tRNA + 64 thr1_tRNA + 32 thr2_tRNA + 8 thr3_tRNA + 16 thrU_tRNA + 88 trpT_tRNA + 96 tyr1_tRNA + 56 val1_tRNA + 64 val2_tRNA + 64 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284
tl_elo_b3887_1_rib1	Translation elongation 1 b3887 1 ribosome(s)	144 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 11 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 11 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 1 EF-Tu.GTP.val3-tRNA + 720 mg2 + 1 rib_ini_b3887_1 --> 1 rib_70_elo1_b3887_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754
tl_elo_b3887_1_rib2	Translation elongation 2 b3887 1 ribosome(s)	143 h2o + 1 rib_70_elo1_b3887_1_cplx --> 143 EF-G.GDP + 143 EF-Tu.GDP + 10 ala1_tRNA + 3 ala2_tRNA + 10 arg1_tRNA + 1 argX_tRNA + 5 asn1_tRNA + 9 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 4 gln2_tRNA + 11 glu1_tRNA + 9 gly1_tRNA + 3 glyT_tRNA + 1 glyU_tRNA + 286 h + 4 ile1_tRNA + 3 leu1_tRNA + 3 leu2_tRNA + 4 leuU_tRNA + 3 leuZ_tRNA + 4 lys1_tRNA + 4 met1_tRNA + 720 mg2 + 6 phe1_tRNA + 286 pi + 1 pro1_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3887_1_cplx + 2 ser1_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 4 serV_tRNA + 4 thr1_tRNA + 2 thr3_tRNA + 2 thrU_tRNA + 1 trpT_tRNA + 3 tyr1_tRNA + 10 val1_tRNA + 4 val2_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754

tl_elo_b3887_4_rib1	Translation elongation 1 b3887 4 ribosome(s)	576 EF-G.GTP + 40 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 40 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argX-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 36 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.gln2-tRNA + 44 EF-Tu.GTP.glu1-tRNA + 36 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 16 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 16 EF-Tu.GTP.serV-tRNA + 16 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 44 EF-Tu.GTP.val1-tRNA + 16 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 2880 mg2 + 1 rib_ini_b3887_4 --> 1 rib_70_elo1_b3887_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754
tl_elo_b3887_4_rib2	Translation elongation 2 b3887 4 ribosome(s)	572 h2o + 1 rib_70_elo1_b3887_4_cplx --> 572 EF-G.GDP + 572 EF-Tu.GDP + 40 ala1_tRNA + 12 ala2_tRNA + 40 arg1_tRNA + 4 argX_tRNA + 20 asn1_tRNA + 36 asp1_tRNA + 8 cysT_tRNA + 4 fmet_tRNA + 24 gln1_tRNA + 16 gln2_tRNA + 44 glu1_tRNA + 36 gly1_tRNA + 12 glyT_tRNA + 4 glyU_tRNA + 1144 h + 16 ile1_tRNA + 12 leu1_tRNA + 12 leu2_tRNA + 16 leuU_tRNA + 12 leuZ_tRNA + 16 lys1_tRNA + 16 met1_tRNA + 2880 mg2 + 24 phe1_tRNA + 1144 pi + 4 pro1_tRNA + 4 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b3887_4_cplx + 8 ser1_tRNA + 4 ser3_tRNA + 4 serT_tRNA + 16 serV_tRNA + 16 thr1_tRNA + 8 thr3_tRNA + 8 thrU_tRNA + 4 trpT_tRNA + 12 tyr1_tRNA + 40 val1_tRNA + 16 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754
tl_elo_b3887_8_rib1	Translation elongation 1 b3887 8 ribosome(s)	1152 EF-G.GTP + 80 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 80 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.argX-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 72 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.cysT-tRNA + 48 EF-Tu.GTP.gln1-tRNA + 32 EF-Tu.GTP.gln2-tRNA + 88 EF-Tu.GTP.glu1-tRNA + 72 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 32 EF-Tu.GTP.ile1-tRNA + 24 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.leu2-tRNA + 32 EF-Tu.GTP.leuU-tRNA + 24 EF-Tu.GTP.leuZ-tRNA + 32 EF-Tu.GTP.lys1-tRNA + 32 EF-Tu.GTP.met1-tRNA + 48 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.proL-tRNA + 8 EF-Tu.GTP.proM-tRNA + 16 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serT-tRNA + 32 EF-Tu.GTP.serV-tRNA + 32 EF-Tu.GTP.thr1-tRNA + 16 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 24 EF-Tu.GTP.tyr1-tRNA + 88 EF-Tu.GTP.val1-tRNA + 32 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 5760 mg2 + 1 rib_ini_b3887_8 --> 1 rib_70_elo1_b3887_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754
tl_elo_b3887_8_rib2	Translation elongation 2 b3887 8 ribosome(s)	1144 h2o + 1 rib_70_elo1_b3887_8_cplx --> 1144 EF-G.GDP + 1144 EF-Tu.GDP + 80 ala1_tRNA + 24 ala2_tRNA + 80 arg1_tRNA + 8 argX_tRNA + 40 asn1_tRNA + 72 asp1_tRNA + 16 cysT_tRNA + 8 fmet_tRNA + 48 gln1_tRNA + 32 gln2_tRNA + 88 glu1_tRNA + 72 gly1_tRNA + 24 glyT_tRNA + 8 glyU_tRNA + 2288 h + 32 ile1_tRNA + 24 leu1_tRNA + 24 leu2_tRNA + 32 leuU_tRNA + 24 leuZ_tRNA + 32 lys1_tRNA + 32 met1_tRNA + 5760 mg2 + 48 phe1_tRNA + 2288 pi + 8 pro1_tRNA + 8 proL_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b3887_8_cplx + 16 ser1_tRNA + 8 ser3_tRNA + 8 serT_tRNA + 32 serV_tRNA + 32 thr1_tRNA + 16 thr3_tRNA + 16 thrU_tRNA + 8 trpT_tRNA + 24 tyr1_tRNA + 80 val1_tRNA + 32 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754
tl_elo_b3888_19_rib1	Translation elongation 1 b3888 19 ribosome(s)	6232 EF-G.GTP + 361 EF-Tu.GTP.ala1-tRNA + 152 EF-Tu.GTP.ala2-tRNA + 342 EF-Tu.GTP.arg1-tRNA + 19 EF-Tu.GTP.argU-tRNA + 57 EF-Tu.GTP.argX-tRNA + 133 EF-Tu.GTP.asn1-tRNA + 285 EF-Tu.GTP.asp1-tRNA + 38 EF-Tu.GTP.cysT-tRNA + 247 EF-Tu.GTP.gln1-tRNA + 95 EF-Tu.GTP.gln2-tRNA + 513 EF-Tu.GTP.glu1-tRNA + 342 EF-Tu.GTP.gly1-tRNA + 76 EF-Tu.GTP.glyT-tRNA + 114 EF-Tu.GTP.glyU-tRNA + 247 EF-Tu.GTP.hisR-tRNA + 323 EF-Tu.GTP.ile1-tRNA + 285 EF-Tu.GTP.leu1-tRNA + 57 EF-Tu.GTP.leu2-tRNA + 171 EF-Tu.GTP.leuU-tRNA + 76 EF-Tu.GTP.leuZ-tRNA + 228 EF-Tu.GTP.lys1-tRNA + 228 EF-Tu.GTP.met1-tRNA + 228 EF-Tu.GTP.phe1-tRNA + 114 EF-Tu.GTP.pro1-tRNA + 19 EF-Tu.GTP.pro2-tRNA + 76 EF-Tu.GTP.proL-tRNA + 114 EF-Tu.GTP.proM-tRNA + 19 EF-Tu.GTP.ser1-tRNA + 38 EF-Tu.GTP.ser3-tRNA + 38 EF-Tu.GTP.serT-tRNA + 152 EF-Tu.GTP.serV-tRNA + 152 EF-Tu.GTP.thr1-tRNA + 57 EF-Tu.GTP.thr2-tRNA + 152 EF-Tu.GTP.thr3-tRNA + 38 EF-Tu.GTP.thrU-tRNA + 114 EF-Tu.GTP.trpT-tRNA + 171 EF-Tu.GTP.tyr1-tRNA + 190 EF-Tu.GTP.val1-tRNA + 76 EF-Tu.GTP.val2-tRNA + 95 EF-Tu.GTP.val3-tRNA + 31160 mg2 + 1 rib_ini_b3888_19 --> 1 rib_70_elo1_b3888_19_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354
tl_elo_b3888_19_rib2	Translation elongation 2 b3888 19 ribosome(s)	6213 h2o + 1 rib_70_elo1_b3888_19_cplx --> 6213 EF-G.GDP + 6213 EF-Tu.GDP + 361 ala1_tRNA + 152 ala2_tRNA + 342 arg1_tRNA + 19 argU_tRNA + 57 argX_tRNA + 133 asn1_tRNA + 285 asp1_tRNA + 38 cysT_tRNA + 19 fmet_tRNA + 247 gln1_tRNA + 95 gln2_tRNA + 494 glu1_tRNA + 342 gly1_tRNA + 76 glyT_tRNA + 114 glyU_tRNA + 12426 h + 247 hisR_tRNA + 323 ile1_tRNA + 285 leu1_tRNA + 57 leu2_tRNA + 171 leuU_tRNA + 76 leuZ_tRNA + 228 lys1_tRNA + 228 met1_tRNA + 31160 mg2 + 228 phe1_tRNA + 12426 pi + 114 pro1_tRNA + 19 pro2_tRNA + 76 proL_tRNA + 114 proM_tRNA + 1 rib_70_elo2_b3888_19_cplx + 19 ser1_tRNA + 38 ser3_tRNA + 38 serT_tRNA + 152 serV_tRNA + 152 thr1_tRNA + 57 thr2_tRNA + 152 thr3_tRNA + 38 thrU_tRNA + 114 trpT_tRNA + 171 tyr1_tRNA + 190 val1_tRNA + 76 val2_tRNA + 95 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354

tl_elo_b3888_1_rib1	Translation elongation 1 b3888 1 ribosome(s)	328 EF-G.GTP + 19 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 3 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 15 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 13 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 27 EF-Tu.GTP.glu1-tRNA + 18 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 13 EF-Tu.GTP.hisR-tRNA + 17 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 8 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1640 mg2 + 1 rib_ini_b3888_1 --> 1 rib_70_elo1_b3888_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354
tl_elo_b3888_1_rib2	Translation elongation 2 b3888 1 ribosome(s)	327 h2o + 1 rib_70_elo1_b3888_1_cplx --> 327 EF-G.GDP + 327 EF-Tu.GDP + 19 ala1_tRNA + 8 ala2_tRNA + 18 arg1_tRNA + 1 argU_tRNA + 3 argX_tRNA + 7 asn1_tRNA + 15 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 13 gln1_tRNA + 5 gln2_tRNA + 26 glu1_tRNA + 18 gly1_tRNA + 4 glyT_tRNA + 6 glyU_tRNA + 654 h + 13 hisR_tRNA + 17 ile1_tRNA + 15 leu1_tRNA + 3 leu2_tRNA + 9 leuU_tRNA + 4 leuZ_tRNA + 12 lys1_tRNA + 12 met1_tRNA + 1640 mg2 + 12 phe1_tRNA + 654 pi + 6 pro1_tRNA + 1 pro2_tRNA + 4 proL_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b3888_1_cplx + 1 ser1_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 8 serV_tRNA + 8 thr1_tRNA + 3 thr2_tRNA + 8 thr3_tRNA + 2 thrU_tRNA + 6 trpT_tRNA + 9 tyr1_tRNA + 10 val1_tRNA + 4 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354
tl_elo_b3888_9_rib1	Translation elongation 1 b3888 9 ribosome(s)	2952 EF-G.GTP + 171 EF-Tu.GTP.ala1-tRNA + 72 EF-Tu.GTP.ala2-tRNA + 162 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argU-tRNA + 27 EF-Tu.GTP.argX-tRNA + 63 EF-Tu.GTP.asn1-tRNA + 135 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.cysT-tRNA + 117 EF-Tu.GTP.gln1-tRNA + 45 EF-Tu.GTP.gln2-tRNA + 243 EF-Tu.GTP.glu1-tRNA + 162 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.glyT-tRNA + 54 EF-Tu.GTP.glyU-tRNA + 117 EF-Tu.GTP.hisR-tRNA + 153 EF-Tu.GTP.ile1-tRNA + 135 EF-Tu.GTP.leu1-tRNA + 27 EF-Tu.GTP.leu2-tRNA + 81 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 108 EF-Tu.GTP.lys1-tRNA + 108 EF-Tu.GTP.met1-tRNA + 108 EF-Tu.GTP.phe1-tRNA + 54 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 36 EF-Tu.GTP.proL-tRNA + 54 EF-Tu.GTP.proM-tRNA + 9 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serT-tRNA + 72 EF-Tu.GTP.serV-tRNA + 72 EF-Tu.GTP.thr1-tRNA + 27 EF-Tu.GTP.thr2-tRNA + 72 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 54 EF-Tu.GTP.trpT-tRNA + 81 EF-Tu.GTP.tyr1-tRNA + 90 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val2-tRNA + 45 EF-Tu.GTP.val3-tRNA + 14760 mg2 + 1 rib_ini_b3888_9 --> 1 rib_70_elo1_b3888_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354
tl_elo_b3888_9_rib2	Translation elongation 2 b3888 9 ribosome(s)	2943 h2o + 1 rib_70_elo1_b3888_9_cplx --> 2943 EF-G.GDP + 2943 EF-Tu.GDP + 171 ala1_tRNA + 72 ala2_tRNA + 162 arg1_tRNA + 9 argU_tRNA + 27 argX_tRNA + 63 asn1_tRNA + 135 asp1_tRNA + 18 cysT_tRNA + 9 fmet_tRNA + 117 gln1_tRNA + 45 gln2_tRNA + 234 glu1_tRNA + 162 gly1_tRNA + 36 glyT_tRNA + 54 glyU_tRNA + 5886 h + 117 hisR_tRNA + 153 ile1_tRNA + 135 leu1_tRNA + 27 leu2_tRNA + 81 leuU_tRNA + 36 leuZ_tRNA + 108 lys1_tRNA + 108 met1_tRNA + 14760 mg2 + 108 phe1_tRNA + 5886 pi + 54 pro1_tRNA + 9 pro2_tRNA + 36 proL_tRNA + 54 proM_tRNA + 1 rib_70_elo2_b3888_9_cplx + 9 ser1_tRNA + 18 ser3_tRNA + 18 serT_tRNA + 72 serV_tRNA + 72 thr1_tRNA + 27 thr2_tRNA + 72 thr3_tRNA + 18 thrU_tRNA + 54 trpT_tRNA + 81 tyr1_tRNA + 90 val1_tRNA + 36 val2_tRNA + 45 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354
tl_elo_b3936_1_rib1	Translation elongation 1 b3936 1 ribosome(s)	69 EF-G.GTP + 2 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 4 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val3-tRNA + 345 mg2 + 1 rib_ini_b3936_1 --> 1 rib_70_elo1_b3936_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	5.62E+01	56.176
tl_elo_b3936_1_rib2	Translation elongation 2 b3936 1 ribosome(s)	68 h2o + 1 rib_70_elo1_b3936_1_cplx --> 68 EF-G.GDP + 68 EF-Tu.GDP + 2 ala1_tRNA + 5 arg1_tRNA + 4 asn1_tRNA + 5 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 2 glu1_tRNA + 6 gly1_tRNA + 136 h + 3 hisR_tRNA + 4 ile1_tRNA + 1 leu1_tRNA + 1 leuU_tRNA + 7 lys1_tRNA + 1 met1_tRNA + 345 mg2 + 4 phe1_tRNA + 136 pi + 3 pro1_tRNA + 1 rib_70_elo2_b3936_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 3 serV_tRNA + 2 thr1_tRNA + 2 thr2_tRNA + 1 tyr1_tRNA + 2 val1_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	5.62E+01	56.176
tl_elo_b3936_2_rib1	Translation elongation 1 b3936 2 ribosome(s)	138 EF-G.GTP + 4 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 8 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val3-tRNA + 690 mg2 + 1 rib_ini_b3936_2 --> 1 rib_70_elo1_b3936_2_cp	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44

tl_elo_b3936_2_rib2	Translation elongation 2 b3936 2 ribosome(s)	136 h2o + 1 rib_70_elo1_b3936_2_cplx --> 136 EF-G.GDP + 136 EF-Tu.GDP + 4 ala1_tRNA + 10 arg1_tRNA + 8 asn1_tRNA + 10 asp1_tRNA + 8 cysT_tRNA + 2 fmet_tRNA + 2 gln1_tRNA + 4 glu1_tRNA + 12 gly1_tRNA + 272 h + 6 hisR_tRNA + 8 ile1_tRNA + 2 leu1_tRNA + 2 leuU_tRNA + 14 lys1_tRNA + 2 met1_tRNA + 690 mg2 + 8 phe1_tRNA + 272 pi + 6 pro1_tRNA + 1 rib_70_elo2_b3936_2_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 6 serV_tRNA + 4 thr1_tRNA + 4 thr2_tRNA + 2 tyr1_tRNA + 4 val1_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b3936_4_rib1	Translation elongation 1 b3936 4 ribosome(s)	276 EF-G.GTP + 8 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.asn1-tRNA + 20 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.glu1-tRNA + 24 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 32 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1380 mg2 + 1 rib_ini_b3936_4 --> 1 rib_70_elo1_b3936_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3936_4_rib2	Translation elongation 2 b3936 4 ribosome(s)	272 h2o + 1 rib_70_elo1_b3936_4_cplx --> 272 EF-G.GDP + 272 EF-Tu.GDP + 8 ala1_tRNA + 20 arg1_tRNA + 16 asn1_tRNA + 20 asp1_tRNA + 16 cysT_tRNA + 4 fmet_tRNA + 4 gln1_tRNA + 8 glu1_tRNA + 24 gly1_tRNA + 544 h + 12 hisR_tRNA + 16 ile1_tRNA + 4 leu1_tRNA + 4 leuU_tRNA + 28 lys1_tRNA + 4 met1_tRNA + 1380 mg2 + 16 phe1_tRNA + 544 pi + 12 pro1_tRNA + 1 rib_70_elo2_b3936_4_cplx + 4 ser1_tRNA + 4 ser2_tRNA + 12 serV_tRNA + 8 thr1_tRNA + 8 thr2_tRNA + 4 tyr1_tRNA + 8 val1_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3965_10_rib1	Translation elongation 1 b3965 10 ribosome(s)	3650 EF-G.GTP + 280 EF-Tu.GTP.ala1-tRNA + 50 EF-Tu.GTP.ala2-tRNA + 200 EF-Tu.GTP.arg1-tRNA + 30 EF-Tu.GTP.argX-tRNA + 190 EF-Tu.GTP.asn1-tRNA + 210 EF-Tu.GTP.asp1-tRNA + 50 EF-Tu.GTP.cysT-tRNA + 160 EF-Tu.GTP.gln1-tRNA + 60 EF-Tu.GTP.gln2-tRNA + 270 EF-Tu.GTP.glu1-tRNA + 100 EF-Tu.GTP.gly1-tRNA + 20 EF-Tu.GTP.glyU-tRNA + 110 EF-Tu.GTP.hisR-tRNA + 210 EF-Tu.GTP.ile1-tRNA + 230 EF-Tu.GTP.leu1-tRNA + 40 EF-Tu.GTP.leu2-tRNA + 30 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuW-tRNA + 80 EF-Tu.GTP.leuZ-tRNA + 160 EF-Tu.GTP.lys1-tRNA + 120 EF-Tu.GTP.met1-tRNA + 140 EF-Tu.GTP.phe1-tRNA + 90 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 40 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.proM-tRNA + 20 EF-Tu.GTP.ser1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 20 EF-Tu.GTP.ser3-tRNA + 20 EF-Tu.GTP.serT-tRNA + 110 EF-Tu.GTP.serV-tRNA + 90 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr2-tRNA + 50 EF-Tu.GTP.thr3-tRNA + 30 EF-Tu.GTP.thrU-tRNA + 30 EF-Tu.GTP.trpT-tRNA + 130 EF-Tu.GTP.tyr1-tRNA + 140 EF-Tu.GTP.val1-tRNA + 40 EF-Tu.GTP.val2-tRNA + 40 EF-Tu.GTP.val3-tRNA + 18250 mg2 + 1 rib_ini_b3965_10 --> 1 rib_70_elo1_b3965_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_elo_b3965_10_rib2	Translation elongation 2 b3965 10 ribosome(s)	3640 h2o + 1 rib_70_elo1_b3965_10_cplx --> 3640 EF-G.GDP + 3640 EF-Tu.GDP + 280 ala1_tRNA + 50 ala2_tRNA + 200 arg1_tRNA + 30 argX_tRNA + 190 asn1_tRNA + 210 asp1_tRNA + 50 cysT_tRNA + 10 fmet_tRNA + 160 gln1_tRNA + 60 gln2_tRNA + 270 glu1_tRNA + 100 gly1_tRNA + 20 glyU_tRNA + 7280 h + 110 hisR_tRNA + 210 ile1_tRNA + 230 leu1_tRNA + 40 leu2_tRNA + 30 leuU_tRNA + 10 leuW_tRNA + 80 leuZ_tRNA + 150 lys1_tRNA + 120 met1_tRNA + 18250 mg2 + 140 phe1_tRNA + 7280 pi + 90 pro1_tRNA + 10 pro2_tRNA + 40 proL_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b3965_10_cplx + 20 ser1_tRNA + 10 ser2_tRNA + 20 ser3_tRNA + 20 serT_tRNA + 110 serV_tRNA + 90 thr1_tRNA + 20 thr2_tRNA + 50 thr3_tRNA + 30 thrU_tRNA + 30 trpT_tRNA + 130 tyr1_tRNA + 140 val1_tRNA + 40 val2_tRNA + 40 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_elo_b3965_1_rib1	Translation elongation 1 b3965 1 ribosome(s)	365 EF-G.GTP + 28 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 20 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argX-tRNA + 19 EF-Tu.GTP.asn1-tRNA + 21 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 27 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 23 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 8 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 14 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 11 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 13 EF-Tu.GTP.tyr1-tRNA + 14 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1825 mg2 + 1 rib_ini_b3965_1 --> 1 rib_70_elo1_b3965_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_elo_b3965_1_rib2	Translation elongation 2 b3965 1 ribosome(s)	364 h2o + 1 rib_70_elo1_b3965_1_cplx --> 364 EF-G.GDP + 364 EF-Tu.GDP + 28 ala1_tRNA + 5 ala2_tRNA + 20 arg1_tRNA + 3 argX_tRNA + 19 asn1_tRNA + 21 asp1_tRNA + 5 cysT_tRNA + 1 fmet_tRNA + 16 gln1_tRNA + 6 gln2_tRNA + 27 glu1_tRNA + 10 gly1_tRNA + 2 glyU_tRNA + 728 h + 11 hisR_tRNA + 21 ile1_tRNA + 23 leu1_tRNA + 4 leu2_tRNA + 3 leuU_tRNA + 1 leuW_tRNA + 8 leuZ_tRNA + 15 lys1_tRNA + 12 met1_tRNA + 1825 mg2 + 14 phe1_tRNA + 728 pi + 9 pro1_tRNA + 1 pro2_tRNA + 4 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3965_1_cplx + 2 ser1_tRNA + 1 ser2_tRNA + 2 ser3_tRNA + 2 serT_tRNA + 11 serV_tRNA + 9 thr1_tRNA + 2 thr2_tRNA + 5 thr3_tRNA + 3 thrU_tRNA + 3 trpT_tRNA + 13 tyr1_tRNA + 14 val1_tRNA + 4 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079

tl_elo_b3965_21_rib1	Translation elongation 1 b3965 21 ribosome(s)	7665 EF-G.GTP + 588 EF-Tu.GTP.ala1-tRNA + 105 EF-Tu.GTP.ala2-tRNA + 420 EF-Tu.GTP.arg1-tRNA + 63 EF-Tu.GTP.argX-tRNA + 399 EF-Tu.GTP.asn1-tRNA + 441 EF-Tu.GTP.asp1-tRNA + 105 EF-Tu.GTP.cysT-tRNA + 336 EF-Tu.GTP.gln1-tRNA + 126 EF-Tu.GTP.gln2-tRNA + 567 EF-Tu.GTP.glu1-tRNA + 210 EF-Tu.GTP.gly1-tRNA + 42 EF-Tu.GTP.glyU-tRNA + 231 EF-Tu.GTP.hisR-tRNA + 441 EF-Tu.GTP.ile1-tRNA + 483 EF-Tu.GTP.leu1-tRNA + 84 EF-Tu.GTP.leu2-tRNA + 63 EF-Tu.GTP.leuU-tRNA + 21 EF-Tu.GTP.leuW-tRNA + 168 EF-Tu.GTP.leuZ-tRNA + 336 EF-Tu.GTP.lys1-tRNA + 252 EF-Tu.GTP.met1-tRNA + 294 EF-Tu.GTP.phe1-tRNA + 189 EF-Tu.GTP.pro1-tRNA + 21 EF-Tu.GTP.pro2-tRNA + 84 EF-Tu.GTP.proL-tRNA + 21 EF-Tu.GTP.proM-tRNA + 42 EF-Tu.GTP.ser1-tRNA + 21 EF-Tu.GTP.ser2-tRNA + 42 EF-Tu.GTP.ser3-tRNA + 42 EF-Tu.GTP.serT-tRNA + 231 EF-Tu.GTP.serV-tRNA + 189 EF-Tu.GTP.thr1-tRNA + 42 EF-Tu.GTP.thr2-tRNA + 105 EF-Tu.GTP.thr3-tRNA + 63 EF-Tu.GTP.thrU-tRNA + 63 EF-Tu.GTP.trpT-tRNA + 273 EF-Tu.GTP.tyr1-tRNA + 294 EF-Tu.GTP.val1-tRNA + 84 EF-Tu.GTP.val2-tRNA + 84 EF-Tu.GTP.val3-tRNA + 38325 mg2 + 1 rib_ini_b3965_21 --> 1 rib_70_elo1_b3965_21_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_elo_b3965_21_rib2	Translation elongation 2 b3965 21 ribosome(s)	7644 h2o + 1 rib_70_elo1_b3965_21_cplx --> 7644 EF-G.GDP + 7644 EF-Tu.GDP + 588 ala1_tRNA + 105 ala2_tRNA + 420 arg1_tRNA + 63 argX_tRNA + 399 asn1_tRNA + 441 asp1_tRNA + 105 cysT_tRNA + 21 fmet_tRNA + 336 gln1_tRNA + 126 gln2_tRNA + 567 glu1_tRNA + 210 gly1_tRNA + 42 glyU_tRNA + 15288 h + 231 hisR_tRNA + 441 ile1_tRNA + 483 leu1_tRNA + 84 leu2_tRNA + 63 leuU_tRNA + 21 leuW_tRNA + 168 leuZ_tRNA + 315 lys1_tRNA + 252 met1_tRNA + 38325 mg2 + 294 phe1_tRNA + 15288 pi + 189 pro1_tRNA + 21 pro2_tRNA + 84 proL_tRNA + 21 proM_tRNA + 1 rib_70_elo2_b3965_21_cplx + 42 ser1_tRNA + 21 ser2_tRNA + 42 ser3_tRNA + 42 serT_tRNA + 231 serV_tRNA + 189 thr1_tRNA + 42 thr2_tRNA + 105 thr3_tRNA + 63 thrU_tRNA + 63 trpT_tRNA + 273 tyr1_tRNA + 294 val1_tRNA + 84 val2_tRNA + 84 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_elo_b3980_11_rib1	Translation elongation 1 b3980 11 ribosome(s)	4323 EF-G.GTP + 286 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.ala2-tRNA + 253 EF-Tu.GTP.arg1-tRNA + 77 EF-Tu.GTP.asn1-tRNA + 264 EF-Tu.GTP.asp1-tRNA + 33 EF-Tu.GTP.cysT-tRNA + 88 EF-Tu.GTP.gln1-tRNA + 407 EF-Tu.GTP.glu1-tRNA + 429 EF-Tu.GTP.gly1-tRNA + 11 EF-Tu.GTP.glyU-tRNA + 121 EF-Tu.GTP.hisR-tRNA + 319 EF-Tu.GTP.ile1-tRNA + 297 EF-Tu.GTP.leu1-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 253 EF-Tu.GTP.lys1-tRNA + 110 EF-Tu.GTP.met1-tRNA + 154 EF-Tu.GTP.phe1-tRNA + 209 EF-Tu.GTP.pro1-tRNA + 11 EF-Tu.GTP.proM-tRNA + 33 EF-Tu.GTP.ser1-tRNA + 77 EF-Tu.GTP.ser2-tRNA + 11 EF-Tu.GTP.serV-tRNA + 165 EF-Tu.GTP.thr1-tRNA + 132 EF-Tu.GTP.thr2-tRNA + 11 EF-Tu.GTP.thr3-tRNA + 22 EF-Tu.GTP.thrU-tRNA + 11 EF-Tu.GTP.trpT-tRNA + 110 EF-Tu.GTP.tyr1-tRNA + 154 EF-Tu.GTP.val1-tRNA + 11 EF-Tu.GTP.val2-tRNA + 242 EF-Tu.GTP.val3-tRNA + 21615 mg2 + 1 rib_ini_b3980_11 --> 1 rib_70_elo1_b3980_11_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.39E+02	238.5469	0	5.64E+01	56.41
tl_elo_b3980_11_rib2	Translation elongation 2 b3980 11 ribosome(s)	4312 h2o + 1 rib_70_elo1_b3980_11_cplx --> 4312 EF-G.GDP + 4312 EF-Tu.GDP + 286 ala1_tRNA + 11 ala2_tRNA + 253 arg1_tRNA + 77 asn1_tRNA + 264 asp1_tRNA + 33 cysT_tRNA + 11 fmet_tRNA + 88 gln1_tRNA + 407 glu1_tRNA + 429 gly1_tRNA + 11 glyU_tRNA + 8624 h + 121 hisR_tRNA + 319 ile1_tRNA + 297 leu1_tRNA + 11 leuU_tRNA + 253 lys1_tRNA + 110 met1_tRNA + 21615 mg2 + 154 phe1_tRNA + 8624 pi + 209 pro1_tRNA + 11 proM_tRNA + 1 rib_70_elo2_b3980_11_cplx + 33 ser1_tRNA + 77 ser2_tRNA + 165 thr1_tRNA + 132 thr2_tRNA + 11 thr3_tRNA + 22 thrU_tRNA + 11 trpT_tRNA + 110 tyr1_tRNA + 154 val1_tRNA + 11 val2_tRNA + 242 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.39E+02	238.5469	0	5.64E+01	56.41
tl_elo_b3980_1_rib1	Translation elongation 1 b3980 1 ribosome(s)	393 EF-G.GTP + 26 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 23 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 24 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 37 EF-Tu.GTP.glu1-tRNA + 39 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 29 EF-Tu.GTP.ile1-tRNA + 27 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 23 EF-Tu.GTP.lys1-tRNA + 10 EF-Tu.GTP.met1-tRNA + 14 EF-Tu.GTP.phe1-tRNA + 19 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 14 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 22 EF-Tu.GTP.val3-tRNA + 1965 mg2 + 1 rib_ini_b3980_1 --> 1 rib_70_elo1_b3980_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.39E+02	238.5469	0	5.64E+01	56.41
tl_elo_b3980_1_rib2	Translation elongation 2 b3980 1 ribosome(s)	392 h2o + 1 rib_70_elo1_b3980_1_cplx --> 392 EF-G.GDP + 392 EF-Tu.GDP + 26 ala1_tRNA + 1 ala2_tRNA + 23 arg1_tRNA + 7 asn1_tRNA + 24 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 37 glu1_tRNA + 39 gly1_tRNA + 1 glyU_tRNA + 784 h + 11 hisR_tRNA + 29 ile1_tRNA + 27 leu1_tRNA + 1 leuU_tRNA + 23 lys1_tRNA + 10 met1_tRNA + 1965 mg2 + 14 phe1_tRNA + 784 pi + 19 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3980_1_cplx + 3 ser1_tRNA + 7 ser2_tRNA + 15 thr1_tRNA + 12 thr2_tRNA + 1 thr3_tRNA + 2 thrU_tRNA + 1 trpT_tRNA + 10 tyr1_tRNA + 14 val1_tRNA + 1 val2_tRNA + 22 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.39E+02	238.5469	0	5.64E+01	56.41
tl_elo_b3980_23_rib1	Translation elongation 1 b3980 23 ribosome(s)	9039 EF-G.GTP + 598 EF-Tu.GTP.ala1-tRNA + 23 EF-Tu.GTP.ala2-tRNA + 529 EF-Tu.GTP.arg1-tRNA + 161 EF-Tu.GTP.asn1-tRNA + 552 EF-Tu.GTP.asp1-tRNA + 69 EF-Tu.GTP.cysT-tRNA + 184 EF-Tu.GTP.gln1-tRNA + 851 EF-Tu.GTP.glu1-tRNA + 897 EF-Tu.GTP.gly1-tRNA + 23 EF-Tu.GTP.glyU-tRNA + 253 EF-Tu.GTP.hisR-tRNA + 667 EF-Tu.GTP.ile1-tRNA + 621 EF-Tu.GTP.leu1-tRNA + 23 EF-Tu.GTP.leuU-tRNA + 529 EF-Tu.GTP.lys1-tRNA + 230 EF-Tu.GTP.met1-tRNA + 322 EF-Tu.GTP.phe1-tRNA + 437 EF-Tu.GTP.pro1-tRNA + 23 EF-Tu.GTP.proM-tRNA + 69 EF-Tu.GTP.ser1-tRNA + 161 EF-Tu.GTP.ser2-tRNA + 23 EF-Tu.GTP.serV-tRNA + 345 EF-Tu.GTP.thr1-tRNA + 276 EF-Tu.GTP.thr2-tRNA + 23 EF-Tu.GTP.thr3-tRNA + 46 EF-Tu.GTP.thrU-tRNA + 23 EF-Tu.GTP.trpT-tRNA + 230 EF-Tu.GTP.tyr1-tRNA + 322 EF-Tu.GTP.val1-tRNA + 23 EF-Tu.GTP.val2-tRNA + 506 EF-Tu.GTP.val3-tRNA + 45195 mg2 + 1 rib_ini_b3980_23 --> 1 rib_70_elo1_b3980_23_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.32E+02	231.6607	0	5.64E+01	56.41

tl_elo_b3980_23_rib2	Translation elongation 2 b3980 23 ribosome(s)	9016 h2o + 1 rib_70_elo1_b3980_23_cplx --> 9016 EF-G.GDP + 9016 EF-Tu.GDP + 598 ala1_tRNA + 23 ala2_tRNA + 529 arg1_tRNA + 161 asn1_tRNA + 552 asp1_tRNA + 69 cysT_tRNA + 23 fmet_tRNA + 184 gln1_tRNA + 851 glu1_tRNA + 897 gly1_tRNA + 23 glyU_tRNA + 18032 h + 253 hisR_tRNA + 667 ile1_tRNA + 621 leu1_tRNA + 23 leuU_tRNA + 529 lys1_tRNA + 230 met1_tRNA + 45195 mg2 + 322 phe1_tRNA + 18032 pi + 437 pro1_tRNA + 23 proM_tRNA + 1 rib_70_elo2_b3980_23_cplx + 69 ser1_tRNA + 161 ser2_tRNA + 345 thr1_tRNA + 276 thr2_tRNA + 23 thr3_tRNA + 46 thrU_tRNA + 23 trpT_tRNA + 230 tyr1_tRNA + 322 val1_tRNA + 23 val2_tRNA + 506 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.32E+02	231.6607	0	5.64E+01	56.41
tl_elo_b3981_1_rib1	Translation elongation 1 b3981 1 ribosome(s)	126 EF-G.GTP + 16 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 2 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 5 EF-Tu.GTP.glu1-tRNA + 7 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.serT-tRNA + 2 EF-Tu.GTP.serV-tRNA + 5 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 630 mg2 + 1 rib_ini_b3981_1 --> 1 rib_70_elo1_b3981_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739
tl_elo_b3981_1_rib2	Translation elongation 2 b3981 1 ribosome(s)	125 h2o + 1 rib_70_elo1_b3981_1_cplx --> 125 EF-G.GDP + 125 EF-Tu.GDP + 16 ala1_tRNA + 2 ala2_tRNA + 8 arg1_tRNA + 1 argW_tRNA + 2 asn1_tRNA + 2 asp1_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 1 gln2_tRNA + 5 glu1_tRNA + 7 gly1_tRNA + 2 glyT_tRNA + 1 glyU_tRNA + 250 h + 1 hisR_tRNA + 9 ile1_tRNA + 14 leu1_tRNA + 2 leu2_tRNA + 2 leuU_tRNA + 1 leuZ_tRNA + 4 lys1_tRNA + 3 met1_tRNA + 630 mg2 + 2 phe1_tRNA + 250 pi + 2 pro1_tRNA + 1 rib_70_elo2_b3981_1_cplx + 1 ser1_tRNA + 1 serT_tRNA + 2 serV_tRNA + 5 thr1_tRNA + 2 thr2_tRNA + 2 thr3_tRNA + 2 thrU_tRNA + 3 trpT_tRNA + 2 tyr1_tRNA + 8 val1_tRNA + 5 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739
tl_elo_b3981_3_rib1	Translation elongation 1 b3981 3 ribosome(s)	378 EF-G.GTP + 48 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argW-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 15 EF-Tu.GTP.glu1-tRNA + 21 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 27 EF-Tu.GTP.ile1-tRNA + 42 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 15 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 9 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 24 EF-Tu.GTP.val1-tRNA + 15 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1890 mg2 + 1 rib_ini_b3981_3 --> 1 rib_70_elo1_b3981_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739
tl_elo_b3981_3_rib2	Translation elongation 2 b3981 3 ribosome(s)	375 h2o + 1 rib_70_elo1_b3981_3_cplx --> 375 EF-G.GDP + 375 EF-Tu.GDP + 48 ala1_tRNA + 6 ala2_tRNA + 24 arg1_tRNA + 3 argW_tRNA + 6 asn1_tRNA + 6 asp1_tRNA + 3 fmet_tRNA + 3 gln1_tRNA + 3 gln2_tRNA + 15 glu1_tRNA + 21 gly1_tRNA + 6 glyT_tRNA + 3 glyU_tRNA + 750 h + 3 hisR_tRNA + 27 ile1_tRNA + 42 leu1_tRNA + 6 leu2_tRNA + 6 leuU_tRNA + 3 leuZ_tRNA + 12 lys1_tRNA + 9 met1_tRNA + 1890 mg2 + 6 phe1_tRNA + 750 pi + 6 pro1_tRNA + 1 rib_70_elo2_b3981_3_cplx + 3 ser1_tRNA + 3 serT_tRNA + 6 serV_tRNA + 15 thr1_tRNA + 6 thr2_tRNA + 6 thr3_tRNA + 6 thrU_tRNA + 9 trpT_tRNA + 6 tyr1_tRNA + 24 val1_tRNA + 15 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739
tl_elo_b3981_7_rib1	Translation elongation 1 b3981 7 ribosome(s)	882 EF-G.GTP + 112 EF-Tu.GTP.ala1-tRNA + 14 EF-Tu.GTP.ala2-tRNA + 56 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argW-tRNA + 14 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 35 EF-Tu.GTP.glu1-tRNA + 49 EF-Tu.GTP.gly1-tRNA + 14 EF-Tu.GTP.glyT-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 63 EF-Tu.GTP.ile1-tRNA + 98 EF-Tu.GTP.leu1-tRNA + 14 EF-Tu.GTP.leu2-tRNA + 14 EF-Tu.GTP.leuU-tRNA + 7 EF-Tu.GTP.leuZ-tRNA + 28 EF-Tu.GTP.lys1-tRNA + 21 EF-Tu.GTP.met1-tRNA + 21 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.serT-tRNA + 14 EF-Tu.GTP.serV-tRNA + 35 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 14 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.thrU-tRNA + 21 EF-Tu.GTP.trpT-tRNA + 14 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 35 EF-Tu.GTP.val2-tRNA + 28 EF-Tu.GTP.val3-tRNA + 4410 mg2 + 1 rib_ini_b3981_7 --> 1 rib_70_elo1_b3981_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739
tl_elo_b3981_7_rib2	Translation elongation 2 b3981 7 ribosome(s)	875 h2o + 1 rib_70_elo1_b3981_7_cplx --> 875 EF-G.GDP + 875 EF-Tu.GDP + 112 ala1_tRNA + 14 ala2_tRNA + 56 arg1_tRNA + 7 argW_tRNA + 14 asn1_tRNA + 14 asp1_tRNA + 7 fmet_tRNA + 7 gln1_tRNA + 7 gln2_tRNA + 35 glu1_tRNA + 49 gly1_tRNA + 14 glyT_tRNA + 7 glyU_tRNA + 1750 h + 7 hisR_tRNA + 63 ile1_tRNA + 98 leu1_tRNA + 14 leu2_tRNA + 14 leuU_tRNA + 7 leuZ_tRNA + 28 lys1_tRNA + 21 met1_tRNA + 4410 mg2 + 14 phe1_tRNA + 1750 pi + 14 pro1_tRNA + 1 rib_70_elo2_b3981_7_cplx + 7 ser1_tRNA + 7 serT_tRNA + 14 serV_tRNA + 35 thr1_tRNA + 14 thr2_tRNA + 14 thr3_tRNA + 14 thrU_tRNA + 21 trpT_tRNA + 14 tyr1_tRNA + 56 val1_tRNA + 35 val2_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739

tl_elo_b3982_10_rib1	Translation elongation 1 b3982 10 ribosome(s)	1800 EF-G.GTP + 80 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 150 EF-Tu.GTP.arg1-tRNA + 50 EF-Tu.GTP.asn1-tRNA + 100 EF-Tu.GTP.asp1-tRNA + 60 EF-Tu.GTP.gln1-tRNA + 170 EF-Tu.GTP.glu1-tRNA + 140 EF-Tu.GTP.gly1-tRNA + 30 EF-Tu.GTP.hisR-tRNA + 60 EF-Tu.GTP.ile1-tRNA + 60 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 110 EF-Tu.GTP.lys1-tRNA + 70 EF-Tu.GTP.met1-tRNA + 110 EF-Tu.GTP.phe1-tRNA + 60 EF-Tu.GTP.pro1-tRNA + 30 EF-Tu.GTP.pro2-tRNA + 20 EF-Tu.GTP.proM-tRNA + 20 EF-Tu.GTP.ser1-tRNA + 40 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.ser3-tRNA + 50 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.trpT-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 100 EF-Tu.GTP.val1-tRNA + 50 EF-Tu.GTP.val2-tRNA + 90 EF-Tu.GTP.val3-tRNA + 9000 mg2 + 1 rib_ini_b3982_10 --> 1 rib_70_elo1_b3982_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_elo_b3982_10_rib2	Translation elongation 2 b3982 10 ribosome(s)	1790 h2o + 1 rib_70_elo1_b3982_10_cplx --> 1790 EF-G.GDP + 1790 EF-Tu.GDP + 80 ala1_tRNA + 150 arg1_tRNA + 50 asn1_tRNA + 100 asp1_tRNA + 10 fmet_tRNA + 60 gln1_tRNA + 170 glu1_tRNA + 140 gly1_tRNA + 3580 h + 30 hisR_tRNA + 60 ile1_tRNA + 60 leu1_tRNA + 10 leu2_tRNA + 10 leuU_tRNA + 10 leuZ_tRNA + 110 lys1_tRNA + 70 met1_tRNA + 9000 mg2 + 110 phe1_tRNA + 3580 pi + 60 pro1_tRNA + 30 pro2_tRNA + 20 proM_tRNA + 1 rib_70_elo2_b3982_10_cplx + 20 ser1_tRNA + 40 ser2_tRNA + 10 ser3_tRNA + 50 serV_tRNA + 20 thr1_tRNA + 10 thr2_tRNA + 20 thr3_tRNA + 20 trpT_tRNA + 30 tyr1_tRNA + 100 val1_tRNA + 50 val2_tRNA + 90 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_elo_b3982_1_rib1	Translation elongation 1 b3982 1 ribosome(s)	180 EF-G.GTP + 8 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 17 EF-Tu.GTP.glu1-tRNA + 14 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 11 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 10 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 9 EF-Tu.GTP.val3-tRNA + 900 mg2 + 1 rib_ini_b3982_1 --> 1 rib_70_elo1_b3982_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_elo_b3982_1_rib2	Translation elongation 2 b3982 1 ribosome(s)	179 h2o + 1 rib_70_elo1_b3982_1_cplx --> 179 EF-G.GDP + 179 EF-Tu.GDP + 8 ala1_tRNA + 15 arg1_tRNA + 5 asn1_tRNA + 10 asp1_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 17 glu1_tRNA + 14 gly1_tRNA + 358 h + 3 hisR_tRNA + 6 ile1_tRNA + 6 leu1_tRNA + 1 leu2_tRNA + 1 leuU_tRNA + 1 leuZ_tRNA + 11 lys1_tRNA + 7 met1_tRNA + 900 mg2 + 11 phe1_tRNA + 358 pi + 6 pro1_tRNA + 3 pro2_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b3982_1_cplx + 2 ser1_tRNA + 4 ser2_tRNA + 1 ser3_tRNA + 5 serV_tRNA + 2 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 2 trpT_tRNA + 3 tyr1_tRNA + 10 val1_tRNA + 5 val2_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_elo_b3982_5_rib1	Translation elongation 1 b3982 5 ribosome(s)	900 EF-G.GTP + 40 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 75 EF-Tu.GTP.arg1-tRNA + 25 EF-Tu.GTP.asn1-tRNA + 50 EF-Tu.GTP.asp1-tRNA + 30 EF-Tu.GTP.gln1-tRNA + 85 EF-Tu.GTP.glu1-tRNA + 70 EF-Tu.GTP.gly1-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 30 EF-Tu.GTP.ile1-tRNA + 30 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 55 EF-Tu.GTP.lys1-tRNA + 35 EF-Tu.GTP.met1-tRNA + 55 EF-Tu.GTP.phe1-tRNA + 30 EF-Tu.GTP.pro1-tRNA + 15 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proM-tRNA + 10 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 25 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 50 EF-Tu.GTP.val1-tRNA + 25 EF-Tu.GTP.val2-tRNA + 45 EF-Tu.GTP.val3-tRNA + 4500 mg2 + 1 rib_ini_b3982_5 --> 1 rib_70_elo1_b3982_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_elo_b3982_5_rib2	Translation elongation 2 b3982 5 ribosome(s)	895 h2o + 1 rib_70_elo1_b3982_5_cplx --> 895 EF-G.GDP + 895 EF-Tu.GDP + 40 ala1_tRNA + 75 arg1_tRNA + 25 asn1_tRNA + 50 asp1_tRNA + 5 fmet_tRNA + 30 gln1_tRNA + 85 glu1_tRNA + 70 gly1_tRNA + 1790 h + 15 hisR_tRNA + 30 ile1_tRNA + 30 leu1_tRNA + 5 leu2_tRNA + 5 leuU_tRNA + 5 leuZ_tRNA + 55 lys1_tRNA + 35 met1_tRNA + 4500 mg2 + 55 phe1_tRNA + 1790 pi + 30 pro1_tRNA + 15 pro2_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b3982_5_cplx + 10 ser1_tRNA + 20 ser2_tRNA + 5 ser3_tRNA + 25 serV_tRNA + 10 thr1_tRNA + 5 thr2_tRNA + 10 thr3_tRNA + 10 trpT_tRNA + 15 tyr1_tRNA + 50 val1_tRNA + 25 val2_tRNA + 45 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_elo_b3983_1_rib1	Translation elongation 1 b3983 1 ribosome(s)	141 EF-G.GTP + 17 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 4 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.leu1-tRNA + 15 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 8 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 705 mg2 + 1 rib_ini_b3983_1 --> 1 rib_70_elo1_b3983_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.60E+01	4.60E+01	0	5.92E+01	59.18534	0	3.64E+01	36.36457
tl_elo_b3983_1_rib2	Translation elongation 2 b3983 1 ribosome(s)	140 h2o + 1 rib_70_elo1_b3983_1_cplx --> 140 EF-G.GDP + 140 EF-Tu.GDP + 17 ala1_tRNA + 3 ala2_tRNA + 4 arg1_tRNA + 4 asn1_tRNA + 5 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 1 gln2_tRNA + 6 glu1_tRNA + 12 gly1_tRNA + 280 h + 9 ile1_tRNA + 7 leu1_tRNA + 15 lys1_tRNA + 5 met1_tRNA + 705 mg2 + 4 phe1_tRNA + 280 pi + 8 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3983_1_cplx + 5 ser1_tRNA + 2 ser2_tRNA + 1 serV_tRNA + 4 thr1_tRNA + 5 thr2_tRNA + 2 tyr1_tRNA + 8 val1_tRNA + 1 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.60E+01	4.60E+01	0	5.92E+01	59.18534	0	3.64E+01	36.36457

tl_elo_b3983_4_rib1	Translation elongation 1 b3983 4 ribosome(s)	564 EF-G.GTP + 68 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 16 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.asn1-tRNA + 24 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 48 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.ile1-tRNA + 28 EF-Tu.GTP.leu1-tRNA + 60 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 32 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.proM-tRNA + 20 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serV-tRNA + 16 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 32 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 16 EF-Tu.GTP.val3-tRNA + 2820 mg2 + 1 rib_ini_b3983_4 --> 1 rib_70_elo1_b3983_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3983_4_rib2	Translation elongation 2 b3983 4 ribosome(s)	560 h2o + 1 rib_70_elo1_b3983_4_cplx --> 560 EF-G.GDP + 560 EF-Tu.GDP + 68 ala1_tRNA + 12 ala2_tRNA + 16 arg1_tRNA + 16 asn1_tRNA + 20 asp1_tRNA + 4 cysT_tRNA + 4 fmet_tRNA + 24 gln1_tRNA + 4 gln2_tRNA + 24 glu1_tRNA + 48 gly1_tRNA + 1120 h + 36 ile1_tRNA + 28 leu1_tRNA + 60 lys1_tRNA + 20 met1_tRNA + 2820 mg2 + 16 phe1_tRNA + 1120 pi + 32 pro1_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b3983_4_cplx + 20 ser1_tRNA + 8 ser2_tRNA + 4 serV_tRNA + 16 thr1_tRNA + 20 thr2_tRNA + 8 tyr1_tRNA + 32 val1_tRNA + 4 val2_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b3983_8_rib1	Translation elongation 1 b3983 8 ribosome(s)	1128 EF-G.GTP + 136 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 32 EF-Tu.GTP.arg1-tRNA + 32 EF-Tu.GTP.asn1-tRNA + 48 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 48 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 48 EF-Tu.GTP.glu1-tRNA + 96 EF-Tu.GTP.gly1-tRNA + 72 EF-Tu.GTP.ile1-tRNA + 56 EF-Tu.GTP.leu1-tRNA + 120 EF-Tu.GTP.lys1-tRNA + 40 EF-Tu.GTP.met1-tRNA + 32 EF-Tu.GTP.phe1-tRNA + 64 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.proM-tRNA + 40 EF-Tu.GTP.ser1-tRNA + 16 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.serV-tRNA + 32 EF-Tu.GTP.thr1-tRNA + 40 EF-Tu.GTP.thr2-tRNA + 16 EF-Tu.GTP.tyr1-tRNA + 64 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 32 EF-Tu.GTP.val3-tRNA + 5640 mg2 + 1 rib_ini_b3983_8 --> 1 rib_70_elo1_b3983_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_elo_b3983_8_rib2	Translation elongation 2 b3983 8 ribosome(s)	1120 h2o + 1 rib_70_elo1_b3983_8_cplx --> 1120 EF-G.GDP + 1120 EF-Tu.GDP + 136 ala1_tRNA + 24 ala2_tRNA + 32 arg1_tRNA + 32 asn1_tRNA + 40 asp1_tRNA + 8 cysT_tRNA + 8 fmet_tRNA + 48 gln1_tRNA + 8 gln2_tRNA + 48 glu1_tRNA + 96 gly1_tRNA + 2240 h + 72 ile1_tRNA + 56 leu1_tRNA + 120 lys1_tRNA + 40 met1_tRNA + 5640 mg2 + 32 phe1_tRNA + 2240 pi + 64 pro1_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b3983_8_cplx + 40 ser1_tRNA + 16 ser2_tRNA + 8 serV_tRNA + 32 thr1_tRNA + 40 thr2_tRNA + 16 tyr1_tRNA + 64 val1_tRNA + 8 val2_tRNA + 32 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_elo_b3984_13_rib1	Translation elongation 1 b3984 13 ribosome(s)	3029 EF-G.GTP + 416 EF-Tu.GTP.ala1-tRNA + 13 EF-Tu.GTP.ala2-tRNA + 143 EF-Tu.GTP.arg1-tRNA + 156 EF-Tu.GTP.asn1-tRNA + 182 EF-Tu.GTP.asp1-tRNA + 104 EF-Tu.GTP.gln1-tRNA + 13 EF-Tu.GTP.gln2-tRNA + 143 EF-Tu.GTP.glu1-tRNA + 260 EF-Tu.GTP.gly1-tRNA + 26 EF-Tu.GTP.hisR-tRNA + 143 EF-Tu.GTP.ile1-tRNA + 208 EF-Tu.GTP.leu1-tRNA + 13 EF-Tu.GTP.leuU-tRNA + 299 EF-Tu.GTP.lys1-tRNA + 78 EF-Tu.GTP.met1-tRNA + 52 EF-Tu.GTP.phe1-tRNA + 78 EF-Tu.GTP.pro1-tRNA + 13 EF-Tu.GTP.proM-tRNA + 26 EF-Tu.GTP.ser1-tRNA + 39 EF-Tu.GTP.ser2-tRNA + 39 EF-Tu.GTP.serV-tRNA + 91 EF-Tu.GTP.thr1-tRNA + 65 EF-Tu.GTP.thr2-tRNA + 13 EF-Tu.GTP.thrU-tRNA + 39 EF-Tu.GTP.tyr1-tRNA + 169 EF-Tu.GTP.val1-tRNA + 208 EF-Tu.GTP.val3-tRNA + 15145 mg2 + 1 rib_ini_b3984_13 --> 1 rib_70_elo1_b3984_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.66E+00	8.66E+00	0	6.38E+00	6.375385	0	6.38E+00	6.375385
tl_elo_b3984_13_rib2	Translation elongation 2 b3984 13 ribosome(s)	3016 h2o + 1 rib_70_elo1_b3984_13_cplx --> 3016 EF-G.GDP + 3016 EF-Tu.GDP + 416 ala1_tRNA + 13 ala2_tRNA + 143 arg1_tRNA + 143 asn1_tRNA + 182 asp1_tRNA + 13 fmet_tRNA + 104 gln1_tRNA + 13 gln2_tRNA + 143 glu1_tRNA + 260 gly1_tRNA + 6032 h + 26 hisR_tRNA + 143 ile1_tRNA + 208 leu1_tRNA + 13 leuU_tRNA + 299 lys1_tRNA + 78 met1_tRNA + 15145 mg2 + 52 phe1_tRNA + 6032 pi + 78 pro1_tRNA + 13 proM_tRNA + 1 rib_70_elo2_b3984_13_cplx + 26 ser1_tRNA + 39 ser2_tRNA + 39 serV_tRNA + 91 thr1_tRNA + 65 thr2_tRNA + 13 thrU_tRNA + 39 tyr1_tRNA + 169 val1_tRNA + 208 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.66E+00	8.66E+00	0	6.38E+00	6.375385	0	6.38E+00	6.375385
tl_elo_b3984_1_rib1	Translation elongation 1 b3984 1 ribosome(s)	233 EF-G.GTP + 32 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 11 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 11 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 23 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 13 EF-Tu.GTP.val1-tRNA + 16 EF-Tu.GTP.val3-tRNA + 1165 mg2 + 1 rib_ini_b3984_1 --> 1 rib_70_elo1_b3984_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.96E+01	1.96E+01	0	3.10E+01	30.95693	0	9.32E+00	9.32475
tl_elo_b3984_1_rib2	Translation elongation 2 b3984 1 ribosome(s)	232 h2o + 1 rib_70_elo1_b3984_1_cplx --> 232 EF-G.GDP + 232 EF-Tu.GDP + 32 ala1_tRNA + 1 ala2_tRNA + 11 arg1_tRNA + 11 asn1_tRNA + 14 asp1_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 1 gln2_tRNA + 11 glu1_tRNA + 20 gly1_tRNA + 464 h + 2 hisR_tRNA + 11 ile1_tRNA + 16 leu1_tRNA + 1 leuU_tRNA + 23 lys1_tRNA + 6 met1_tRNA + 1165 mg2 + 4 phe1_tRNA + 464 pi + 6 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b3984_1_cplx + 2 ser1_tRNA + 3 ser2_tRNA + 3 serV_tRNA + 7 thr1_tRNA + 5 thr2_tRNA + 1 thrU_tRNA + 3 tyr1_tRNA + 13 val1_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.96E+01	1.96E+01	0	3.10E+01	30.95693	0	9.32E+00	9.32475

tl_elo_b3984_6_rib1	Translation elongation 1 b3984 6 ribosome(s)	1398 EF-G.GTP + 192 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 66 EF-Tu.GTP.arg1-tRNA + 72 EF-Tu.GTP.asn1-tRNA + 84 EF-Tu.GTP.asp1-tRNA + 48 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 66 EF-Tu.GTP.glu1-tRNA + 120 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 66 EF-Tu.GTP.ile1-tRNA + 96 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 138 EF-Tu.GTP.lys1-tRNA + 36 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 36 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.serV-tRNA + 42 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thrU-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 78 EF-Tu.GTP.val1-tRNA + 96 EF-Tu.GTP.val3-tRNA + 6990 mg2 + 1 rib_ini_b3984_6 --> 1 rib_70_elo1_b3984_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	1.38E+01	13.81333	0	1.34E+01	13.389
tl_elo_b3984_6_rib2	Translation elongation 2 b3984 6 ribosome(s)	1392 h2o + 1 rib_70_elo1_b3984_6_cplx --> 1392 EF-G.GDP + 1392 EF-Tu.GDP + 192 ala1_tRNA + 6 ala2_tRNA + 66 arg1_tRNA + 66 asn1_tRNA + 84 asp1_tRNA + 6 fmet_tRNA + 48 gln1_tRNA + 6 gln2_tRNA + 66 glu1_tRNA + 120 gly1_tRNA + 2784 h + 12 hisR_tRNA + 66 ile1_tRNA + 96 leu1_tRNA + 6 leuU_tRNA + 138 lys1_tRNA + 36 met1_tRNA + 6990 mg2 + 24 phe1_tRNA + 2784 pi + 36 pro1_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b3984_6_cplx + 12 ser1_tRNA + 18 ser2_tRNA + 18 serV_tRNA + 42 thr1_tRNA + 30 thr2_tRNA + 6 thrU_tRNA + 18 tyr1_tRNA + 78 val1_tRNA + 96 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	1.38E+01	13.81333	0	1.34E+01	13.389
tl_elo_b3985_1_rib1	Translation elongation 1 b3985 1 ribosome(s)	164 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 1 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 15 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 5 EF-Tu.GTP.ile1-tRNA + 13 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 820 mg2 + 1 rib_ini_b3985_1 --> 1 rib_70_elo1_b3985_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.34E+01	2.34E+01	0	3.75E+01	37.54288	0	1.16E+01	11.56763
tl_elo_b3985_1_rib2	Translation elongation 2 b3985 1 ribosome(s)	163 h2o + 1 rib_70_elo1_b3985_1_cplx --> 163 EF-G.GDP + 163 EF-Tu.GDP + 29 ala1_tRNA + 3 ala2_tRNA + 12 arg1_tRNA + 3 asn1_tRNA + 6 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 1 gln1_tRNA + 2 gln2_tRNA + 15 glu1_tRNA + 9 gly1_tRNA + 326 h + 1 hisR_tRNA + 5 ile1_tRNA + 13 leu1_tRNA + 1 leuU_tRNA + 1 leuZ_tRNA + 12 lys1_tRNA + 5 met1_tRNA + 820 mg2 + 6 phe1_tRNA + 326 pi + 5 pro1_tRNA + 1 rib_70_elo2_b3985_1_cplx + 1 ser1_tRNA + 3 ser2_tRNA + 1 ser3_tRNA + 1 serV_tRNA + 4 thr1_tRNA + 5 thr2_tRNA + 3 tyr1_tRNA + 6 val1_tRNA + 2 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.34E+01	2.34E+01	0	3.75E+01	37.54288	0	1.16E+01	11.56763
tl_elo_b3985_4_rib1	Translation elongation 1 b3985 4 ribosome(s)	656 EF-G.GTP + 120 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 48 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 24 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 60 EF-Tu.GTP.glu1-tRNA + 36 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 52 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 48 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serV-tRNA + 16 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 24 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 28 EF-Tu.GTP.val3-tRNA + 3280 mg2 + 1 rib_ini_b3985_4 --> 1 rib_70_elo1_b3985_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.43E+01	2.43E+01	0	2.07E+01	20.72	0	1.72E+01	17.189
tl_elo_b3985_4_rib2	Translation elongation 2 b3985 4 ribosome(s)	652 h2o + 1 rib_70_elo1_b3985_4_cplx --> 652 EF-G.GDP + 652 EF-Tu.GDP + 116 ala1_tRNA + 12 ala2_tRNA + 48 arg1_tRNA + 12 asn1_tRNA + 24 asp1_tRNA + 4 cysT_tRNA + 4 fmet_tRNA + 4 gln1_tRNA + 8 gln2_tRNA + 60 glu1_tRNA + 36 gly1_tRNA + 1304 h + 4 hisR_tRNA + 20 ile1_tRNA + 52 leu1_tRNA + 4 leuU_tRNA + 4 leuZ_tRNA + 48 lys1_tRNA + 20 met1_tRNA + 3280 mg2 + 24 phe1_tRNA + 1304 pi + 20 pro1_tRNA + 1 rib_70_elo2_b3985_4_cplx + 4 ser1_tRNA + 12 ser2_tRNA + 4 ser3_tRNA + 4 serV_tRNA + 16 thr1_tRNA + 20 thr2_tRNA + 12 tyr1_tRNA + 24 val1_tRNA + 8 val2_tRNA + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.43E+01	2.43E+01	0	2.07E+01	20.72	0	1.72E+01	17.189
tl_elo_b3985_9_rib1	Translation elongation 1 b3985 9 ribosome(s)	1476 EF-G.GTP + 270 EF-Tu.GTP.ala1-tRNA + 27 EF-Tu.GTP.ala2-tRNA + 108 EF-Tu.GTP.arg1-tRNA + 27 EF-Tu.GTP.asn1-tRNA + 54 EF-Tu.GTP.asp1-tRNA + 9 EF-Tu.GTP.cysT-tRNA + 9 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 135 EF-Tu.GTP.glu1-tRNA + 81 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 45 EF-Tu.GTP.ile1-tRNA + 117 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 9 EF-Tu.GTP.leuZ-tRNA + 108 EF-Tu.GTP.lys1-tRNA + 45 EF-Tu.GTP.met1-tRNA + 54 EF-Tu.GTP.phe1-tRNA + 45 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.ser1-tRNA + 27 EF-Tu.GTP.ser2-tRNA + 9 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serV-tRNA + 36 EF-Tu.GTP.thr1-tRNA + 45 EF-Tu.GTP.thr2-tRNA + 27 EF-Tu.GTP.tyr1-tRNA + 54 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 63 EF-Tu.GTP.val3-tRNA + 7380 mg2 + 1 rib_ini_b3985_9 --> 1 rib_70_elo1_b3985_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.25E+01	1.25E+01	0	9.21E+00	9.208889	0	9.21E+00	9.208889
tl_elo_b3985_9_rib2	Translation elongation 2 b3985 9 ribosome(s)	1467 h2o + 1 rib_70_elo1_b3985_9_cplx --> 1467 EF-G.GDP + 1467 EF-Tu.GDP + 261 ala1_tRNA + 27 ala2_tRNA + 108 arg1_tRNA + 27 asn1_tRNA + 54 asp1_tRNA + 9 cysT_tRNA + 9 fmet_tRNA + 9 gln1_tRNA + 18 gln2_tRNA + 135 glu1_tRNA + 81 gly1_tRNA + 2934 h + 9 hisR_tRNA + 45 ile1_tRNA + 117 leu1_tRNA + 9 leuU_tRNA + 9 leuZ_tRNA + 108 lys1_tRNA + 45 met1_tRNA + 7380 mg2 + 54 phe1_tRNA + 2934 pi + 45 pro1_tRNA + 1 rib_70_elo2_b3985_9_cplx + 9 ser1_tRNA + 27 ser2_tRNA + 9 ser3_tRNA + 9 serV_tRNA + 36 thr1_tRNA + 45 thr2_tRNA + 27 tyr1_tRNA + 54 val1_tRNA + 18 val2_tRNA + 63 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.25E+01	1.25E+01	0	9.21E+00	9.208889	0	9.21E+00	9.208889

tl_elo_b3986_1_rib1	Translation elongation 1 b3986 1 ribosome(s)	120 EF-G.GTP + 28 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 8 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val3-tRNA + 600 mg2 + 1 rib_ini_b3986_1 --> 1 rib_70_elo1_b3986_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	3.32E+02	331.52	0	1.22E+02	121.5037
tl_elo_b3986_1_rib2	Translation elongation 2 b3986 1 ribosome(s)	119 h2o + 1 rib_70_elo1_b3986_1_cplx --> 119 EF-G.GDP + 119 EF-Tu.GDP + 28 ala1_tRNA + 1 arg1_tRNA + 1 asn1_tRNA + 6 asp1_tRNA + 1 fmet_tRNA + 1 gln2_tRNA + 16 glu1_tRNA + 8 gly1_tRNA + 238 h + 6 ile1_tRNA + 8 leu1_tRNA + 12 lys1_tRNA + 3 met1_tRNA + 600 mg2 + 2 phe1_tRNA + 238 pi + 2 pro1_tRNA + 1 rib_70_elo2_b3986_1_cplx + 1 ser1_tRNA + 4 ser2_tRNA + 1 serV_tRNA + 3 thr2_tRNA + 8 val1_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	3.32E+02	331.52	0	1.22E+02	121.5037
tl_elo_b3986_3_rib1	Translation elongation 1 b3986 3 ribosome(s)	360 EF-G.GTP + 84 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 48 EF-Tu.GTP.glu1-tRNA + 24 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.ile1-tRNA + 24 EF-Tu.GTP.leu1-tRNA + 39 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 24 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val3-tRNA + 1800 mg2 + 1 rib_ini_b3986_3 --> 1 rib_70_elo1_b3986_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	1.11E+02	110.5067	0	1.11E+02	110.5067
tl_elo_b3986_3_rib2	Translation elongation 2 b3986 3 ribosome(s)	357 h2o + 1 rib_70_elo1_b3986_3_cplx --> 357 EF-G.GDP + 357 EF-Tu.GDP + 84 ala1_tRNA + 3 arg1_tRNA + 3 asn1_tRNA + 18 asp1_tRNA + 3 fmet_tRNA + 3 gln2_tRNA + 48 glu1_tRNA + 24 gly1_tRNA + 714 h + 18 ile1_tRNA + 24 leu1_tRNA + 36 lys1_tRNA + 9 met1_tRNA + 1800 mg2 + 6 phe1_tRNA + 714 pi + 6 pro1_tRNA + 1 rib_70_elo2_b3986_3_cplx + 3 ser1_tRNA + 12 ser2_tRNA + 3 serV_tRNA + 9 thr2_tRNA + 24 val1_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	1.11E+02	110.5067	0	1.11E+02	110.5067
tl_elo_b3986_7_rib1	Translation elongation 1 b3986 7 ribosome(s)	840 EF-G.GTP + 196 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 42 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 112 EF-Tu.GTP.glu1-tRNA + 56 EF-Tu.GTP.gly1-tRNA + 42 EF-Tu.GTP.ile1-tRNA + 56 EF-Tu.GTP.leu1-tRNA + 91 EF-Tu.GTP.lys1-tRNA + 21 EF-Tu.GTP.met1-tRNA + 14 EF-Tu.GTP.phe1-tRNA + 14 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 28 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.serV-tRNA + 21 EF-Tu.GTP.thr2-tRNA + 56 EF-Tu.GTP.val1-tRNA + 56 EF-Tu.GTP.val3-tRNA + 4200 mg2 + 1 rib_ini_b3986_7 --> 1 rib_70_elo1_b3986_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	4.74E+01	47.36	0	4.74E+01	47.36
tl_elo_b3986_7_rib2	Translation elongation 2 b3986 7 ribosome(s)	833 h2o + 1 rib_70_elo1_b3986_7_cplx --> 833 EF-G.GDP + 833 EF-Tu.GDP + 196 ala1_tRNA + 7 arg1_tRNA + 7 asn1_tRNA + 42 asp1_tRNA + 7 fmet_tRNA + 7 gln2_tRNA + 112 glu1_tRNA + 56 gly1_tRNA + 1666 h + 42 ile1_tRNA + 56 leu1_tRNA + 84 lys1_tRNA + 21 met1_tRNA + 4200 mg2 + 14 phe1_tRNA + 1666 pi + 14 pro1_tRNA + 1 rib_70_elo2_b3986_7_cplx + 7 ser1_tRNA + 28 ser2_tRNA + 7 serV_tRNA + 21 thr2_tRNA + 56 val1_tRNA + 56 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	4.74E+01	47.36	0	4.74E+01	47.36
tl_elo_b3987_1_rib1	Translation elongation 1 b3987 1 ribosome(s)	1341 EF-G.GTP + 70 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 90 EF-Tu.GTP.arg1-tRNA + 51 EF-Tu.GTP.asn1-tRNA + 92 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 50 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 122 EF-Tu.GTP.glu1-tRNA + 104 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 19 EF-Tu.GTP.hisR-tRNA + 84 EF-Tu.GTP.ile1-tRNA + 99 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 21 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 80 EF-Tu.GTP.lys1-tRNA + 36 EF-Tu.GTP.met1-tRNA + 44 EF-Tu.GTP.phe1-tRNA + 38 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proM-tRNA + 31 EF-Tu.GTP.ser1-tRNA + 23 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 17 EF-Tu.GTP.serV-tRNA + 34 EF-Tu.GTP.thr1-tRNA + 17 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 43 EF-Tu.GTP.tyr1-tRNA + 55 EF-Tu.GTP.val1-tRNA + 13 EF-Tu.GTP.val2-tRNA + 41 EF-Tu.GTP.val3-tRNA + 6705 mg2 + 1 rib_ini_b3987_1 --> 1 rib_70_elo1_b3987_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.69E+01	1.69E+01	0	2.83E+01	28.32872	0	2.21E+00	2.209
tl_elo_b3987_1_rib2	Translation elongation 2 b3987 1 ribosome(s)	1340 h2o + 1 rib_70_elo1_b3987_1_cplx --> 1340 EF-G.GDP + 1340 EF-Tu.GDP + 70 ala1_tRNA + 9 ala2_tRNA + 90 arg1_tRNA + 51 asn1_tRNA + 92 asp1_tRNA + 7 cysT_tRNA + 1 fmet_tRNA + 50 gln1_tRNA + 8 gln2_tRNA + 121 glu1_tRNA + 104 gly1_tRNA + 2 glyU_tRNA + 2680 h + 19 hisR_tRNA + 84 ile1_tRNA + 99 leu1_tRNA + 6 leu2_tRNA + 21 leuU_tRNA + 1 leuZ_tRNA + 80 lys1_tRNA + 36 met1_tRNA + 6705 mg2 + 44 phe1_tRNA + 2680 pi + 38 pro1_tRNA + 8 pro2_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b3987_1_cplx + 31 ser1_tRNA + 23 ser2_tRNA + 3 ser3_tRNA + 17 serV_tRNA + 34 thr1_tRNA + 17 thr2_tRNA + 6 thr3_tRNA + 3 thrU_tRNA + 4 trpT_tRNA + 43 tyr1_tRNA + 55 val1_tRNA + 13 val2_tRNA + 41 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.69E+01	1.69E+01	0	2.83E+01	28.32872	0	2.21E+00	2.209
tl_elo_b3987_39_rib1	Translation elongation 1 b3987 39 ribosome(s)	52299 EF-G.GTP + 2730 EF-Tu.GTP.ala1-tRNA + 351 EF-Tu.GTP.ala2-tRNA + 3510 EF-Tu.GTP.arg1-tRNA + 1989 EF-Tu.GTP.asn1-tRNA + 3588 EF-Tu.GTP.asp1-tRNA + 273 EF-Tu.GTP.cysT-tRNA + 1950 EF-Tu.GTP.gln1-tRNA + 312 EF-Tu.GTP.gln2-tRNA + 4758 EF-Tu.GTP.glu1-tRNA + 4056 EF-Tu.GTP.gly1-tRNA + 78 EF-Tu.GTP.glyU-tRNA + 741 EF-Tu.GTP.hisR-tRNA + 3276 EF-Tu.GTP.ile1-tRNA + 3861 EF-Tu.GTP.leu1-tRNA + 234 EF-Tu.GTP.leu2-tRNA + 819 EF-Tu.GTP.leuU-tRNA + 39 EF-Tu.GTP.leuZ-tRNA + 3120 EF-Tu.GTP.lys1-tRNA + 1404 EF-Tu.GTP.met1-tRNA + 1716 EF-Tu.GTP.phe1-tRNA + 1482 EF-Tu.GTP.pro1-tRNA + 312 EF-Tu.GTP.pro2-tRNA + 390 EF-Tu.GTP.proM-tRNA + 1209 EF-Tu.GTP.ser1-tRNA + 897 EF-Tu.GTP.ser2-tRNA + 117 EF-Tu.GTP.ser3-tRNA + 663 EF-Tu.GTP.serV-tRNA + 1326 EF-Tu.GTP.thr1-tRNA + 663 EF-Tu.GTP.thr2-tRNA + 234 EF-Tu.GTP.thr3-tRNA + 117 EF-Tu.GTP.thrU-tRNA + 156 EF-Tu.GTP.trpT-tRNA + 1677 EF-Tu.GTP.tyr1-tRNA + 2145 EF-Tu.GTP.val1-tRNA + 507 EF-Tu.GTP.val2-tRNA + 1599 EF-Tu.GTP.val3-tRNA + 261495 mg2 + 1 rib_ini_b3987_39 --> 1 rib_70_elo1_b3987_39_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.99E+00	9.99E+00	0	1.49E+01	14.89415	0	2.21E+00	2.209

tl_elo_b3987_39_rib2	Translation elongation 2 b3987 39 ribosome(s)	52260 h2o + 1 rib_70_elo1_b3987_39_cplx --> 52260 EF-G.GDP + 52260 EF-Tu.GDP + 2730 ala1_tRNA + 351 ala2_tRNA + 3510 arg1_tRNA + 1989 asn1_tRNA + 3588 asp1_tRNA + 273 cysT_tRNA + 39 fmet_tRNA + 1950 gln1_tRNA + 312 gln2_tRNA + 4719 glu1_tRNA + 4056 gly1_tRNA + 78 glyU_tRNA + 104520 h + 741 hisR_tRNA + 3276 ile1_tRNA + 3861 leu1_tRNA + 234 leu2_tRNA + 819 leuU_tRNA + 39 leuZ_tRNA + 3120 lys1_tRNA + 1404 met1_tRNA + 261495 mg2 + 1716 phe1_tRNA + 104520 pi + 1482 pro1_tRNA + 312 pro2_tRNA + 390 proM_tRNA + 1 rib_70_elo2_b3987_39_cplx + 1209 ser1_tRNA + 897 ser2_tRNA + 117 ser3_tRNA + 663 serV_tRNA + 1326 thr1_tRNA + 663 thr2_tRNA + 234 thr3_tRNA + 117 thrU_tRNA + 156 trpT_tRNA + 1677 tyr1_tRNA + 2145 val1_tRNA + 507 val2_tRNA + 1599 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.99E+00	9.99E+00	0	1.49E+01	14.89415	0	2.21E+00	2.209
tl_elo_b3987_78_rib1	Translation elongation 1 b3987 78 ribosome(s)	104598 EF-G.GTP + 5460 EF-Tu.GTP.ala1-tRNA + 702 EF-Tu.GTP.ala2-tRNA + 7020 EF-Tu.GTP.arg1-tRNA + 3978 EF-Tu.GTP.asn1-tRNA + 7176 EF-Tu.GTP.asp1-tRNA + 546 EF-Tu.GTP.cysT-tRNA + 3900 EF-Tu.GTP.gln1-tRNA + 624 EF-Tu.GTP.gln2-tRNA + 9516 EF-Tu.GTP.glu1-tRNA + 8112 EF-Tu.GTP.gly1-tRNA + 156 EF-Tu.GTP.glyU-tRNA + 1482 EF-Tu.GTP.hisR-tRNA + 6552 EF-Tu.GTP.ile1-tRNA + 7722 EF-Tu.GTP.leu1-tRNA + 468 EF-Tu.GTP.leu2-tRNA + 1638 EF-Tu.GTP.leuU-tRNA + 78 EF-Tu.GTP.leuZ-tRNA + 6240 EF-Tu.GTP.lys1-tRNA + 2808 EF-Tu.GTP.met1-tRNA + 3432 EF-Tu.GTP.phe1-tRNA + 2964 EF-Tu.GTP.pro1-tRNA + 624 EF-Tu.GTP.pro2-tRNA + 780 EF-Tu.GTP.proM-tRNA + 2418 EF-Tu.GTP.ser1-tRNA + 1794 EF-Tu.GTP.ser2-tRNA + 234 EF-Tu.GTP.ser3-tRNA + 1326 EF-Tu.GTP.serV-tRNA + 2652 EF-Tu.GTP.thr1-tRNA + 1326 EF-Tu.GTP.thr2-tRNA + 468 EF-Tu.GTP.thr3-tRNA + 234 EF-Tu.GTP.thrU-tRNA + 312 EF-Tu.GTP.trpT-tRNA + 3354 EF-Tu.GTP.tyr1-tRNA + 4290 EF-Tu.GTP.val1-tRNA + 1014 EF-Tu.GTP.val2-tRNA + 3198 EF-Tu.GTP.val3-tRNA + 522990 mg2 + 1 rib_ini_b3987_78 --> 1 rib_70_elo1_b3987_78_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+00	6.18E+00	0	8.34E+00	8.341509	0	1.31E+00	1.313051
tl_elo_b3987_78_rib2	Translation elongation 2 b3987 78 ribosome(s)	104520 h2o + 1 rib_70_elo1_b3987_78_cplx --> 104520 EF-G.GDP + 104520 EF-Tu.GDP + 5460 ala1_tRNA + 702 ala2_tRNA + 7020 arg1_tRNA + 3978 asn1_tRNA + 7176 asp1_tRNA + 546 cysT_tRNA + 78 fmet_tRNA + 3900 gln1_tRNA + 624 gln2_tRNA + 9438 glu1_tRNA + 8112 gly1_tRNA + 156 glyU_tRNA + 209040 h + 1482 hisR_tRNA + 6552 ile1_tRNA + 7722 leu1_tRNA + 468 leu2_tRNA + 1638 leuU_tRNA + 78 leuZ_tRNA + 6240 lys1_tRNA + 2808 met1_tRNA + 522990 mg2 + 3432 phe1_tRNA + 209040 pi + 2964 pro1_tRNA + 624 pro2_tRNA + 780 proM_tRNA + 1 rib_70_elo2_b3987_78_cplx + 2418 ser1_tRNA + 1794 ser2_tRNA + 234 ser3_tRNA + 1326 serV_tRNA + 2652 thr1_tRNA + 1326 thr2_tRNA + 468 thr3_tRNA + 234 thrU_tRNA + 312 trpT_tRNA + 3354 tyr1_tRNA + 4290 val1_tRNA + 1014 val2_tRNA + 3198 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+00	6.18E+00	0	8.34E+00	8.341509	0	1.31E+00	1.313051
tl_elo_b3988_1_rib1	Translation elongation 1 b3988 1 ribosome(s)	1406 EF-G.GTP + 113 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.ala2-tRNA + 99 EF-Tu.GTP.arg1-tRNA + 48 EF-Tu.GTP.asn1-tRNA + 81 EF-Tu.GTP.asp1-tRNA + 15 EF-Tu.GTP.cysT-tRNA + 47 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 109 EF-Tu.GTP.glu1-tRNA + 113 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 21 EF-Tu.GTP.hisR-tRNA + 92 EF-Tu.GTP.ile1-tRNA + 125 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 87 EF-Tu.GTP.lys1-tRNA + 35 EF-Tu.GTP.met1-tRNA + 35 EF-Tu.GTP.phe1-tRNA + 45 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 9 EF-Tu.GTP.proM-tRNA + 27 EF-Tu.GTP.ser1-tRNA + 24 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 14 EF-Tu.GTP.serV-tRNA + 46 EF-Tu.GTP.thr1-tRNA + 23 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 9 EF-Tu.GTP.trpT-tRNA + 34 EF-Tu.GTP.tyr1-tRNA + 48 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 53 EF-Tu.GTP.val3-tRNA + 7030 mg2 + 1 rib_ini_b3988_1 --> 1 rib_70_elo1_b3988_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.60E+01	1.60E+01	0	2.74E+01	27.36872	0	1.25E+00	1.249
tl_elo_b3988_1_rib2	Translation elongation 2 b3988 1 ribosome(s)	1405 h2o + 1 rib_70_elo1_b3988_1_cplx --> 1405 EF-G.GDP + 1405 EF-Tu.GDP + 113 ala1_tRNA + 11 ala2_tRNA + 99 arg1_tRNA + 48 asn1_tRNA + 81 asp1_tRNA + 15 cysT_tRNA + 1 fmet_tRNA + 47 gln1_tRNA + 3 gln2_tRNA + 108 glu1_tRNA + 113 gly1_tRNA + 2 glyU_tRNA + 2810 h + 21 hisR_tRNA + 92 ile1_tRNA + 125 leu1_tRNA + 1 leu2_tRNA + 10 leuU_tRNA + 3 leuZ_tRNA + 87 lys1_tRNA + 35 met1_tRNA + 7030 mg2 + 35 phe1_tRNA + 2810 pi + 45 pro1_tRNA + 3 pro2_tRNA + 9 proM_tRNA + 1 rib_70_elo2_b3988_1_cplx + 27 ser1_tRNA + 24 ser2_tRNA + 5 ser3_tRNA + 1 serT_tRNA + 14 serV_tRNA + 46 thr1_tRNA + 23 thr2_tRNA + 7 thr3_tRNA + 1 thrU_tRNA + 9 trpT_tRNA + 34 tyr1_tRNA + 48 val1_tRNA + 7 val2_tRNA + 53 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.60E+01	1.60E+01	0	2.74E+01	27.36872	0	1.25E+00	1.249
tl_elo_b3988_41_rib1	Translation elongation 1 b3988 41 ribosome(s)	57646 EF-G.GTP + 4633 EF-Tu.GTP.ala1-tRNA + 451 EF-Tu.GTP.ala2-tRNA + 4059 EF-Tu.GTP.arg1-tRNA + 1968 EF-Tu.GTP.asn1-tRNA + 3321 EF-Tu.GTP.asp1-tRNA + 615 EF-Tu.GTP.cysT-tRNA + 1927 EF-Tu.GTP.gln1-tRNA + 123 EF-Tu.GTP.gln2-tRNA + 4469 EF-Tu.GTP.glu1-tRNA + 4633 EF-Tu.GTP.gly1-tRNA + 82 EF-Tu.GTP.glyU-tRNA + 861 EF-Tu.GTP.hisR-tRNA + 3772 EF-Tu.GTP.ile1-tRNA + 5125 EF-Tu.GTP.leu1-tRNA + 41 EF-Tu.GTP.leu2-tRNA + 410 EF-Tu.GTP.leuU-tRNA + 123 EF-Tu.GTP.leuZ-tRNA + 3567 EF-Tu.GTP.lys1-tRNA + 1435 EF-Tu.GTP.met1-tRNA + 1435 EF-Tu.GTP.phe1-tRNA + 1845 EF-Tu.GTP.pro1-tRNA + 123 EF-Tu.GTP.pro2-tRNA + 369 EF-Tu.GTP.proM-tRNA + 1107 EF-Tu.GTP.ser1-tRNA + 984 EF-Tu.GTP.ser2-tRNA + 205 EF-Tu.GTP.ser3-tRNA + 41 EF-Tu.GTP.serT-tRNA + 574 EF-Tu.GTP.serV-tRNA + 1886 EF-Tu.GTP.thr1-tRNA + 943 EF-Tu.GTP.thr2-tRNA + 287 EF-Tu.GTP.thr3-tRNA + 41 EF-Tu.GTP.thrU-tRNA + 369 EF-Tu.GTP.trpT-tRNA + 1394 EF-Tu.GTP.tyr1-tRNA + 1968 EF-Tu.GTP.val1-tRNA + 287 EF-Tu.GTP.val2-tRNA + 2173 EF-Tu.GTP.val3-tRNA + 288230 mg2 + 1 rib_ini_b3988_41 --> 1 rib_70_elo1_b3988_41_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.31E+00	9.31E+00	0	1.41E+01	14.07016	0	1.25E+00	1.249

tl_elo_b3988_41_rib2	Translation elongation 2 b3988 41 ribosome(s)	57605 h2o + 1 rib_70_elo1_b3988_41_cplx --> 57605 EF-G.GDP + 57605 EF-Tu.GDP + 4633 ala1_tRNA + 451 ala2_tRNA + 4059 arg1_tRNA + 1968 asn1_tRNA + 3321 asp1_tRNA + 615 cysT_tRNA + 41 fmet_tRNA + 1927 gln1_tRNA + 123 gln2_tRNA + 4428 glu1_tRNA + 4633 gly1_tRNA + 82 glyU_tRNA + 115210 h + 861 hisR_tRNA + 3772 ile1_tRNA + 5125 leu1_tRNA + 41 leu2_tRNA + 410 leuU_tRNA + 123 leuZ_tRNA + 3567 lys1_tRNA + 1435 met1_tRNA + 288230 mg2 + 1435 phe1_tRNA + 115210 pi + 1845 pro1_tRNA + 123 pro2_tRNA + 369 proM_tRNA + 1 rib_70_elo2_b3988_41_cplx + 1107 ser1_tRNA + 984 ser2_tRNA + 205 ser3_tRNA + 41 serT_tRNA + 574 serV_tRNA + 1886 thr1_tRNA + 943 thr2_tRNA + 287 thr3_tRNA + 41 thrU_tRNA + 369 trpT_tRNA + 1394 tyr1_tRNA + 1968 val1_tRNA + 287 val2_tRNA + 2173 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.31E+00	9.31E+00	0	1.41E+01	14.07016	0	1.25E+00	1.249
tl_elo_b3988_82_rib1	Translation elongation 1 b3988 82 ribosome(s)	115292 EF-G.GTP + 9266 EF-Tu.GTP.ala1-tRNA + 902 EF-Tu.GTP.ala2-tRNA + 8118 EF-Tu.GTP.arg1-tRNA + 3936 EF-Tu.GTP.asn1-tRNA + 6642 EF-Tu.GTP.asp1-tRNA + 1230 EF-Tu.GTP.cysT-tRNA + 3854 EF-Tu.GTP.gln1-tRNA + 246 EF-Tu.GTP.gln2-tRNA + 8938 EF-Tu.GTP.glu1-tRNA + 9266 EF-Tu.GTP.gly1-tRNA + 164 EF-Tu.GTP.glyU-tRNA + 1722 EF-Tu.GTP.hisR-tRNA + 7544 EF-Tu.GTP.ile1-tRNA + 10250 EF-Tu.GTP.leu1-tRNA + 82 EF-Tu.GTP.leu2-tRNA + 820 EF-Tu.GTP.leuU-tRNA + 246 EF-Tu.GTP.leuZ-tRNA + 7134 EF-Tu.GTP.lys1-tRNA + 2870 EF-Tu.GTP.met1-tRNA + 2870 EF-Tu.GTP.phe1-tRNA + 3690 EF-Tu.GTP.pro1-tRNA + 246 EF-Tu.GTP.pro2-tRNA + 738 EF-Tu.GTP.proM-tRNA + 2214 EF-Tu.GTP.ser1-tRNA + 1968 EF-Tu.GTP.ser2-tRNA + 410 EF-Tu.GTP.ser3-tRNA + 82 EF-Tu.GTP.serT-tRNA + 1148 EF-Tu.GTP.serV-tRNA + 3772 EF-Tu.GTP.thr1-tRNA + 1886 EF-Tu.GTP.thr2-tRNA + 574 EF-Tu.GTP.thr3-tRNA + 82 EF-Tu.GTP.thrU-tRNA + 738 EF-Tu.GTP.trpT-tRNA + 2788 EF-Tu.GTP.tyr1-tRNA + 3936 EF-Tu.GTP.val1-tRNA + 574 EF-Tu.GTP.val2-tRNA + 4346 EF-Tu.GTP.val3-tRNA + 576460 mg2 + 1 rib_ini_b3988_82 --> 1 rib_70_elo1_b3988_82_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.88E+00	5.88E+00	0	7.93E+00	7.934606	0	1.25E+00	1.249
tl_elo_b3988_82_rib2	Translation elongation 2 b3988 82 ribosome(s)	115210 h2o + 1 rib_70_elo1_b3988_82_cplx --> 115210 EF-G.GDP + 115210 EF-Tu.GDP + 9266 ala1_tRNA + 902 ala2_tRNA + 8118 arg1_tRNA + 3936 asn1_tRNA + 6642 asp1_tRNA + 1230 cysT_tRNA + 82 fmet_tRNA + 3854 gln1_tRNA + 246 gln2_tRNA + 8856 glu1_tRNA + 9266 gly1_tRNA + 164 glyU_tRNA + 230420 h + 1722 hisR_tRNA + 7544 ile1_tRNA + 10250 leu1_tRNA + 82 leu2_tRNA + 820 leuU_tRNA + 246 leuZ_tRNA + 7134 lys1_tRNA + 2870 met1_tRNA + 576460 mg2 + 2870 phe1_tRNA + 230420 pi + 3690 pro1_tRNA + 246 pro2_tRNA + 738 proM_tRNA + 1 rib_70_elo2_b3988_82_cplx + 2214 ser1_tRNA + 1968 ser2_tRNA + 410 ser3_tRNA + 82 serT_tRNA + 1148 serV_tRNA + 3772 thr1_tRNA + 1886 thr2_tRNA + 574 thr3_tRNA + 82 thrU_tRNA + 738 trpT_tRNA + 2788 tyr1_tRNA + 3936 val1_tRNA + 574 val2_tRNA + 4346 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.88E+00	5.88E+00	0	7.93E+00	7.934606	0	1.25E+00	1.249
tl_elo_b4022_17_rib1	Translation elongation 1 b4022 17 ribosome(s)	4913 EF-G.GTP + 136 EF-Tu.GTP.ala1-tRNA + 68 EF-Tu.GTP.ala2-tRNA + 357 EF-Tu.GTP.arg1-tRNA + 34 EF-Tu.GTP.argX-tRNA + 238 EF-Tu.GTP.asn1-tRNA + 289 EF-Tu.GTP.asp1-tRNA + 51 EF-Tu.GTP.cysT-tRNA + 85 EF-Tu.GTP.gln1-tRNA + 17 EF-Tu.GTP.gln2-tRNA + 374 EF-Tu.GTP.glu1-tRNA + 289 EF-Tu.GTP.gly1-tRNA + 17 EF-Tu.GTP.glyT-tRNA + 119 EF-Tu.GTP.glyU-tRNA + 68 EF-Tu.GTP.hisR-tRNA + 357 EF-Tu.GTP.ile1-tRNA + 187 EF-Tu.GTP.leu1-tRNA + 34 EF-Tu.GTP.leu2-tRNA + 102 EF-Tu.GTP.leuU-tRNA + 68 EF-Tu.GTP.leuZ-tRNA + 527 EF-Tu.GTP.lys1-tRNA + 68 EF-Tu.GTP.met1-tRNA + 170 EF-Tu.GTP.phe1-tRNA + 119 EF-Tu.GTP.pro1-tRNA + 34 EF-Tu.GTP.pro2-tRNA + 51 EF-Tu.GTP.proL-tRNA + 34 EF-Tu.GTP.proM-tRNA + 68 EF-Tu.GTP.ser1-tRNA + 17 EF-Tu.GTP.ser2-tRNA + 17 EF-Tu.GTP.ser3-tRNA + 51 EF-Tu.GTP.serT-tRNA + 119 EF-Tu.GTP.serV-tRNA + 153 EF-Tu.GTP.thr1-tRNA + 51 EF-Tu.GTP.thr3-tRNA + 34 EF-Tu.GTP.thrU-tRNA + 17 EF-Tu.GTP.trpT-tRNA + 68 EF-Tu.GTP.tyr1-tRNA + 238 EF-Tu.GTP.val1-tRNA + 85 EF-Tu.GTP.val2-tRNA + 102 EF-Tu.GTP.val3-tRNA + 24565 mg2 + 1 rib_ini_b4022_17 --> 1 rib_70_elo1_b4022_17_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641
tl_elo_b4022_17_rib2	Translation elongation 2 b4022 17 ribosome(s)	4896 h2o + 1 rib_70_elo1_b4022_17_cplx --> 4896 EF-G.GDP + 4896 EF-Tu.GDP + 136 ala1_tRNA + 68 ala2_tRNA + 340 arg1_tRNA + 34 argX_tRNA + 238 asn1_tRNA + 289 asp1_tRNA + 51 cysT_tRNA + 17 fmet_tRNA + 85 gln1_tRNA + 17 gln2_tRNA + 374 glu1_tRNA + 289 gly1_tRNA + 17 glyT_tRNA + 119 glyU_tRNA + 9792 h + 68 hisR_tRNA + 357 ile1_tRNA + 187 leu1_tRNA + 34 leu2_tRNA + 102 leuU_tRNA + 68 leuZ_tRNA + 527 lys1_tRNA + 68 met1_tRNA + 24565 mg2 + 170 phe1_tRNA + 9792 pi + 119 pro1_tRNA + 34 pro2_tRNA + 51 proL_tRNA + 34 proM_tRNA + 1 rib_70_elo2_b4022_17_cplx + 68 ser1_tRNA + 17 ser2_tRNA + 17 ser3_tRNA + 51 serT_tRNA + 119 serV_tRNA + 153 thr1_tRNA + 51 thr3_tRNA + 34 thrU_tRNA + 17 trpT_tRNA + 68 tyr1_tRNA + 238 val1_tRNA + 85 val2_tRNA + 102 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641
tl_elo_b4022_1_rib1	Translation elongation 1 b4022 1 ribosome(s)	289 EF-G.GTP + 8 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 21 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 14 EF-Tu.GTP.asn1-tRNA + 17 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 5 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 22 EF-Tu.GTP.glu1-tRNA + 17 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 31 EF-Tu.GTP.lys1-tRNA + 4 EF-Tu.GTP.met1-tRNA + 10 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 14 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1445 mg2 + 1 rib_ini_b4022_1 --> 1 rib_70_elo1_b4022_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641

tl_elo_b4022_1_rib2	Translation elongation 2 b4022 1 ribosome(s)	288 h2o + 1 rib_70_elo1_b4022_1_cplx --> 288 EF-G.GDP + 288 EF-Tu.GDP + 8 ala1_tRNA + 4 ala2_tRNA + 20 arg1_tRNA + 2 argX_tRNA + 14 asn1_tRNA + 17 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 5 gln1_tRNA + 1 gln2_tRNA + 22 glu1_tRNA + 17 gly1_tRNA + 1 glyT_tRNA + 7 glyU_tRNA + 576 h + 4 hisR_tRNA + 21 ile1_tRNA + 11 leu1_tRNA + 2 leu2_tRNA + 6 leuU_tRNA + 4 leuZ_tRNA + 31 lys1_tRNA + 4 met1_tRNA + 1445 mg2 + 10 phe1_tRNA + 576 pi + 7 pro1_tRNA + 2 pro2_tRNA + 3 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b4022_1_cplx + 4 ser1_tRNA + 1 ser2_tRNA + 1 ser3_tRNA + 3 serT_tRNA + 7 serV_tRNA + 9 thr1_tRNA + 3 thr3_tRNA + 2 thrU_tRNA + 1 trpT_tRNA + 4 tyr1_tRNA + 14 val1_tRNA + 5 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641
tl_elo_b4022_8_rib1	Translation elongation 1 b4022 8 ribosome(s)	2312 EF-G.GTP + 64 EF-Tu.GTP.ala1-tRNA + 32 EF-Tu.GTP.ala2-tRNA + 168 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.argX-tRNA + 112 EF-Tu.GTP.asn1-tRNA + 136 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.cysT-tRNA + 40 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 176 EF-Tu.GTP.glu1-tRNA + 136 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 56 EF-Tu.GTP.glyU-tRNA + 32 EF-Tu.GTP.hisR-tRNA + 168 EF-Tu.GTP.ile1-tRNA + 88 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 48 EF-Tu.GTP.leuU-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 248 EF-Tu.GTP.lys1-tRNA + 32 EF-Tu.GTP.met1-tRNA + 80 EF-Tu.GTP.phe1-tRNA + 56 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proL-tRNA + 16 EF-Tu.GTP.proM-tRNA + 32 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serT-tRNA + 56 EF-Tu.GTP.serV-tRNA + 72 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 32 EF-Tu.GTP.tyr1-tRNA + 112 EF-Tu.GTP.val1-tRNA + 40 EF-Tu.GTP.val2-tRNA + 48 EF-Tu.GTP.val3-tRNA + 11560 mg2 + 1 rib_ini_b4022_8 --> 1 rib_70_elo1_b4022_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641
tl_elo_b4022_8_rib2	Translation elongation 2 b4022 8 ribosome(s)	2304 h2o + 1 rib_70_elo1_b4022_8_cplx --> 2304 EF-G.GDP + 2304 EF-Tu.GDP + 64 ala1_tRNA + 32 ala2_tRNA + 160 arg1_tRNA + 16 argX_tRNA + 112 asn1_tRNA + 136 asp1_tRNA + 24 cysT_tRNA + 8 fmet_tRNA + 40 gln1_tRNA + 8 gln2_tRNA + 176 glu1_tRNA + 136 gly1_tRNA + 8 glyT_tRNA + 56 glyU_tRNA + 4608 h + 32 hisR_tRNA + 168 ile1_tRNA + 88 leu1_tRNA + 16 leu2_tRNA + 48 leuU_tRNA + 32 leuZ_tRNA + 248 lys1_tRNA + 32 met1_tRNA + 11560 mg2 + 80 phe1_tRNA + 4608 pi + 56 pro1_tRNA + 16 pro2_tRNA + 24 proL_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b4022_8_cplx + 32 ser1_tRNA + 8 ser2_tRNA + 8 ser3_tRNA + 24 serT_tRNA + 56 serV_tRNA + 72 thr1_tRNA + 24 thr3_tRNA + 16 thrU_tRNA + 8 trpT_tRNA + 32 tyr1_tRNA + 112 val1_tRNA + 40 val2_tRNA + 48 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641
tl_elo_b4049_10_rib1	Translation elongation 1 b4049 10 ribosome(s)	3440 EF-G.GTP + 250 EF-Tu.GTP.ala1-tRNA + 60 EF-Tu.GTP.ala2-tRNA + 150 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argU-tRNA + 60 EF-Tu.GTP.argX-tRNA + 130 EF-Tu.GTP.asn1-tRNA + 220 EF-Tu.GTP.asp1-tRNA + 70 EF-Tu.GTP.cysT-tRNA + 80 EF-Tu.GTP.gln1-tRNA + 50 EF-Tu.GTP.gln2-tRNA + 210 EF-Tu.GTP.glu1-tRNA + 230 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 40 EF-Tu.GTP.glyU-tRNA + 130 EF-Tu.GTP.hisR-tRNA + 190 EF-Tu.GTP.ile1-tRNA + 160 EF-Tu.GTP.leu1-tRNA + 50 EF-Tu.GTP.leu2-tRNA + 80 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 150 EF-Tu.GTP.lys1-tRNA + 130 EF-Tu.GTP.met1-tRNA + 90 EF-Tu.GTP.phe1-tRNA + 120 EF-Tu.GTP.pro1-tRNA + 20 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proM-tRNA + 30 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 50 EF-Tu.GTP.ser3-tRNA + 90 EF-Tu.GTP.serV-tRNA + 60 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 50 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.thrU-tRNA + 40 EF-Tu.GTP.trpT-tRNA + 130 EF-Tu.GTP.tyr1-tRNA + 160 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 40 EF-Tu.GTP.val3-tRNA + 17200 mg2 + 1 rib_ini_b4049_10 --> 1 rib_70_elo1_b4049_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_elo_b4049_10_rib2	Translation elongation 2 b4049 10 ribosome(s)	3430 h2o + 1 rib_70_elo1_b4049_10_cplx --> 3430 EF-G.GDP + 3430 EF-Tu.GDP + 250 ala1_tRNA + 60 ala2_tRNA + 140 arg1_tRNA + 10 argU_tRNA + 60 argX_tRNA + 130 asn1_tRNA + 220 asp1_tRNA + 70 cysT_tRNA + 10 fmet_tRNA + 80 gln1_tRNA + 50 gln2_tRNA + 210 glu1_tRNA + 230 gly1_tRNA + 10 glyT_tRNA + 40 glyU_tRNA + 6860 h + 130 hisR_tRNA + 190 ile1_tRNA + 160 leu1_tRNA + 50 leu2_tRNA + 80 leuU_tRNA + 20 leuZ_tRNA + 150 lys1_tRNA + 130 met1_tRNA + 17200 mg2 + 90 phe1_tRNA + 6860 pi + 120 pro1_tRNA + 20 pro2_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b4049_10_cplx + 30 ser1_tRNA + 20 ser2_tRNA + 50 ser3_tRNA + 90 serV_tRNA + 60 thr1_tRNA + 10 thr2_tRNA + 50 thr3_tRNA + 20 thrU_tRNA + 40 trpT_tRNA + 130 tyr1_tRNA + 160 val1_tRNA + 20 val2_tRNA + 40 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_elo_b4049_1_rib1	Translation elongation 1 b4049 1 ribosome(s)	344 EF-G.GTP + 25 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 6 EF-Tu.GTP.argX-tRNA + 13 EF-Tu.GTP.asn1-tRNA + 22 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 21 EF-Tu.GTP.glu1-tRNA + 23 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 13 EF-Tu.GTP.hisR-tRNA + 19 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 15 EF-Tu.GTP.lys1-tRNA + 13 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 9 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 13 EF-Tu.GTP.tyr1-tRNA + 16 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1720 mg2 + 1 rib_ini_b4049_1 --> 1 rib_70_elo1_b4049_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78

tl_elo_b4049_1_rib2	Translation elongation 2 b4049 1 ribosome(s)	343 h2o + 1 rib_70_elo1_b4049_1_cplx --> 343 EF-G.GDP + 343 EF-Tu.GDP + 25 ala1_tRNA + 6 ala2_tRNA + 14 arg1_tRNA + 1 argU_tRNA + 6 argX_tRNA + 13 asn1_tRNA + 22 asp1_tRNA + 7 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 5 gln2_tRNA + 21 glu1_tRNA + 23 gly1_tRNA + 1 glyT_tRNA + 4 glyU_tRNA + 686 h + 13 hisR_tRNA + 19 ile1_tRNA + 16 leu1_tRNA + 5 leu2_tRNA + 8 leuU_tRNA + 2 leuZ_tRNA + 15 lys1_tRNA + 13 met1_tRNA + 1720 mg2 + 9 phe1_tRNA + 686 pi + 12 pro1_tRNA + 2 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b4049_1_cplx + 3 ser1_tRNA + 2 ser2_tRNA + 5 ser3_tRNA + 9 serV_tRNA + 6 thr1_tRNA + 1 thr2_tRNA + 5 thr3_tRNA + 2 thrU_tRNA + 4 trpT_tRNA + 13 tyr1_tRNA + 16 val1_tRNA + 2 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_elo_b4049_20_rib1	Translation elongation 1 b4049 20 ribosome(s)	6880 EF-G.GTP + 500 EF-Tu.GTP.ala1-tRNA + 120 EF-Tu.GTP.ala2-tRNA + 300 EF-Tu.GTP.arg1-tRNA + 20 EF-Tu.GTP.argU-tRNA + 120 EF-Tu.GTP.argX-tRNA + 260 EF-Tu.GTP.asn1-tRNA + 440 EF-Tu.GTP.asp1-tRNA + 140 EF-Tu.GTP.cysT-tRNA + 160 EF-Tu.GTP.gln1-tRNA + 100 EF-Tu.GTP.gln2-tRNA + 420 EF-Tu.GTP.glu1-tRNA + 460 EF-Tu.GTP.gly1-tRNA + 20 EF-Tu.GTP.glyT-tRNA + 80 EF-Tu.GTP.glyU-tRNA + 260 EF-Tu.GTP.hisR-tRNA + 380 EF-Tu.GTP.ile1-tRNA + 320 EF-Tu.GTP.leu1-tRNA + 100 EF-Tu.GTP.leu2-tRNA + 160 EF-Tu.GTP.leuU-tRNA + 40 EF-Tu.GTP.leuZ-tRNA + 300 EF-Tu.GTP.lys1-tRNA + 260 EF-Tu.GTP.met1-tRNA + 180 EF-Tu.GTP.phe1-tRNA + 240 EF-Tu.GTP.pro1-tRNA + 40 EF-Tu.GTP.pro2-tRNA + 20 EF-Tu.GTP.proM-tRNA + 60 EF-Tu.GTP.ser1-tRNA + 40 EF-Tu.GTP.ser2-tRNA + 100 EF-Tu.GTP.ser3-tRNA + 180 EF-Tu.GTP.serV-tRNA + 120 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr2-tRNA + 100 EF-Tu.GTP.thr3-tRNA + 40 EF-Tu.GTP.thrU-tRNA + 80 EF-Tu.GTP.trpT-tRNA + 260 EF-Tu.GTP.tyr1-tRNA + 320 EF-Tu.GTP.val1-tRNA + 40 EF-Tu.GTP.val2-tRNA + 80 EF-Tu.GTP.val3-tRNA + 34400 mg2 + 1 rib_ini_b4049_20 --> 1 rib_70_elo1_b4049_20_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_elo_b4049_20_rib2	Translation elongation 2 b4049 20 ribosome(s)	6860 h2o + 1 rib_70_elo1_b4049_20_cplx --> 6860 EF-G.GDP + 6860 EF-Tu.GDP + 500 ala1_tRNA + 120 ala2_tRNA + 280 arg1_tRNA + 20 argU_tRNA + 120 argX_tRNA + 260 asn1_tRNA + 440 asp1_tRNA + 140 cysT_tRNA + 20 fmet_tRNA + 160 gln1_tRNA + 100 gln2_tRNA + 420 glu1_tRNA + 460 gly1_tRNA + 20 glyT_tRNA + 80 glyU_tRNA + 13720 h + 260 hisR_tRNA + 380 ile1_tRNA + 320 leu1_tRNA + 100 leu2_tRNA + 160 leuU_tRNA + 40 leuZ_tRNA + 300 lys1_tRNA + 260 met1_tRNA + 34400 mg2 + 180 phe1_tRNA + 13720 pi + 240 pro1_tRNA + 40 pro2_tRNA + 20 proM_tRNA + 1 rib_70_elo2_b4049_20_cplx + 60 ser1_tRNA + 40 ser2_tRNA + 100 ser3_tRNA + 180 serV_tRNA + 120 thr1_tRNA + 20 thr2_tRNA + 100 thr3_tRNA + 40 thrU_tRNA + 80 trpT_tRNA + 260 tyr1_tRNA + 320 val1_tRNA + 40 val2_tRNA + 80 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_elo_b4129_14_rib1	Translation elongation 1 b4129 14 ribosome(s)	7056 EF-G.GTP + 490 EF-Tu.GTP.ala1-tRNA + 84 EF-Tu.GTP.ala2-tRNA + 518 EF-Tu.GTP.arg1-tRNA + 28 EF-Tu.GTP.argU-tRNA + 28 EF-Tu.GTP.argX-tRNA + 280 EF-Tu.GTP.asn1-tRNA + 504 EF-Tu.GTP.asp1-tRNA + 14 EF-Tu.GTP.cysT-tRNA + 182 EF-Tu.GTP.gln1-tRNA + 112 EF-Tu.GTP.gln2-tRNA + 644 EF-Tu.GTP.glu1-tRNA + 392 EF-Tu.GTP.gly1-tRNA + 28 EF-Tu.GTP.glyT-tRNA + 42 EF-Tu.GTP.glyU-tRNA + 154 EF-Tu.GTP.hisR-tRNA + 434 EF-Tu.GTP.ile1-tRNA + 406 EF-Tu.GTP.leu1-tRNA + 56 EF-Tu.GTP.leu2-tRNA + 70 EF-Tu.GTP.leuU-tRNA + 28 EF-Tu.GTP.leuW-tRNA + 70 EF-Tu.GTP.leuZ-tRNA + 280 EF-Tu.GTP.lys1-tRNA + 238 EF-Tu.GTP.met1-tRNA + 434 EF-Tu.GTP.phe1-tRNA + 126 EF-Tu.GTP.pro1-tRNA + 28 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proL-tRNA + 98 EF-Tu.GTP.proM-tRNA + 70 EF-Tu.GTP.ser1-tRNA + 70 EF-Tu.GTP.ser2-tRNA + 14 EF-Tu.GTP.ser3-tRNA + 28 EF-Tu.GTP.serT-tRNA + 56 EF-Tu.GTP.serV-tRNA + 154 EF-Tu.GTP.thr1-tRNA + 98 EF-Tu.GTP.thr2-tRNA + 98 EF-Tu.GTP.thr3-tRNA + 56 EF-Tu.GTP.thrU-tRNA + 28 EF-Tu.GTP.trpT-tRNA + 210 EF-Tu.GTP.tyr1-tRNA + 154 EF-Tu.GTP.val1-tRNA + 98 EF-Tu.GTP.val2-tRNA + 140 EF-Tu.GTP.val3-tRNA + 35280 mg2 + 1 rib_ini_b4129_14 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.70E+02	169.7023	0	4.09E+00	4.087
tl_elo_b4129_14_rib2	Translation elongation 2 b4129 14 ribosome(s)	7042 h2o + 1 rib_70_elo1_b4129_14_cplx --> 7042 EF-G.GDP + 7042 EF-Tu.GDP + 490 ala1_tRNA + 84 ala2_tRNA + 518 arg1_tRNA + 28 argU_tRNA + 28 argX_tRNA + 280 asn1_tRNA + 504 asp1_tRNA + 14 cysT_tRNA + 14 fmet_tRNA + 182 gln1_tRNA + 112 gln2_tRNA + 644 glu1_tRNA + 392 gly1_tRNA + 28 glyT_tRNA + 42 glyU_tRNA + 14084 h + 154 hisR_tRNA + 434 ile1_tRNA + 406 leu1_tRNA + 56 leu2_tRNA + 70 leuU_tRNA + 28 leuW_tRNA + 70 leuZ_tRNA + 266 lys1_tRNA + 238 met1_tRNA + 35280 mg2 + 434 phe1_tRNA + 14084 pi + 126 pro1_tRNA + 28 pro2_tRNA + 14 proL_tRNA + 98 proM_tRNA + 1 rib_70_elo2_b4129_14_cplx + 70 ser1_tRNA + 70 ser2_tRNA + 14 ser3_tRNA + 28 serT_tRNA + 56 serV_tRNA + 154 thr1_tRNA + 98 thr2_tRNA + 98 thr3_tRNA + 56 thrU_tRNA + 28 trpT_tRNA + 210 tyr1_tRNA + 154 val1_tRNA + 98 val2_tRNA + 140 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.70E+02	169.7023	0	4.09E+00	4.087
tl_elo_b4129_1_rib1	Translation elongation 1 b4129 1 ribosome(s)	504 EF-G.GTP + 35 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 37 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argU-tRNA + 2 EF-Tu.GTP.argX-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 36 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 13 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 46 EF-Tu.GTP.glu1-tRNA + 28 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 31 EF-Tu.GTP.ile1-tRNA + 29 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 17 EF-Tu.GTP.met1-tRNA + 31 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 7 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 11 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 15 EF-Tu.GTP.tyr1-tRNA + 11 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 2520 mg2 + 1 rib_ini_b4129_1 --> 1 rib_70_elo1_b4129_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.70E+02	169.7023	0	4.09E+00	4.087

tl_elo_b4129_1_rib2	Translation elongation 2 b4129 1 ribosome(s)	503 h2o + 1 rib_70_elo1_b4129_1_cplx --> 503 EF-G.GDP + 503 EF-Tu.GDP + 35 ala1_tRNA + 6 ala2_tRNA + 37 arg1_tRNA + 2 argU_tRNA + 2 argX_tRNA + 20 asn1_tRNA + 36 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 13 gln1_tRNA + 8 gln2_tRNA + 46 glu1_tRNA + 28 gly1_tRNA + 2 glyT_tRNA + 3 glyU_tRNA + 1006 h + 11 hisR_tRNA + 31 ile1_tRNA + 29 leu1_tRNA + 4 leu2_tRNA + 5 leuU_tRNA + 2 leuW_tRNA + 5 leuZ_tRNA + 19 lys1_tRNA + 17 met1_tRNA + 2520 mg2 + 31 phe1_tRNA + 1006 pi + 9 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b4129_1_cplx + 5 ser1_tRNA + 5 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 4 serV_tRNA + 11 thr1_tRNA + 7 thr2_tRNA + 7 thr3_tRNA + 4 thrU_tRNA + 2 trpT_tRNA + 15 tyr1_tRNA + 11 val1_tRNA + 7 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.70E+02	169.7023	0	4.09E+00	4.087
tl_elo_b4129_29_rib1	Translation elongation 1 b4129 29 ribosome(s)	14616 EF-G.GTP + 1015 EF-Tu.GTP.ala1-tRNA + 174 EF-Tu.GTP.ala2-tRNA + 1073 EF-Tu.GTP.arg1-tRNA + 58 EF-Tu.GTP.argU-tRNA + 58 EF-Tu.GTP.argX-tRNA + 580 EF-Tu.GTP.asn1-tRNA + 1044 EF-Tu.GTP.asp1-tRNA + 29 EF-Tu.GTP.cysT-tRNA + 377 EF-Tu.GTP.gln1-tRNA + 232 EF-Tu.GTP.gln2-tRNA + 1334 EF-Tu.GTP.glu1-tRNA + 812 EF-Tu.GTP.gly1-tRNA + 58 EF-Tu.GTP.glyT-tRNA + 87 EF-Tu.GTP.glyU-tRNA + 319 EF-Tu.GTP.hisR-tRNA + 899 EF-Tu.GTP.ile1-tRNA + 841 EF-Tu.GTP.leu1-tRNA + 116 EF-Tu.GTP.leu2-tRNA + 145 EF-Tu.GTP.leuU-tRNA + 58 EF-Tu.GTP.leuW-tRNA + 145 EF-Tu.GTP.leuZ-tRNA + 580 EF-Tu.GTP.lys1-tRNA + 493 EF-Tu.GTP.met1-tRNA + 899 EF-Tu.GTP.phe1-tRNA + 261 EF-Tu.GTP.pro1-tRNA + 58 EF-Tu.GTP.pro2-tRNA + 29 EF-Tu.GTP.proL-tRNA + 203 EF-Tu.GTP.proM-tRNA + 145 EF-Tu.GTP.ser1-tRNA + 145 EF-Tu.GTP.ser2-tRNA + 29 EF-Tu.GTP.ser3-tRNA + 58 EF-Tu.GTP.serT-tRNA + 116 EF-Tu.GTP.serV-tRNA + 319 EF-Tu.GTP.thr1-tRNA + 203 EF-Tu.GTP.thr2-tRNA + 203 EF-Tu.GTP.thr3-tRNA + 116 EF-Tu.GTP.thrU-tRNA + 58 EF-Tu.GTP.trpT-tRNA + 435 EF-Tu.GTP.tyr1-tRNA + 319 EF-Tu.GTP.val1-tRNA + 203 EF-Tu.GTP.val2-tRNA + 290 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.48E+02	147.7835	0	4.09E+00	4.087
tl_elo_b4129_29_rib2	Translation elongation 2 b4129 29 ribosome(s)	14587 h2o + 1 rib_70_elo1_b4129_29_cplx --> 14587 EF-G.GDP + 14587 EF-Tu.GDP + 1015 ala1_tRNA + 174 ala2_tRNA + 1073 arg1_tRNA + 58 argU_tRNA + 58 argX_tRNA + 580 asn1_tRNA + 1044 asp1_tRNA + 29 cysT_tRNA + 29 fmet_tRNA + 377 gln1_tRNA + 232 gln2_tRNA + 1334 glu1_tRNA + 812 gly1_tRNA + 58 glyT_tRNA + 87 glyU_tRNA + 29174 h + 319 hisR_tRNA + 899 ile1_tRNA + 841 leu1_tRNA + 116 leu2_tRNA + 145 leuU_tRNA + 58 leuW_tRNA + 145 leuZ_tRNA + 551 lys1_tRNA + 493 met1_tRNA + 73080 mg2 + 899 phe1_tRNA + 29174 pi + 261 pro1_tRNA + 58 pro2_tRNA + 29 proL_tRNA + 203 proM_tRNA + 1 rib_70_elo2_b4129_29_cplx + 145 ser1_tRNA + 145 ser2_tRNA + 29 ser3_tRNA + 58 serT_tRNA + 116 serV_tRNA + 319 thr1_tRNA + 203 thr2_tRNA + 203 thr3_tRNA + 116 thrU_tRNA + 58 trpT_tRNA + 435 tyr1_tRNA + 319 val1_tRNA + 203 val2_tRNA + 290 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.48E+02	147.7835	0	4.09E+00	4.087
tl_elo_b4142_1_rib1	Translation elongation 1 b4142 1 ribosome(s)	96 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.glu1-tRNA + 10 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 1 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 480 mg2 + 1 rib_ini_b4142_1 --> 1 rib_70_elo1_b4142_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_elo_b4142_1_rib2	Translation elongation 2 b4142 1 ribosome(s)	95 h2o + 1 rib_70_elo1_b4142_1_cplx --> 95 EF-G.GDP + 95 EF-Tu.GDP + 6 ala1_tRNA + 5 arg1_tRNA + 5 asn1_tRNA + 6 asp1_tRNA + 1 fmet_tRNA + 10 glu1_tRNA + 10 gly1_tRNA + 190 h + 1 hisR_tRNA + 10 ile1_tRNA + 4 leu1_tRNA + 2 leu2_tRNA + 1 leuU_tRNA + 8 lys1_tRNA + 1 met1_tRNA + 480 mg2 + 1 phe1_tRNA + 190 pi + 1 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b4142_1_cplx + 2 ser1_tRNA + 3 ser2_tRNA + 1 serV_tRNA + 2 thr1_tRNA + 1 thr2_tRNA + 1 tyr1_tRNA + 6 val1_tRNA + 2 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_elo_b4142_2_rib1	Translation elongation 1 b4142 2 ribosome(s)	192 EF-G.GTP + 14 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 960 mg2 + 1 rib_ini_b4142_2 --> 1 rib_70_elo1_b4142_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_elo_b4142_2_rib2	Translation elongation 2 b4142 2 ribosome(s)	190 h2o + 1 rib_70_elo1_b4142_2_cplx --> 190 EF-G.GDP + 190 EF-Tu.GDP + 12 ala1_tRNA + 10 arg1_tRNA + 10 asn1_tRNA + 12 asp1_tRNA + 2 fmet_tRNA + 20 glu1_tRNA + 20 gly1_tRNA + 380 h + 2 hisR_tRNA + 20 ile1_tRNA + 8 leu1_tRNA + 4 leu2_tRNA + 2 leuU_tRNA + 16 lys1_tRNA + 2 met1_tRNA + 960 mg2 + 2 phe1_tRNA + 380 pi + 2 pro1_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b4142_2_cplx + 4 ser1_tRNA + 6 ser2_tRNA + 2 serV_tRNA + 4 thr1_tRNA + 2 thr2_tRNA + 2 tyr1_tRNA + 12 val1_tRNA + 4 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_elo_b4142_5_rib1	Translation elongation 1 b4142 5 ribosome(s)	480 EF-G.GTP + 35 EF-Tu.GTP.ala1-tRNA + 25 EF-Tu.GTP.arg1-tRNA + 25 EF-Tu.GTP.asn1-tRNA + 30 EF-Tu.GTP.asp1-tRNA + 50 EF-Tu.GTP.glu1-tRNA + 50 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 50 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 40 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.proM-tRNA + 10 EF-Tu.GTP.ser1-tRNA + 15 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 5 EF-Tu.GTP.thr2-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 30 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 25 EF-Tu.GTP.val3-tRNA + 2400 mg2 + 1 rib_ini_b4142_5 --> 1 rib_70_elo1_b4142_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222

tl_elo_b4142_5_rib2	Translation elongation 2 b4142 5 ribosome(s)	475 h2o + 1 rib_70_elo1_b4142_5_cplx --> 475 EF-G.GDP + 475 EF-Tu.GDP + 30 ala1_tRNA + 25 arg1_tRNA + 25 asn1_tRNA + 30 asp1_tRNA + 5 fmet_tRNA + 50 glu1_tRNA + 50 gly1_tRNA + 950 h + 5 hisR_tRNA + 50 ile1_tRNA + 20 leu1_tRNA + 10 leu2_tRNA + 5 leuU_tRNA + 40 lys1_tRNA + 5 met1_tRNA + 2400 mg2 + 5 phe1_tRNA + 950 pi + 5 pro1_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b4142_5_cplx + 10 ser1_tRNA + 15 ser2_tRNA + 5 serV_tRNA + 10 thr1_tRNA + 5 thr2_tRNA + 5 tyr1_tRNA + 30 val1_tRNA + 10 val2_tRNA + 25 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_elo_b4143_16_rib1	Translation elongation 1 b4143 16 ribosome(s)	8752 EF-G.GTP + 1136 EF-Tu.GTP.ala1-tRNA + 48 EF-Tu.GTP.ala2-tRNA + 352 EF-Tu.GTP.arg1-tRNA + 304 EF-Tu.GTP.asn1-tRNA + 560 EF-Tu.GTP.asp1-tRNA + 48 EF-Tu.GTP.cysT-tRNA + 256 EF-Tu.GTP.gln1-tRNA + 736 EF-Tu.GTP.glu1-tRNA + 944 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 512 EF-Tu.GTP.ile1-tRNA + 624 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuZ-tRNA + 640 EF-Tu.GTP.lys1-tRNA + 352 EF-Tu.GTP.met1-tRNA + 112 EF-Tu.GTP.phe1-tRNA + 160 EF-Tu.GTP.pro1-tRNA + 16 EF-Tu.GTP.pro2-tRNA + 48 EF-Tu.GTP.proM-tRNA + 80 EF-Tu.GTP.ser1-tRNA + 176 EF-Tu.GTP.ser2-tRNA + 16 EF-Tu.GTP.serV-tRNA + 400 EF-Tu.GTP.thr1-tRNA + 128 EF-Tu.GTP.thr2-tRNA + 112 EF-Tu.GTP.tyr1-tRNA + 416 EF-Tu.GTP.val1-tRNA + 32 EF-Tu.GTP.val2-tRNA + 480 EF-Tu.GTP.val3-tRNA + 43760 mg2 + 1 rib_ini_b4143_16 --> 1 rib_70_elo1_b4143_16_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	7.82E+01	7.82E+01	0	1.28E+02	128.0933	0	7.29E+00	7.292
tl_elo_b4143_16_rib2	Translation elongation 2 b4143 16 ribosome(s)	8736 h2o + 1 rib_70_elo1_b4143_16_cplx --> 8736 EF-G.GDP + 8736 EF-Tu.GDP + 1136 ala1_tRNA + 48 ala2_tRNA + 352 arg1_tRNA + 304 asn1_tRNA + 560 asp1_tRNA + 48 cysT_tRNA + 16 fmet_tRNA + 256 gln1_tRNA + 736 glu1_tRNA + 944 gly1_tRNA + 17472 h + 16 hisR_tRNA + 512 ile1_tRNA + 624 leu1_tRNA + 16 leu2_tRNA + 16 leuU_tRNA + 16 leuZ_tRNA + 640 lys1_tRNA + 336 met1_tRNA + 43760 mg2 + 112 phe1_tRNA + 17472 pi + 160 pro1_tRNA + 16 pro2_tRNA + 48 proM_tRNA + 1 rib_70_elo2_b4143_16_cplx + 80 ser1_tRNA + 176 ser2_tRNA + 16 serV_tRNA + 400 thr1_tRNA + 128 thr2_tRNA + 112 tyr1_tRNA + 416 val1_tRNA + 32 val2_tRNA + 480 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.82E+01	7.82E+01	0	1.28E+02	128.0933	0	7.29E+00	7.292
tl_elo_b4143_1_rib1	Translation elongation 1 b4143 1 ribosome(s)	547 EF-G.GTP + 71 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 22 EF-Tu.GTP.arg1-tRNA + 19 EF-Tu.GTP.asn1-tRNA + 35 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 46 EF-Tu.GTP.glu1-tRNA + 59 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 32 EF-Tu.GTP.ile1-tRNA + 39 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 40 EF-Tu.GTP.lys1-tRNA + 22 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 11 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serV-tRNA + 25 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 26 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 30 EF-Tu.GTP.val3-tRNA + 2735 mg2 + 1 rib_ini_b4143_1 --> 1 rib_70_elo1_b4143_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.80E+01	8.80E+01	0	1.50E+02	150.0754	0	7.29E+00	7.292
tl_elo_b4143_1_rib2	Translation elongation 2 b4143 1 ribosome(s)	546 h2o + 1 rib_70_elo1_b4143_1_cplx --> 546 EF-G.GDP + 546 EF-Tu.GDP + 71 ala1_tRNA + 3 ala2_tRNA + 22 arg1_tRNA + 19 asn1_tRNA + 35 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 16 gln1_tRNA + 46 glu1_tRNA + 59 gly1_tRNA + 1092 h + 1 hisR_tRNA + 32 ile1_tRNA + 39 leu1_tRNA + 1 leu2_tRNA + 1 leuU_tRNA + 1 leuZ_tRNA + 40 lys1_tRNA + 21 met1_tRNA + 2735 mg2 + 7 phe1_tRNA + 1092 pi + 10 pro1_tRNA + 1 pro2_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b4143_1_cplx + 5 ser1_tRNA + 11 ser2_tRNA + 1 serV_tRNA + 25 thr1_tRNA + 8 thr2_tRNA + 7 tyr1_tRNA + 26 val1_tRNA + 2 val2_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.80E+01	8.80E+01	0	1.50E+02	150.0754	0	7.29E+00	7.292
tl_elo_b4143_32_rib1	Translation elongation 1 b4143 32 ribosome(s)	17504 EF-G.GTP + 2272 EF-Tu.GTP.ala1-tRNA + 96 EF-Tu.GTP.ala2-tRNA + 704 EF-Tu.GTP.arg1-tRNA + 608 EF-Tu.GTP.asn1-tRNA + 1120 EF-Tu.GTP.asp1-tRNA + 96 EF-Tu.GTP.cysT-tRNA + 512 EF-Tu.GTP.gln1-tRNA + 1472 EF-Tu.GTP.glu1-tRNA + 1888 EF-Tu.GTP.gly1-tRNA + 32 EF-Tu.GTP.hisR-tRNA + 1024 EF-Tu.GTP.ile1-tRNA + 1248 EF-Tu.GTP.leu1-tRNA + 32 EF-Tu.GTP.leu2-tRNA + 32 EF-Tu.GTP.leuU-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 1280 EF-Tu.GTP.lys1-tRNA + 704 EF-Tu.GTP.met1-tRNA + 224 EF-Tu.GTP.phe1-tRNA + 320 EF-Tu.GTP.pro1-tRNA + 32 EF-Tu.GTP.pro2-tRNA + 96 EF-Tu.GTP.proM-tRNA + 160 EF-Tu.GTP.ser1-tRNA + 352 EF-Tu.GTP.ser2-tRNA + 32 EF-Tu.GTP.serV-tRNA + 800 EF-Tu.GTP.thr1-tRNA + 256 EF-Tu.GTP.thr2-tRNA + 224 EF-Tu.GTP.tyr1-tRNA + 832 EF-Tu.GTP.val1-tRNA + 64 EF-Tu.GTP.val2-tRNA + 960 EF-Tu.GTP.val3-tRNA + 87520 mg2 + 1 rib_ini_b4143_32 --> 1 rib_70_elo1_b4143_32_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	6.54E+01	6.54E+01	0	1.07E+02	107.1087	0	7.29E+00	7.292
tl_elo_b4143_32_rib2	Translation elongation 2 b4143 32 ribosome(s)	17472 h2o + 1 rib_70_elo1_b4143_32_cplx --> 17472 EF-G.GDP + 17472 EF-Tu.GDP + 2272 ala1_tRNA + 96 ala2_tRNA + 704 arg1_tRNA + 608 asn1_tRNA + 1120 asp1_tRNA + 96 cysT_tRNA + 32 fmet_tRNA + 512 gln1_tRNA + 1472 glu1_tRNA + 1888 gly1_tRNA + 34944 h + 32 hisR_tRNA + 1024 ile1_tRNA + 1248 leu1_tRNA + 32 leu2_tRNA + 32 leuU_tRNA + 32 leuZ_tRNA + 1280 lys1_tRNA + 672 met1_tRNA + 87520 mg2 + 224 phe1_tRNA + 34944 pi + 320 pro1_tRNA + 32 pro2_tRNA + 96 proM_tRNA + 1 rib_70_elo2_b4143_32_cplx + 160 ser1_tRNA + 352 ser2_tRNA + 32 serV_tRNA + 800 thr1_tRNA + 256 thr2_tRNA + 224 tyr1_tRNA + 832 val1_tRNA + 64 val2_tRNA + 960 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.54E+01	6.54E+01	0	1.07E+02	107.1087	0	7.29E+00	7.292

tl_elo_b4162_10_rib1	Translation elongation 1 b4162 10 ribosome(s)	1800 EF-G.GTP + 110 EF-Tu.GTP.ala1-tRNA + 50 EF-Tu.GTP.ala2-tRNA + 110 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argX-tRNA + 70 EF-Tu.GTP.asn1-tRNA + 130 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.cysT-tRNA + 60 EF-Tu.GTP.gln1-tRNA + 170 EF-Tu.GTP.glu1-tRNA + 50 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 30 EF-Tu.GTP.glyU-tRNA + 50 EF-Tu.GTP.hisR-tRNA + 120 EF-Tu.GTP.ile1-tRNA + 160 EF-Tu.GTP.leu1-tRNA + 30 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 80 EF-Tu.GTP.lys1-tRNA + 50 EF-Tu.GTP.met1-tRNA + 60 EF-Tu.GTP.phe1-tRNA + 40 EF-Tu.GTP.pro1-tRNA + 10 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 20 EF-Tu.GTP.ser3-tRNA + 50 EF-Tu.GTP.serV-tRNA + 70 EF-Tu.GTP.thr1-tRNA + 40 EF-Tu.GTP.thr3-tRNA + 40 EF-Tu.GTP.trpT-tRNA + 60 EF-Tu.GTP.tyr1-tRNA + 70 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 9000 mg2 + 1 rib_ini_b4162_10 --> 1 rib_70_elo1_b4162_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_elo_b4162_10_rib2	Translation elongation 2 b4162 10 ribosome(s)	1790 h2o + 1 rib_70_elo1_b4162_10_cplx --> 1790 EF-G.GDP + 1790 EF-Tu.GDP + 110 ala1_tRNA + 50 ala2_tRNA + 110 arg1_tRNA + 10 argX_tRNA + 70 asn1_tRNA + 130 asp1_tRNA + 10 cysT_tRNA + 10 fmet_tRNA + 60 gln1_tRNA + 170 glu1_tRNA + 50 gly1_tRNA + 10 glyT_tRNA + 30 glyU_tRNA + 3580 h + 50 hisR_tRNA + 120 ile1_tRNA + 150 leu1_tRNA + 30 leuU_tRNA + 10 leuZ_tRNA + 80 lys1_tRNA + 50 met1_tRNA + 9000 mg2 + 60 phe1_tRNA + 3580 pi + 40 pro1_tRNA + 10 pro2_tRNA + 10 proL_tRNA + 1 rib_70_elo2_b4162_10_cplx + 10 ser2_tRNA + 20 ser3_tRNA + 50 serV_tRNA + 70 thr1_tRNA + 40 thr3_tRNA + 40 trpT_tRNA + 60 tyr1_tRNA + 70 val1_tRNA + 10 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_elo_b4162_1_rib1	Translation elongation 1 b4162 1 ribosome(s)	180 EF-G.GTP + 11 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 11 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 13 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 17 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 900 mg2 + 1 rib_ini_b4162_1 --> 1 rib_70_elo1_b4162_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_elo_b4162_1_rib2	Translation elongation 2 b4162 1 ribosome(s)	179 h2o + 1 rib_70_elo1_b4162_1_cplx --> 179 EF-G.GDP + 179 EF-Tu.GDP + 11 ala1_tRNA + 5 ala2_tRNA + 11 arg1_tRNA + 1 argX_tRNA + 7 asn1_tRNA + 13 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 17 glu1_tRNA + 5 gly1_tRNA + 1 glyT_tRNA + 3 glyU_tRNA + 358 h + 5 hisR_tRNA + 12 ile1_tRNA + 15 leu1_tRNA + 3 leuU_tRNA + 1 leuZ_tRNA + 8 lys1_tRNA + 5 met1_tRNA + 900 mg2 + 6 phe1_tRNA + 358 pi + 4 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 1 rib_70_elo2_b4162_1_cplx + 1 ser2_tRNA + 2 ser3_tRNA + 5 serV_tRNA + 7 thr1_tRNA + 4 thr3_tRNA + 4 trpT_tRNA + 6 tyr1_tRNA + 7 val1_tRNA + 1 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_elo_b4162_5_rib1	Translation elongation 1 b4162 5 ribosome(s)	900 EF-G.GTP + 55 EF-Tu.GTP.ala1-tRNA + 25 EF-Tu.GTP.ala2-tRNA + 55 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argX-tRNA + 35 EF-Tu.GTP.asn1-tRNA + 65 EF-Tu.GTP.asp1-tRNA + 5 EF-Tu.GTP.cysT-tRNA + 30 EF-Tu.GTP.gln1-tRNA + 85 EF-Tu.GTP.glu1-tRNA + 25 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 15 EF-Tu.GTP.glyU-tRNA + 25 EF-Tu.GTP.hisR-tRNA + 60 EF-Tu.GTP.ile1-tRNA + 80 EF-Tu.GTP.leu1-tRNA + 15 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 40 EF-Tu.GTP.lys1-tRNA + 25 EF-Tu.GTP.met1-tRNA + 30 EF-Tu.GTP.phe1-tRNA + 20 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.ser2-tRNA + 10 EF-Tu.GTP.ser3-tRNA + 25 EF-Tu.GTP.serV-tRNA + 35 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.trpT-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 35 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 4500 mg2 + 1 rib_ini_b4162_5 --> 1 rib_70_elo1_b4162_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_elo_b4162_5_rib2	Translation elongation 2 b4162 5 ribosome(s)	895 h2o + 1 rib_70_elo1_b4162_5_cplx --> 895 EF-G.GDP + 895 EF-Tu.GDP + 55 ala1_tRNA + 25 ala2_tRNA + 55 arg1_tRNA + 5 argX_tRNA + 35 asn1_tRNA + 65 asp1_tRNA + 5 cysT_tRNA + 5 fmet_tRNA + 30 gln1_tRNA + 85 glu1_tRNA + 25 gly1_tRNA + 5 glyT_tRNA + 15 glyU_tRNA + 1790 h + 25 hisR_tRNA + 60 ile1_tRNA + 75 leu1_tRNA + 15 leuU_tRNA + 5 leuZ_tRNA + 40 lys1_tRNA + 25 met1_tRNA + 4500 mg2 + 30 phe1_tRNA + 1790 pi + 20 pro1_tRNA + 5 pro2_tRNA + 5 proL_tRNA + 1 rib_70_elo2_b4162_5_cplx + 5 ser2_tRNA + 10 ser3_tRNA + 25 serV_tRNA + 35 thr1_tRNA + 20 thr3_tRNA + 20 trpT_tRNA + 30 tyr1_tRNA + 35 val1_tRNA + 5 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_elo_b4167_15_rib1	Translation elongation 1 b4167 15 ribosome(s)	7710 EF-G.GTP + 780 EF-Tu.GTP.ala1-tRNA + 240 EF-Tu.GTP.ala2-tRNA + 375 EF-Tu.GTP.arg1-tRNA + 75 EF-Tu.GTP.argX-tRNA + 240 EF-Tu.GTP.asn1-tRNA + 465 EF-Tu.GTP.asp1-tRNA + 90 EF-Tu.GTP.cysT-tRNA + 105 EF-Tu.GTP.gln1-tRNA + 105 EF-Tu.GTP.gln2-tRNA + 420 EF-Tu.GTP.glu1-tRNA + 585 EF-Tu.GTP.gly1-tRNA + 90 EF-Tu.GTP.glyT-tRNA + 120 EF-Tu.GTP.glyU-tRNA + 300 EF-Tu.GTP.hisR-tRNA + 390 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.ile2-tRNA + 465 EF-Tu.GTP.leu1-tRNA + 150 EF-Tu.GTP.leu2-tRNA + 150 EF-Tu.GTP.leuU-tRNA + 30 EF-Tu.GTP.leuW-tRNA + 90 EF-Tu.GTP.leuZ-tRNA + 270 EF-Tu.GTP.lys1-tRNA + 135 EF-Tu.GTP.met1-tRNA + 105 EF-Tu.GTP.phe1-tRNA + 165 EF-Tu.GTP.pro1-tRNA + 75 EF-Tu.GTP.pro2-tRNA + 90 EF-Tu.GTP.proL-tRNA + 45 EF-Tu.GTP.proM-tRNA + 90 EF-Tu.GTP.ser1-tRNA + 45 EF-Tu.GTP.ser2-tRNA + 90 EF-Tu.GTP.ser3-tRNA + 30 EF-Tu.GTP.serT-tRNA + 135 EF-Tu.GTP.serV-tRNA + 120 EF-Tu.GTP.thr1-tRNA + 90 EF-Tu.GTP.thr2-tRNA + 150 EF-Tu.GTP.thr3-tRNA + 30 EF-Tu.GTP.thrU-tRNA + 135 EF-Tu.GTP.trpT-tRNA + 90 EF-Tu.GTP.tyr1-tRNA + 330 EF-Tu.GTP.val1-tRNA + 135 EF-Tu.GTP.val2-tRNA + 75 EF-Tu.GTP.val3-tRNA + 38550 mg2 + 1 rib_ini_b4167_15 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184

tl_elo_b4167_15_rib2	Translation elongation 2 b4167 15 ribosome(s)	7695 h2o + 1 rib_70_elo1_b4167_15_cplx --> 7695 EF-G.GDP + 7695 EF-Tu.GDP + 780 ala1_tRNA + 240 ala2_tRNA + 375 arg1_tRNA + 75 argX_tRNA + 240 asn1_tRNA + 465 asp1_tRNA + 90 cysT_tRNA + 15 fmet_tRNA + 105 gln1_tRNA + 105 gln2_tRNA + 420 glu1_tRNA + 585 gly1_tRNA + 90 glyT_tRNA + 120 glyU_tRNA + 15390 h + 300 hisR_tRNA + 390 ile1_tRNA + 15 ile2_tRNA + 465 leu1_tRNA + 150 leu2_tRNA + 150 leuU_tRNA + 30 leuW_tRNA + 90 leuZ_tRNA + 270 lys1_tRNA + 135 met1_tRNA + 38550 mg2 + 105 phe1_tRNA + 15390 pi + 165 pro1_tRNA + 75 pro2_tRNA + 75 proL_tRNA + 45 proM_tRNA + 1 rib_70_elo2_b4167_15_cplx + 90 ser1_tRNA + 45 ser2_tRNA + 90 ser3_tRNA + 30 serT_tRNA + 135 serV_tRNA + 120 thr1_tRNA + 90 thr2_tRNA + 150 thr3_tRNA + 30 thrU_tRNA + 135 trpT_tRNA + 90 tyr1_tRNA + 330 val1_tRNA + 135 val2_tRNA + 75 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184
tl_elo_b4167_1_rib1	Translation elongation 1 b4167 1 ribosome(s)	514 EF-G.GTP + 52 EF-Tu.GTP.ala1-tRNA + 16 EF-Tu.GTP.ala2-tRNA + 25 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argX-tRNA + 16 EF-Tu.GTP.asn1-tRNA + 31 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 7 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 28 EF-Tu.GTP.glu1-tRNA + 39 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 20 EF-Tu.GTP.hisR-tRNA + 26 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 31 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 18 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 9 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 10 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 9 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 22 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 2570 mg2 + 1 rib_ini_b4167_1 --> 1 rib_70_elo1_b4167_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184
tl_elo_b4167_1_rib2	Translation elongation 2 b4167 1 ribosome(s)	513 h2o + 1 rib_70_elo1_b4167_1_cplx --> 513 EF-G.GDP + 513 EF-Tu.GDP + 52 ala1_tRNA + 16 ala2_tRNA + 25 arg1_tRNA + 5 argX_tRNA + 16 asn1_tRNA + 31 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 7 gln1_tRNA + 7 gln2_tRNA + 28 glu1_tRNA + 39 gly1_tRNA + 6 glyT_tRNA + 8 glyU_tRNA + 1026 h + 20 hisR_tRNA + 26 ile1_tRNA + 1 ile2_tRNA + 31 leu1_tRNA + 10 leu2_tRNA + 10 leuU_tRNA + 2 leuW_tRNA + 6 leuZ_tRNA + 18 lys1_tRNA + 9 met1_tRNA + 2570 mg2 + 7 phe1_tRNA + 1026 pi + 11 pro1_tRNA + 5 pro2_tRNA + 5 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b4167_1_cplx + 6 ser1_tRNA + 3 ser2_tRNA + 6 ser3_tRNA + 2 serT_tRNA + 9 serV_tRNA + 8 thr1_tRNA + 6 thr2_tRNA + 10 thr3_tRNA + 2 thrU_tRNA + 9 trpT_tRNA + 6 tyr1_tRNA + 22 val1_tRNA + 9 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184
tl_elo_b4167_30_rib1	Translation elongation 1 b4167 30 ribosome(s)	15420 EF-G.GTP + 1560 EF-Tu.GTP.ala1-tRNA + 480 EF-Tu.GTP.ala2-tRNA + 750 EF-Tu.GTP.arg1-tRNA + 150 EF-Tu.GTP.argX-tRNA + 480 EF-Tu.GTP.asn1-tRNA + 930 EF-Tu.GTP.asp1-tRNA + 180 EF-Tu.GTP.cysT-tRNA + 210 EF-Tu.GTP.gln1-tRNA + 210 EF-Tu.GTP.gln2-tRNA + 840 EF-Tu.GTP.glu1-tRNA + 1170 EF-Tu.GTP.gly1-tRNA + 180 EF-Tu.GTP.glyT-tRNA + 240 EF-Tu.GTP.glyU-tRNA + 600 EF-Tu.GTP.hisR-tRNA + 780 EF-Tu.GTP.ile1-tRNA + 30 EF-Tu.GTP.ile2-tRNA + 930 EF-Tu.GTP.leu1-tRNA + 300 EF-Tu.GTP.leu2-tRNA + 300 EF-Tu.GTP.leuU-tRNA + 60 EF-Tu.GTP.leuW-tRNA + 180 EF-Tu.GTP.leuZ-tRNA + 540 EF-Tu.GTP.lys1-tRNA + 270 EF-Tu.GTP.met1-tRNA + 210 EF-Tu.GTP.phe1-tRNA + 330 EF-Tu.GTP.pro1-tRNA + 150 EF-Tu.GTP.pro2-tRNA + 180 EF-Tu.GTP.proL-tRNA + 90 EF-Tu.GTP.proM-tRNA + 180 EF-Tu.GTP.ser1-tRNA + 90 EF-Tu.GTP.ser2-tRNA + 180 EF-Tu.GTP.ser3-tRNA + 60 EF-Tu.GTP.serT-tRNA + 270 EF-Tu.GTP.serV-tRNA + 240 EF-Tu.GTP.thr1-tRNA + 180 EF-Tu.GTP.thr2-tRNA + 300 EF-Tu.GTP.thr3-tRNA + 60 EF-Tu.GTP.thrU-tRNA + 270 EF-Tu.GTP.trpT-tRNA + 180 EF-Tu.GTP.tyr1-tRNA + 660 EF-Tu.GTP.val1-tRNA + 270 EF-Tu.GTP.val2-tRNA + 150 EF-Tu.GTP.va	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184
tl_elo_b4167_30_rib2	Translation elongation 2 b4167 30 ribosome(s)	15390 h2o + 1 rib_70_elo1_b4167_30_cplx --> 15390 EF-G.GDP + 15390 EF-Tu.GDP + 1560 ala1_tRNA + 480 ala2_tRNA + 750 arg1_tRNA + 150 argX_tRNA + 480 asn1_tRNA + 930 asp1_tRNA + 180 cysT_tRNA + 30 fmet_tRNA + 210 gln1_tRNA + 210 gln2_tRNA + 840 glu1_tRNA + 1170 gly1_tRNA + 180 glyT_tRNA + 240 glyU_tRNA + 30780 h + 600 hisR_tRNA + 780 ile1_tRNA + 30 ile2_tRNA + 930 leu1_tRNA + 300 leu2_tRNA + 300 leuU_tRNA + 60 leuW_tRNA + 180 leuZ_tRNA + 540 lys1_tRNA + 270 met1_tRNA + 77100 mg2 + 210 phe1_tRNA + 30780 pi + 330 pro1_tRNA + 150 pro2_tRNA + 150 proL_tRNA + 90 proM_tRNA + 1 rib_70_elo2_b4167_30_cplx + 180 ser1_tRNA + 90 ser2_tRNA + 180 ser3_tRNA + 60 serT_tRNA + 270 serV_tRNA + 240 thr1_tRNA + 180 thr2_tRNA + 300 thr3_tRNA + 60 thrU_tRNA + 270 trpT_tRNA + 180 tyr1_tRNA + 660 val1_tRNA + 270 val2_tRNA + 150 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184
tl_elo_b4168_1_rib1	Translation elongation 1 b4168 1 ribosome(s)	152 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 5 EF-Tu.GTP.ala2-tRNA + 6 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 10 EF-Tu.GTP.glu1-tRNA + 13 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 5 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 7 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 3 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 5 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 760 mg2 + 1 rib_ini_b4168_1 --> 1 rib_70_elo1_b4168_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814

tl_elo_b4168_1_rib2	Translation elongation 2 b4168 1 ribosome(s)	151 h2o + 1 rib_70_elo1_b4168_1_cplx --> 151 EF-G.GDP + 151 EF-Tu.GDP + 10 ala1_tRNA + 5 ala2_tRNA + 6 arg1_tRNA + 2 argX_tRNA + 4 asn1_tRNA + 12 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 3 gln2_tRNA + 10 glu1_tRNA + 12 gly1_tRNA + 1 glyU_tRNA + 302 h + 3 hisR_tRNA + 5 ile1_tRNA + 1 ile2_tRNA + 7 leu1_tRNA + 3 leu2_tRNA + 4 leuU_tRNA + 5 leuZ_tRNA + 3 lys1_tRNA + 3 met1_tRNA + 760 mg2 + 5 phe1_tRNA + 302 pi + 2 pro1_tRNA + 2 pro2_tRNA + 3 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b4168_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 3 serV_tRNA + 3 thr1_tRNA + 1 thr2_tRNA + 2 thr3_tRNA + 2 thrU_tRNA + 1 trpT_tRNA + 8 tyr1_tRNA + 5 val1_tRNA + 4 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_elo_b4168_4_rib1	Translation elongation 1 b4168 4 ribosome(s)	608 EF-G.GTP + 40 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.argX-tRNA + 16 EF-Tu.GTP.asn1-tRNA + 48 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 40 EF-Tu.GTP.glu1-tRNA + 52 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.ile2-tRNA + 28 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 20 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 32 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 16 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 3040 mg2 + 1 rib_ini_b4168_4 --> 1 rib_70_elo1_b4168_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_elo_b4168_4_rib2	Translation elongation 2 b4168 4 ribosome(s)	604 h2o + 1 rib_70_elo1_b4168_4_cplx --> 604 EF-G.GDP + 604 EF-Tu.GDP + 40 ala1_tRNA + 20 ala2_tRNA + 24 arg1_tRNA + 8 argX_tRNA + 16 asn1_tRNA + 48 asp1_tRNA + 8 cysT_tRNA + 4 fmet_tRNA + 16 gln1_tRNA + 12 gln2_tRNA + 40 glu1_tRNA + 48 gly1_tRNA + 4 glyU_tRNA + 1208 h + 12 hisR_tRNA + 20 ile1_tRNA + 4 ile2_tRNA + 28 leu1_tRNA + 12 leu2_tRNA + 16 leuU_tRNA + 20 leuZ_tRNA + 12 lys1_tRNA + 12 met1_tRNA + 3040 mg2 + 20 phe1_tRNA + 1208 pi + 8 pro1_tRNA + 8 pro2_tRNA + 12 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b4168_4_cplx + 4 ser1_tRNA + 4 ser2_tRNA + 12 serV_tRNA + 12 thr1_tRNA + 4 thr2_tRNA + 8 thr3_tRNA + 8 thrU_tRNA + 4 trpT_tRNA + 32 tyr1_tRNA + 20 val1_tRNA + 16 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_elo_b4168_9_rib1	Translation elongation 1 b4168 9 ribosome(s)	1368 EF-G.GTP + 90 EF-Tu.GTP.ala1-tRNA + 45 EF-Tu.GTP.ala2-tRNA + 54 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argX-tRNA + 36 EF-Tu.GTP.asn1-tRNA + 108 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.cysT-tRNA + 36 EF-Tu.GTP.gln1-tRNA + 27 EF-Tu.GTP.gln2-tRNA + 90 EF-Tu.GTP.glu1-tRNA + 117 EF-Tu.GTP.gly1-tRNA + 9 EF-Tu.GTP.glyU-tRNA + 27 EF-Tu.GTP.hisR-tRNA + 45 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.ile2-tRNA + 63 EF-Tu.GTP.leu1-tRNA + 27 EF-Tu.GTP.leu2-tRNA + 36 EF-Tu.GTP.leuU-tRNA + 45 EF-Tu.GTP.leuZ-tRNA + 27 EF-Tu.GTP.lys1-tRNA + 27 EF-Tu.GTP.met1-tRNA + 45 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 27 EF-Tu.GTP.proL-tRNA + 9 EF-Tu.GTP.proM-tRNA + 9 EF-Tu.GTP.ser1-tRNA + 9 EF-Tu.GTP.ser2-tRNA + 27 EF-Tu.GTP.serV-tRNA + 27 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.thrU-tRNA + 9 EF-Tu.GTP.trpT-tRNA + 72 EF-Tu.GTP.tyr1-tRNA + 45 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val2-tRNA + 18 EF-Tu.GTP.val3-tRNA + 6840 mg2 + 1 rib_ini_b4168_9 --> 1 rib_70_elo1_b4168_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_elo_b4168_9_rib2	Translation elongation 2 b4168 9 ribosome(s)	1359 h2o + 1 rib_70_elo1_b4168_9_cplx --> 1359 EF-G.GDP + 1359 EF-Tu.GDP + 90 ala1_tRNA + 45 ala2_tRNA + 54 arg1_tRNA + 18 argX_tRNA + 36 asn1_tRNA + 108 asp1_tRNA + 18 cysT_tRNA + 9 fmet_tRNA + 36 gln1_tRNA + 27 gln2_tRNA + 90 glu1_tRNA + 108 gly1_tRNA + 9 glyU_tRNA + 2718 h + 27 hisR_tRNA + 45 ile1_tRNA + 9 ile2_tRNA + 63 leu1_tRNA + 27 leu2_tRNA + 36 leuU_tRNA + 45 leuZ_tRNA + 27 lys1_tRNA + 27 met1_tRNA + 6840 mg2 + 45 phe1_tRNA + 2718 pi + 18 pro1_tRNA + 18 pro2_tRNA + 27 proL_tRNA + 9 proM_tRNA + 1 rib_70_elo2_b4168_9_cplx + 9 ser1_tRNA + 9 ser2_tRNA + 27 serV_tRNA + 27 thr1_tRNA + 9 thr2_tRNA + 18 thr3_tRNA + 18 thrU_tRNA + 9 trpT_tRNA + 72 tyr1_tRNA + 45 val1_tRNA + 36 val2_tRNA + 18 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_elo_b4169_13_rib1	Translation elongation 1 b4169 13 ribosome(s)	5772 EF-G.GTP + 442 EF-Tu.GTP.ala1-tRNA + 143 EF-Tu.GTP.ala2-tRNA + 312 EF-Tu.GTP.arg1-tRNA + 13 EF-Tu.GTP.argU-tRNA + 65 EF-Tu.GTP.argX-tRNA + 325 EF-Tu.GTP.asn1-tRNA + 312 EF-Tu.GTP.asp1-tRNA + 13 EF-Tu.GTP.cysT-tRNA + 182 EF-Tu.GTP.gln1-tRNA + 130 EF-Tu.GTP.gln2-tRNA + 208 EF-Tu.GTP.glu1-tRNA + 325 EF-Tu.GTP.gly1-tRNA + 39 EF-Tu.GTP.glyT-tRNA + 52 EF-Tu.GTP.glyU-tRNA + 104 EF-Tu.GTP.hisR-tRNA + 286 EF-Tu.GTP.ile1-tRNA + 26 EF-Tu.GTP.ile2-tRNA + 234 EF-Tu.GTP.leu1-tRNA + 104 EF-Tu.GTP.leu2-tRNA + 104 EF-Tu.GTP.leuU-tRNA + 13 EF-Tu.GTP.leuW-tRNA + 39 EF-Tu.GTP.leuZ-tRNA + 208 EF-Tu.GTP.lys1-tRNA + 78 EF-Tu.GTP.met1-tRNA + 143 EF-Tu.GTP.phe1-tRNA + 195 EF-Tu.GTP.pro1-tRNA + 78 EF-Tu.GTP.pro2-tRNA + 39 EF-Tu.GTP.proL-tRNA + 65 EF-Tu.GTP.proM-tRNA + 26 EF-Tu.GTP.ser1-tRNA + 78 EF-Tu.GTP.ser2-tRNA + 52 EF-Tu.GTP.ser3-tRNA + 13 EF-Tu.GTP.serT-tRNA + 286 EF-Tu.GTP.serV-tRNA + 91 EF-Tu.GTP.thr1-tRNA + 78 EF-Tu.GTP.thr2-tRNA + 260 EF-Tu.GTP.thr3-tRNA + 39 EF-Tu.GTP.trpT-tRNA + 117 EF-Tu.GTP.tyr1-tRNA + 273 EF-Tu.GTP.val1-tRNA + 91 EF-Tu.GTP.val2-tRNA + 91 EF-Tu.GTP.val3-tRNA + 28860 mg2 + 1 rib_	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664

tl_elo_b4169_13_rib2	Translation elongation 2 b4169 13 ribosome(s)	5759 h2o + 1 rib_70_elo1_b4169_13_cplx --> 5759 EF-G.GDP + 5759 EF-Tu.GDP + 442 ala1_tRNA + 143 ala2_tRNA + 312 arg1_tRNA + 13 argU_tRNA + 65 argX_tRNA + 312 asn1_tRNA + 312 asp1_tRNA + 13 cysT_tRNA + 13 fmet_tRNA + 182 gln1_tRNA + 130 gln2_tRNA + 208 glu1_tRNA + 325 gly1_tRNA + 39 glyT_tRNA + 52 glyU_tRNA + 11518 h + 104 hisR_tRNA + 286 ile1_tRNA + 26 ile2_tRNA + 234 leu1_tRNA + 104 leu2_tRNA + 104 leuU_tRNA + 13 leuW_tRNA + 39 leuZ_tRNA + 208 lys1_tRNA + 78 met1_tRNA + 28860 mg2 + 143 phe1_tRNA + 11518 pi + 195 pro1_tRNA + 78 pro2_tRNA + 39 proL_tRNA + 65 proM_tRNA + 1 rib_70_elo2_b4169_13_cplx + 26 ser1_tRNA + 78 ser2_tRNA + 52 ser3_tRNA + 13 serT_tRNA + 286 serV_tRNA + 91 thr1_tRNA + 78 thr2_tRNA + 260 thr3_tRNA + 39 trpT_tRNA + 117 tyr1_tRNA + 273 val1_tRNA + 91 val2_tRNA + 91 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_elo_b4169_1_rib1	Translation elongation 1 b4169 1 ribosome(s)	444 EF-G.GTP + 34 EF-Tu.GTP.ala1-tRNA + 11 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 5 EF-Tu.GTP.argX-tRNA + 25 EF-Tu.GTP.asn1-tRNA + 24 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 14 EF-Tu.GTP.gln1-tRNA + 10 EF-Tu.GTP.gln2-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 25 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 22 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 16 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 11 EF-Tu.GTP.phe1-tRNA + 15 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 22 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 21 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 2220 mg2 + 1 rib_ini_b4169_1 --> 1 rib_70_elo1_b4169_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_elo_b4169_1_rib2	Translation elongation 2 b4169 1 ribosome(s)	443 h2o + 1 rib_70_elo1_b4169_1_cplx --> 443 EF-G.GDP + 443 EF-Tu.GDP + 34 ala1_tRNA + 11 ala2_tRNA + 24 arg1_tRNA + 1 argU_tRNA + 5 argX_tRNA + 24 asn1_tRNA + 24 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 14 gln1_tRNA + 10 gln2_tRNA + 16 glu1_tRNA + 25 gly1_tRNA + 3 glyT_tRNA + 4 glyU_tRNA + 886 h + 8 hisR_tRNA + 22 ile1_tRNA + 2 ile2_tRNA + 18 leu1_tRNA + 8 leu2_tRNA + 8 leuU_tRNA + 1 leuW_tRNA + 3 leuZ_tRNA + 16 lys1_tRNA + 6 met1_tRNA + 2220 mg2 + 11 phe1_tRNA + 886 pi + 15 pro1_tRNA + 6 pro2_tRNA + 3 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b4169_1_cplx + 2 ser1_tRNA + 6 ser2_tRNA + 4 ser3_tRNA + 1 serT_tRNA + 22 serV_tRNA + 7 thr1_tRNA + 6 thr2_tRNA + 20 thr3_tRNA + 3 trpT_tRNA + 9 tyr1_tRNA + 21 val1_tRNA + 7 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_elo_b4169_26_rib1	Translation elongation 1 b4169 26 ribosome(s)	11544 EF-G.GTP + 884 EF-Tu.GTP.ala1-tRNA + 286 EF-Tu.GTP.ala2-tRNA + 624 EF-Tu.GTP.arg1-tRNA + 26 EF-Tu.GTP.argU-tRNA + 130 EF-Tu.GTP.argX-tRNA + 650 EF-Tu.GTP.asn1-tRNA + 624 EF-Tu.GTP.asp1-tRNA + 26 EF-Tu.GTP.cysT-tRNA + 364 EF-Tu.GTP.gln1-tRNA + 260 EF-Tu.GTP.gln2-tRNA + 416 EF-Tu.GTP.glu1-tRNA + 650 EF-Tu.GTP.gly1-tRNA + 78 EF-Tu.GTP.glyT-tRNA + 104 EF-Tu.GTP.glyU-tRNA + 208 EF-Tu.GTP.hisR-tRNA + 572 EF-Tu.GTP.ile1-tRNA + 52 EF-Tu.GTP.ile2-tRNA + 468 EF-Tu.GTP.leu1-tRNA + 208 EF-Tu.GTP.leu2-tRNA + 208 EF-Tu.GTP.leuU-tRNA + 26 EF-Tu.GTP.leuW-tRNA + 78 EF-Tu.GTP.leuZ-tRNA + 416 EF-Tu.GTP.lys1-tRNA + 156 EF-Tu.GTP.met1-tRNA + 286 EF-Tu.GTP.phe1-tRNA + 390 EF-Tu.GTP.pro1-tRNA + 156 EF-Tu.GTP.pro2-tRNA + 78 EF-Tu.GTP.proL-tRNA + 130 EF-Tu.GTP.proM-tRNA + 52 EF-Tu.GTP.ser1-tRNA + 156 EF-Tu.GTP.ser2-tRNA + 104 EF-Tu.GTP.ser3-tRNA + 26 EF-Tu.GTP.serT-tRNA + 572 EF-Tu.GTP.serV-tRNA + 182 EF-Tu.GTP.thr1-tRNA + 156 EF-Tu.GTP.thr2-tRNA + 520 EF-Tu.GTP.thr3-tRNA + 78 EF-Tu.GTP.trpT-tRNA + 234 EF-Tu.GTP.tyr1-tRNA + 546 EF-Tu.GTP.val1-tRNA + 182 EF-Tu.GTP.val2-tRNA + 182 EF-Tu.GTP.val3-tRNA + 57720 mg2 + 1 rib	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_elo_b4169_26_rib2	Translation elongation 2 b4169 26 ribosome(s)	11518 h2o + 1 rib_70_elo1_b4169_26_cplx --> 11518 EF-G.GDP + 11518 EF-Tu.GDP + 884 ala1_tRNA + 286 ala2_tRNA + 624 arg1_tRNA + 26 argU_tRNA + 130 argX_tRNA + 624 asn1_tRNA + 624 asp1_tRNA + 26 cysT_tRNA + 26 fmet_tRNA + 364 gln1_tRNA + 260 gln2_tRNA + 416 glu1_tRNA + 650 gly1_tRNA + 78 glyT_tRNA + 104 glyU_tRNA + 23036 h + 208 hisR_tRNA + 572 ile1_tRNA + 52 ile2_tRNA + 468 leu1_tRNA + 208 leu2_tRNA + 208 leuU_tRNA + 26 leuW_tRNA + 78 leuZ_tRNA + 416 lys1_tRNA + 156 met1_tRNA + 57720 mg2 + 286 phe1_tRNA + 23036 pi + 390 pro1_tRNA + 156 pro2_tRNA + 78 proL_tRNA + 130 proM_tRNA + 1 rib_70_elo2_b4169_26_cplx + 52 ser1_tRNA + 156 ser2_tRNA + 104 ser3_tRNA + 26 serT_tRNA + 572 serV_tRNA + 182 thr1_tRNA + 156 thr2_tRNA + 520 thr3_tRNA + 78 trpT_tRNA + 234 tyr1_tRNA + 546 val1_tRNA + 182 val2_tRNA + 182 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_elo_b4170_18_rib1	Translation elongation 1 b4170 18 ribosome(s)	11052 EF-G.GTP + 1044 EF-Tu.GTP.ala1-tRNA + 306 EF-Tu.GTP.ala2-tRNA + 666 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argW-tRNA + 90 EF-Tu.GTP.argX-tRNA + 360 EF-Tu.GTP.asn1-tRNA + 504 EF-Tu.GTP.asp1-tRNA + 126 EF-Tu.GTP.cysT-tRNA + 504 EF-Tu.GTP.gln1-tRNA + 306 EF-Tu.GTP.gln2-tRNA + 774 EF-Tu.GTP.glu1-tRNA + 468 EF-Tu.GTP.gly1-tRNA + 108 EF-Tu.GTP.glyU-tRNA + 306 EF-Tu.GTP.hisR-tRNA + 630 EF-Tu.GTP.ile1-tRNA + 54 EF-Tu.GTP.ile2-tRNA + 648 EF-Tu.GTP.leu1-tRNA + 144 EF-Tu.GTP.leu2-tRNA + 180 EF-Tu.GTP.leuU-tRNA + 90 EF-Tu.GTP.leuW-tRNA + 198 EF-Tu.GTP.leuZ-tRNA + 396 EF-Tu.GTP.lys1-tRNA + 108 EF-Tu.GTP.met1-tRNA + 234 EF-Tu.GTP.phe1-tRNA + 432 EF-Tu.GTP.pro1-tRNA + 144 EF-Tu.GTP.pro2-tRNA + 126 EF-Tu.GTP.proL-tRNA + 126 EF-Tu.GTP.proM-tRNA + 90 EF-Tu.GTP.ser1-tRNA + 72 EF-Tu.GTP.ser2-tRNA + 90 EF-Tu.GTP.ser3-tRNA + 90 EF-Tu.GTP.serT-tRNA + 180 EF-Tu.GTP.serV-tRNA + 162 EF-Tu.GTP.thr1-tRNA + 54 EF-Tu.GTP.thr2-tRNA + 216 EF-Tu.GTP.thr3-tRNA + 126 EF-Tu.GTP.trpT-tRNA + 198 EF-Tu.GTP.tyr1-tRNA + 504 EF-Tu.GTP.val1-tRNA + 108 EF-Tu.GTP.val2-tRNA + 72 EF-Tu.GTP.val3-tRNA + 55260 mg2 + 1 rib_	irreversible	Translation	0.00E+00	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924

tl_elo_b4170_18_rib2	Translation elongation 2 b4170 18 ribosome(s)	11034 h2o + 1 rib_70_elo1_b4170_18_cplx --> 11034 EF-G.GDP + 11034 EF-Tu.GDP + 1044 ala1_tRNA + 306 ala2_tRNA + 666 arg1_tRNA + 18 argW_tRNA + 90 argX_tRNA + 360 asn1_tRNA + 504 asp1_tRNA + 126 cysT_tRNA + 18 fmet_tRNA + 504 gln1_tRNA + 306 gln2_tRNA + 756 glu1_tRNA + 468 gly1_tRNA + 108 glyU_tRNA + 22068 h + 306 hisR_tRNA + 630 ile1_tRNA + 54 ile2_tRNA + 648 leu1_tRNA + 144 leu2_tRNA + 180 leuU_tRNA + 90 leuW_tRNA + 198 leuZ_tRNA + 396 lys1_tRNA + 108 met1_tRNA + 55260 mg2 + 234 phe1_tRNA + 22068 pi + 432 pro1_tRNA + 144 pro2_tRNA + 126 proL_tRNA + 126 proM_tRNA + 1 rib_70_elo2_b4170_18_cplx + 90 ser1_tRNA + 72 ser2_tRNA + 90 ser3_tRNA + 90 serT_tRNA + 180 serV_tRNA + 162 thr1_tRNA + 54 thr2_tRNA + 216 thr3_tRNA + 126 trpT_tRNA + 198 tyr1_tRNA + 504 val1_tRNA + 108 val2_tRNA + 72 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924
tl_elo_b4170_1_rib1	Translation elongation 1 b4170 1 ribosome(s)	614 EF-G.GTP + 58 EF-Tu.GTP.ala1-tRNA + 17 EF-Tu.GTP.ala2-tRNA + 37 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 5 EF-Tu.GTP.argX-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 28 EF-Tu.GTP.asp1-tRNA + 7 EF-Tu.GTP.cysT-tRNA + 28 EF-Tu.GTP.gln1-tRNA + 17 EF-Tu.GTP.gln2-tRNA + 43 EF-Tu.GTP.glu1-tRNA + 26 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 17 EF-Tu.GTP.hisR-tRNA + 35 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 36 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuW-tRNA + 11 EF-Tu.GTP.leuZ-tRNA + 22 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 13 EF-Tu.GTP.phe1-tRNA + 24 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proL-tRNA + 7 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serT-tRNA + 10 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 11 EF-Tu.GTP.tyr1-tRNA + 28 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 3070 mg2 + 1 rib_ini_b4170_1 --> 1 rib_70_elo1_b4170_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924
tl_elo_b4170_1_rib2	Translation elongation 2 b4170 1 ribosome(s)	613 h2o + 1 rib_70_elo1_b4170_1_cplx --> 613 EF-G.GDP + 613 EF-Tu.GDP + 58 ala1_tRNA + 17 ala2_tRNA + 37 arg1_tRNA + 1 argW_tRNA + 5 argX_tRNA + 20 asn1_tRNA + 28 asp1_tRNA + 7 cysT_tRNA + 1 fmet_tRNA + 28 gln1_tRNA + 17 gln2_tRNA + 42 glu1_tRNA + 26 gly1_tRNA + 6 glyU_tRNA + 1226 h + 17 hisR_tRNA + 35 ile1_tRNA + 3 ile2_tRNA + 36 leu1_tRNA + 8 leu2_tRNA + 10 leuU_tRNA + 5 leuW_tRNA + 11 leuZ_tRNA + 22 lys1_tRNA + 6 met1_tRNA + 3070 mg2 + 13 phe1_tRNA + 1226 pi + 24 pro1_tRNA + 8 pro2_tRNA + 7 proL_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b4170_1_cplx + 5 ser1_tRNA + 4 ser2_tRNA + 5 ser3_tRNA + 5 serT_tRNA + 10 serV_tRNA + 9 thr1_tRNA + 3 thr2_tRNA + 12 thr3_tRNA + 7 trpT_tRNA + 11 tyr1_tRNA + 28 val1_tRNA + 6 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924
tl_elo_b4170_36_rib1	Translation elongation 1 b4170 36 ribosome(s)	22104 EF-G.GTP + 2088 EF-Tu.GTP.ala1-tRNA + 612 EF-Tu.GTP.ala2-tRNA + 1332 EF-Tu.GTP.arg1-tRNA + 36 EF-Tu.GTP.argW-tRNA + 180 EF-Tu.GTP.argX-tRNA + 720 EF-Tu.GTP.asn1-tRNA + 1008 EF-Tu.GTP.asp1-tRNA + 252 EF-Tu.GTP.cysT-tRNA + 1008 EF-Tu.GTP.gln1-tRNA + 612 EF-Tu.GTP.gln2-tRNA + 1548 EF-Tu.GTP.glu1-tRNA + 936 EF-Tu.GTP.gly1-tRNA + 216 EF-Tu.GTP.glyU-tRNA + 612 EF-Tu.GTP.hisR-tRNA + 1260 EF-Tu.GTP.ile1-tRNA + 108 EF-Tu.GTP.ile2-tRNA + 1296 EF-Tu.GTP.leu1-tRNA + 288 EF-Tu.GTP.leu2-tRNA + 360 EF-Tu.GTP.leuU-tRNA + 180 EF-Tu.GTP.leuW-tRNA + 396 EF-Tu.GTP.leuZ-tRNA + 792 EF-Tu.GTP.lys1-tRNA + 216 EF-Tu.GTP.met1-tRNA + 468 EF-Tu.GTP.phe1-tRNA + 864 EF-Tu.GTP.pro1-tRNA + 288 EF-Tu.GTP.pro2-tRNA + 252 EF-Tu.GTP.proL-tRNA + 252 EF-Tu.GTP.proM-tRNA + 180 EF-Tu.GTP.ser1-tRNA + 144 EF-Tu.GTP.ser2-tRNA + 180 EF-Tu.GTP.ser3-tRNA + 180 EF-Tu.GTP.serT-tRNA + 360 EF-Tu.GTP.serV-tRNA + 324 EF-Tu.GTP.thr1-tRNA + 108 EF-Tu.GTP.thr2-tRNA + 432 EF-Tu.GTP.thr3-tRNA + 252 EF-Tu.GTP.trpT-tRNA + 396 EF-Tu.GTP.tyr1-tRNA + 1008 EF-Tu.GTP.val1-tRNA + 216 EF-Tu.GTP.val2-tRNA + 144 EF-Tu.GTP.val3-tRNA + 110520 mg2 + 1 ri	irreversible	Translation	0.00E+00	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924
tl_elo_b4170_36_rib2	Translation elongation 2 b4170 36 ribosome(s)	22068 h2o + 1 rib_70_elo1_b4170_36_cplx --> 22068 EF-G.GDP + 22068 EF-Tu.GDP + 2088 ala1_tRNA + 612 ala2_tRNA + 1332 arg1_tRNA + 36 argW_tRNA + 180 argX_tRNA + 720 asn1_tRNA + 1008 asp1_tRNA + 252 cysT_tRNA + 36 fmet_tRNA + 1008 gln1_tRNA + 612 gln2_tRNA + 1512 glu1_tRNA + 936 gly1_tRNA + 216 glyU_tRNA + 44136 h + 612 hisR_tRNA + 1260 ile1_tRNA + 108 ile2_tRNA + 1296 leu1_tRNA + 288 leu2_tRNA + 360 leuU_tRNA + 180 leuW_tRNA + 396 leuZ_tRNA + 792 lys1_tRNA + 216 met1_tRNA + 110520 mg2 + 468 phe1_tRNA + 44136 pi + 864 pro1_tRNA + 288 pro2_tRNA + 252 proL_tRNA + 252 proM_tRNA + rib_70_elo2_b4170_36_cplx + 180 ser1_tRNA + 144 ser2_tRNA + 180 ser3_tRNA + 180 serT_tRNA + 360 serV_tRNA + 324 thr1_tRNA + 108 thr2_tRNA + 432 thr3_tRNA + 252 trpT_tRNA + 396 tyr1_tRNA + 1008 val1_tRNA + 216 val2_tRNA + 144 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924
tl_elo_b4171_18_rib1	Translation elongation 1 b4171 18 ribosome(s)	5670 EF-G.GTP + 540 EF-Tu.GTP.ala1-tRNA + 180 EF-Tu.GTP.ala2-tRNA + 270 EF-Tu.GTP.arg1-tRNA + 36 EF-Tu.GTP.argU-tRNA + 36 EF-Tu.GTP.argW-tRNA + 90 EF-Tu.GTP.argX-tRNA + 36 EF-Tu.GTP.asn1-tRNA + 306 EF-Tu.GTP.asp1-tRNA + 36 EF-Tu.GTP.cysT-tRNA + 216 EF-Tu.GTP.gln1-tRNA + 108 EF-Tu.GTP.gln2-tRNA + 432 EF-Tu.GTP.glu1-tRNA + 216 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.glyT-tRNA + 108 EF-Tu.GTP.glyU-tRNA + 144 EF-Tu.GTP.hisR-tRNA + 306 EF-Tu.GTP.ile1-tRNA + 36 EF-Tu.GTP.ile2-tRNA + 180 EF-Tu.GTP.leu1-tRNA + 198 EF-Tu.GTP.leu2-tRNA + 144 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuW-tRNA + 108 EF-Tu.GTP.leuZ-tRNA + 180 EF-Tu.GTP.lys1-tRNA + 126 EF-Tu.GTP.met1-tRNA + 162 EF-Tu.GTP.phe1-tRNA + 180 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 90 EF-Tu.GTP.proM-tRNA + 54 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 90 EF-Tu.GTP.ser3-tRNA + 72 EF-Tu.GTP.serT-tRNA + 108 EF-Tu.GTP.serV-tRNA + 36 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 162 EF-Tu.GTP.thr3-tRNA + 90 EF-Tu.GTP.trpT-tRNA + 144 EF-Tu.GTP.tyr1-tRNA + 126 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 144 EF-Tu.GTP.val3-tRNA + 28350 mg2 + 1 rib	irreversible	Translation	0.00E+00	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954

tl_elo_b4171_18_rib2	Translation elongation 2 b4171 18 ribosome(s)	5652 h2o + 1 rib_70_elo1_b4171_18_cplx --> 5652 EF-G.GDP + 5652 EF-Tu.GDP + 540 ala1_tRNA + 180 ala2_tRNA + 270 arg1_tRNA + 36 argU_tRNA + 36 argW_tRNA + 90 argX_tRNA + 36 asn1_tRNA + 306 asp1_tRNA + 36 cysT_tRNA + 18 fmet_tRNA + 216 gln1_tRNA + 108 gln2_tRNA + 432 glu1_tRNA + 198 gly1_tRNA + 36 glyT_tRNA + 108 glyU_tRNA + 11304 h + 144 hisR_tRNA + 306 ile1_tRNA + 36 ile2_tRNA + 180 leu1_tRNA + 198 leu2_tRNA + 144 leuU_tRNA + 36 leuW_tRNA + 108 leuZ_tRNA + 180 lys1_tRNA + 126 met1_tRNA + 28350 mg2 + 162 phe1_tRNA + 11304 pi + 180 pro1_tRNA + 36 pro2_tRNA + 90 proM_tRNA + 1 rib_70_elo2_b4171_18_cplx + 54 ser1_tRNA + 36 ser2_tRNA + 90 ser3_tRNA + 72 serT_tRNA + 108 serV_tRNA + 36 thr1_tRNA + 18 thr2_tRNA + 162 thr3_tRNA + 90 trpT_tRNA + 144 tyr1_tRNA + 126 val1_tRNA + 18 val2_tRNA + 144 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954
tl_elo_b4171_1_rib1	Translation elongation 1 b4171 1 ribosome(s)	315 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 15 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argU-tRNA + 2 EF-Tu.GTP.argW-tRNA + 5 EF-Tu.GTP.argX-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 17 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 24 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 17 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 11 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 10 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 5 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 5 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 1575 mg2 + 1 rib_ini_b4171_1 --> 1 rib_70_elo1_b4171_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954
tl_elo_b4171_1_rib2	Translation elongation 2 b4171 1 ribosome(s)	314 h2o + 1 rib_70_elo1_b4171_1_cplx --> 314 EF-G.GDP + 314 EF-Tu.GDP + 30 ala1_tRNA + 10 ala2_tRNA + 15 arg1_tRNA + 2 argU_tRNA + 2 argW_tRNA + 5 argX_tRNA + 2 asn1_tRNA + 17 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 12 gln1_tRNA + 6 gln2_tRNA + 24 glu1_tRNA + 11 gly1_tRNA + 2 glyT_tRNA + 6 glyU_tRNA + 628 h + 8 hisR_tRNA + 17 ile1_tRNA + 2 ile2_tRNA + 10 leu1_tRNA + 11 leu2_tRNA + 8 leuU_tRNA + 2 leuW_tRNA + 6 leuZ_tRNA + 10 lys1_tRNA + 7 met1_tRNA + 1575 mg2 + 9 phe1_tRNA + 628 pi + 10 pro1_tRNA + 2 pro2_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b4171_1_cplx + 3 ser1_tRNA + 2 ser2_tRNA + 5 ser3_tRNA + 4 serT_tRNA + 6 serV_tRNA + 2 thr1_tRNA + 1 thr2_tRNA + 9 thr3_tRNA + 5 trpT_tRNA + 8 tyr1_tRNA + 7 val1_tRNA + 1 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954
tl_elo_b4171_9_rib1	Translation elongation 1 b4171 9 ribosome(s)	2835 EF-G.GTP + 270 EF-Tu.GTP.ala1-tRNA + 90 EF-Tu.GTP.ala2-tRNA + 135 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argU-tRNA + 18 EF-Tu.GTP.argW-tRNA + 45 EF-Tu.GTP.argX-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 153 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.cysT-tRNA + 108 EF-Tu.GTP.gln1-tRNA + 54 EF-Tu.GTP.gln2-tRNA + 216 EF-Tu.GTP.glu1-tRNA + 108 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 54 EF-Tu.GTP.glyU-tRNA + 72 EF-Tu.GTP.hisR-tRNA + 153 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.ile2-tRNA + 90 EF-Tu.GTP.leu1-tRNA + 99 EF-Tu.GTP.leu2-tRNA + 72 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuW-tRNA + 54 EF-Tu.GTP.leuZ-tRNA + 90 EF-Tu.GTP.lys1-tRNA + 63 EF-Tu.GTP.met1-tRNA + 81 EF-Tu.GTP.phe1-tRNA + 90 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 45 EF-Tu.GTP.proM-tRNA + 27 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 45 EF-Tu.GTP.ser3-tRNA + 36 EF-Tu.GTP.serT-tRNA + 54 EF-Tu.GTP.serV-tRNA + 18 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 81 EF-Tu.GTP.thr3-tRNA + 45 EF-Tu.GTP.trpT-tRNA + 72 EF-Tu.GTP.tyr1-tRNA + 63 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val2-tRNA + 72 EF-Tu.GTP.val3-tRNA + 14175 mg2 + 1 rib_	irreversible	Translation	0.00E+00	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954
tl_elo_b4171_9_rib2	Translation elongation 2 b4171 9 ribosome(s)	2826 h2o + 1 rib_70_elo1_b4171_9_cplx --> 2826 EF-G.GDP + 2826 EF-Tu.GDP + 270 ala1_tRNA + 90 ala2_tRNA + 135 arg1_tRNA + 18 argU_tRNA + 18 argW_tRNA + 45 argX_tRNA + 18 asn1_tRNA + 153 asp1_tRNA + 18 cysT_tRNA + 9 fmet_tRNA + 108 gln1_tRNA + 54 gln2_tRNA + 216 glu1_tRNA + 99 gly1_tRNA + 18 glyT_tRNA + 54 glyU_tRNA + 5652 h + 72 hisR_tRNA + 153 ile1_tRNA + 18 ile2_tRNA + 90 leu1_tRNA + 99 leu2_tRNA + 72 leuU_tRNA + 18 leuW_tRNA + 54 leuZ_tRNA + 90 lys1_tRNA + 63 met1_tRNA + 14175 mg2 + 81 phe1_tRNA + 5652 pi + 90 pro1_tRNA + 18 pro2_tRNA + 45 proM_tRNA + 1 rib_70_elo2_b4171_9_cplx + 27 ser1_tRNA + 18 ser2_tRNA + 45 ser3_tRNA + 36 serT_tRNA + 54 serV_tRNA + 18 thr1_tRNA + 9 thr2_tRNA + 81 thr3_tRNA + 45 trpT_tRNA + 72 tyr1_tRNA + 63 val1_tRNA + 9 val2_tRNA + 72 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954
tl_elo_b4172_1_rib1	Translation elongation 1 b4172 1 ribosome(s)	101 EF-G.GTP + 5 EF-Tu.GTP.ala1-tRNA + 1 EF-Tu.GTP.ala2-tRNA + 3 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 5 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 5 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 7 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 505 mg2 + 1 rib_ini_b4172_1 --> 1 rib_70_elo1_b4172_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595

tl_elo_b4172_1_rib2	Translation elongation 2 b4172 1 ribosome(s)	100 h2o + 1 rib_70_elo1_b4172_1_cplx --> 100 EF-G.GDP + 100 EF-Tu.GDP + 5 ala1_tRNA + 1 ala2_tRNA + 3 arg1_tRNA + 1 argX_tRNA + 7 asn1_tRNA + 3 asp1_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 5 gln2_tRNA + 4 glu1_tRNA + 5 gly1_tRNA + 2 glyU_tRNA + 200 h + 5 hisR_tRNA + 5 ile1_tRNA + 4 leu1_tRNA + 2 leu2_tRNA + 1 leuZ_tRNA + 4 lys1_tRNA + 1 met1_tRNA + 505 mg2 + 3 phe1_tRNA + 200 pi + 3 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b4172_1_cplx + 1 ser1_tRNA + 6 ser2_tRNA + 7 serV_tRNA + 2 thr1_tRNA + 2 thr2_tRNA + 1 thr3_tRNA + 3 tyr1_tRNA + 2 val1_tRNA + 2 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_elo_b4172_3_rib1	Translation elongation 1 b4172 3 ribosome(s)	303 EF-G.GTP + 15 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 9 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argX-tRNA + 21 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 15 EF-Tu.GTP.gln2-tRNA + 15 EF-Tu.GTP.glu1-tRNA + 15 EF-Tu.GTP.gly1-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 15 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 21 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.tyr1-tRNA + 6 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 15 EF-Tu.GTP.val3-tRNA + 1515 mg2 + 1 rib_ini_b4172_3 --> 1 rib_70_elo1_b4172_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_elo_b4172_3_rib2	Translation elongation 2 b4172 3 ribosome(s)	300 h2o + 1 rib_70_elo1_b4172_3_cplx --> 300 EF-G.GDP + 300 EF-Tu.GDP + 15 ala1_tRNA + 3 ala2_tRNA + 9 arg1_tRNA + 3 argX_tRNA + 21 asn1_tRNA + 9 asp1_tRNA + 3 fmet_tRNA + 12 gln1_tRNA + 15 gln2_tRNA + 12 glu1_tRNA + 15 gly1_tRNA + 6 glyU_tRNA + 600 h + 15 hisR_tRNA + 15 ile1_tRNA + 12 leu1_tRNA + 6 leu2_tRNA + 3 leuZ_tRNA + 12 lys1_tRNA + 3 met1_tRNA + 1515 mg2 + 9 phe1_tRNA + 600 pi + 9 pro1_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b4172_3_cplx + 3 ser1_tRNA + 18 ser2_tRNA + 21 serV_tRNA + 6 thr1_tRNA + 6 thr2_tRNA + 3 thr3_tRNA + 9 tyr1_tRNA + 6 val1_tRNA + 6 val2_tRNA + 15 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_elo_b4172_6_rib1	Translation elongation 1 b4172 6 ribosome(s)	606 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 18 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argX-tRNA + 42 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 30 EF-Tu.GTP.gln2-tRNA + 30 EF-Tu.GTP.glu1-tRNA + 30 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyU-tRNA + 30 EF-Tu.GTP.hisR-tRNA + 30 EF-Tu.GTP.ile1-tRNA + 24 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 24 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 18 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 42 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 18 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 30 EF-Tu.GTP.val3-tRNA + 3030 mg2 + 1 rib_ini_b4172_6 --> 1 rib_70_elo1_b4172_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_elo_b4172_6_rib2	Translation elongation 2 b4172 6 ribosome(s)	600 h2o + 1 rib_70_elo1_b4172_6_cplx --> 600 EF-G.GDP + 600 EF-Tu.GDP + 30 ala1_tRNA + 6 ala2_tRNA + 18 arg1_tRNA + 6 argX_tRNA + 42 asn1_tRNA + 18 asp1_tRNA + 6 fmet_tRNA + 24 gln1_tRNA + 30 gln2_tRNA + 24 glu1_tRNA + 30 gly1_tRNA + 12 glyU_tRNA + 1200 h + 30 hisR_tRNA + 30 ile1_tRNA + 24 leu1_tRNA + 12 leu2_tRNA + 6 leuZ_tRNA + 24 lys1_tRNA + 6 met1_tRNA + 3030 mg2 + 18 phe1_tRNA + 1200 pi + 18 pro1_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b4172_6_cplx + 6 ser1_tRNA + 36 ser2_tRNA + 42 serV_tRNA + 12 thr1_tRNA + 12 thr2_tRNA + 6 thr3_tRNA + 18 tyr1_tRNA + 12 val1_tRNA + 12 val2_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_elo_b4173_12_rib1	Translation elongation 1 b4173 12 ribosome(s)	5100 EF-G.GTP + 360 EF-Tu.GTP.ala1-tRNA + 96 EF-Tu.GTP.ala2-tRNA + 372 EF-Tu.GTP.arg1-tRNA + 36 EF-Tu.GTP.argU-tRNA + 72 EF-Tu.GTP.argX-tRNA + 108 EF-Tu.GTP.asn1-tRNA + 312 EF-Tu.GTP.asp1-tRNA + 36 EF-Tu.GTP.cysT-tRNA + 228 EF-Tu.GTP.gln1-tRNA + 108 EF-Tu.GTP.gln2-tRNA + 468 EF-Tu.GTP.glu1-tRNA + 204 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.glyT-tRNA + 60 EF-Tu.GTP.glyU-tRNA + 132 EF-Tu.GTP.hisR-tRNA + 240 EF-Tu.GTP.ile1-tRNA + 48 EF-Tu.GTP.ile2-tRNA + 252 EF-Tu.GTP.leu1-tRNA + 132 EF-Tu.GTP.leu2-tRNA + 168 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuZ-tRNA + 180 EF-Tu.GTP.lys1-tRNA + 60 EF-Tu.GTP.met1-tRNA + 156 EF-Tu.GTP.phe1-tRNA + 120 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.pro2-tRNA + 48 EF-Tu.GTP.proM-tRNA + 36 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 48 EF-Tu.GTP.ser3-tRNA + 60 EF-Tu.GTP.serV-tRNA + 168 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 96 EF-Tu.GTP.thr3-tRNA + 24 EF-Tu.GTP.thrU-tRNA + 48 EF-Tu.GTP.trpT-tRNA + 84 EF-Tu.GTP.tyr1-tRNA + 192 EF-Tu.GTP.val1-tRNA + 96 EF-Tu.GTP.val2-tRNA + 132 EF-Tu.GTP.val3-tRNA + 25500 mg2 + 1 rib_ini_b4173_12 --> 1 rib_70_elo1_b4173_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_elo_b4173_12_rib2	Translation elongation 2 b4173 12 ribosome(s)	5088 h2o + 1 rib_70_elo1_b4173_12_cplx --> 5088 EF-G.GDP + 5088 EF-Tu.GDP + 360 ala1_tRNA + 96 ala2_tRNA + 372 arg1_tRNA + 36 argU_tRNA + 72 argX_tRNA + 108 asn1_tRNA + 312 asp1_tRNA + 36 cysT_tRNA + 12 fmet_tRNA + 228 gln1_tRNA + 108 gln2_tRNA + 468 glu1_tRNA + 204 gly1_tRNA + 24 glyT_tRNA + 60 glyU_tRNA + 10176 h + 132 hisR_tRNA + 228 ile1_tRNA + 48 ile2_tRNA + 252 leu1_tRNA + 132 leu2_tRNA + 168 leuU_tRNA + 36 leuZ_tRNA + 180 lys1_tRNA + 60 met1_tRNA + 25500 mg2 + 156 phe1_tRNA + 10176 pi + 120 pro1_tRNA + 12 pro2_tRNA + 48 proM_tRNA + 1 rib_70_elo2_b4173_12_cplx + 36 ser1_tRNA + 36 ser2_tRNA + 48 ser3_tRNA + 60 serV_tRNA + 168 thr1_tRNA + 12 thr2_tRNA + 96 thr3_tRNA + 24 thrU_tRNA + 48 trpT_tRNA + 84 tyr1_tRNA + 192 val1_tRNA + 96 val2_tRNA + 132 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604

tl_elo_b4173_1_rib1	Translation elongation 1 b4173 1 ribosome(s)	425 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 31 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argU-tRNA + 6 EF-Tu.GTP.argX-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 26 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 19 EF-Tu.GTP.gln1-tRNA + 9 EF-Tu.GTP.gln2-tRNA + 39 EF-Tu.GTP.glu1-tRNA + 17 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 5 EF-Tu.GTP.glyU-tRNA + 11 EF-Tu.GTP.hisR-tRNA + 20 EF-Tu.GTP.ile1-tRNA + 4 EF-Tu.GTP.ile2-tRNA + 21 EF-Tu.GTP.leu1-tRNA + 11 EF-Tu.GTP.leu2-tRNA + 14 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 15 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 13 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serV-tRNA + 14 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 16 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 11 EF-Tu.GTP.val3-tRNA + 2125 mg2 + 1 rib_ini_b4173_1 --> 1 rib_70_elo1_b4173_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_elo_b4173_1_rib2	Translation elongation 2 b4173 1 ribosome(s)	424 h2o + 1 rib_70_elo1_b4173_1_cplx --> 424 EF-G.GDP + 424 EF-Tu.GDP + 30 ala1_tRNA + 8 ala2_tRNA + 31 arg1_tRNA + 3 argU_tRNA + 6 argX_tRNA + 9 asn1_tRNA + 26 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 19 gln1_tRNA + 9 gln2_tRNA + 39 glu1_tRNA + 17 gly1_tRNA + 2 glyT_tRNA + 5 glyU_tRNA + 848 h + 11 hisR_tRNA + 19 ile1_tRNA + 4 ile2_tRNA + 21 leu1_tRNA + 11 leu2_tRNA + 14 leuU_tRNA + 3 leuZ_tRNA + 15 lys1_tRNA + 5 met1_tRNA + 2125 mg2 + 13 phe1_tRNA + 848 pi + 10 pro1_tRNA + 1 pro2_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b4173_1_cplx + 3 ser1_tRNA + 3 ser2_tRNA + 4 ser3_tRNA + 5 serV_tRNA + 14 thr1_tRNA + 1 thr2_tRNA + 8 thr3_tRNA + 2 thrU_tRNA + 4 trpT_tRNA + 7 tyr1_tRNA + 16 val1_tRNA + 8 val2_tRNA + 11 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_elo_b4173_25_rib1	Translation elongation 1 b4173 25 ribosome(s)	10625 EF-G.GTP + 750 EF-Tu.GTP.ala1-tRNA + 200 EF-Tu.GTP.ala2-tRNA + 775 EF-Tu.GTP.arg1-tRNA + 75 EF-Tu.GTP.argU-tRNA + 150 EF-Tu.GTP.argX-tRNA + 225 EF-Tu.GTP.asn1-tRNA + 650 EF-Tu.GTP.asp1-tRNA + 75 EF-Tu.GTP.cysT-tRNA + 475 EF-Tu.GTP.gln1-tRNA + 225 EF-Tu.GTP.gln2-tRNA + 975 EF-Tu.GTP.glu1-tRNA + 425 EF-Tu.GTP.gly1-tRNA + 50 EF-Tu.GTP.glyT-tRNA + 125 EF-Tu.GTP.glyU-tRNA + 275 EF-Tu.GTP.hisR-tRNA + 500 EF-Tu.GTP.ile1-tRNA + 100 EF-Tu.GTP.ile2-tRNA + 525 EF-Tu.GTP.leu1-tRNA + 275 EF-Tu.GTP.leu2-tRNA + 350 EF-Tu.GTP.leuU-tRNA + 75 EF-Tu.GTP.leuZ-tRNA + 375 EF-Tu.GTP.lys1-tRNA + 125 EF-Tu.GTP.met1-tRNA + 325 EF-Tu.GTP.phe1-tRNA + 250 EF-Tu.GTP.pro1-tRNA + 25 EF-Tu.GTP.pro2-tRNA + 100 EF-Tu.GTP.proM-tRNA + 75 EF-Tu.GTP.ser1-tRNA + 75 EF-Tu.GTP.ser2-tRNA + 100 EF-Tu.GTP.ser3-tRNA + 125 EF-Tu.GTP.serV-tRNA + 350 EF-Tu.GTP.thr1-tRNA + 25 EF-Tu.GTP.thr2-tRNA + 200 EF-Tu.GTP.thr3-tRNA + 50 EF-Tu.GTP.thrU-tRNA + 100 EF-Tu.GTP.trpT-tRNA + 175 EF-Tu.GTP.tyr1-tRNA + 400 EF-Tu.GTP.val1-tRNA + 200 EF-Tu.GTP.val2-tRNA + 275 EF-Tu.GTP.val3-tRNA + 53125 mg2 + 1 rib_ini_b4173_25 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_elo_b4173_25_rib2	Translation elongation 2 b4173 25 ribosome(s)	10600 h2o + 1 rib_70_elo1_b4173_25_cplx --> 10600 EF-G.GDP + 10600 EF-Tu.GDP + 750 ala1_tRNA + 200 ala2_tRNA + 775 arg1_tRNA + 75 argU_tRNA + 150 argX_tRNA + 225 asn1_tRNA + 650 asp1_tRNA + 75 cysT_tRNA + 25 fmet_tRNA + 475 gln1_tRNA + 225 gln2_tRNA + 975 glu1_tRNA + 425 gly1_tRNA + 50 glyT_tRNA + 125 glyU_tRNA + 21200 h + 275 hisR_tRNA + 475 ile1_tRNA + 100 ile2_tRNA + 525 leu1_tRNA + 275 leu2_tRNA + 350 leuU_tRNA + 75 leuZ_tRNA + 375 lys1_tRNA + 125 met1_tRNA + 53125 mg2 + 325 phe1_tRNA + 21200 pi + 250 pro1_tRNA + 25 pro2_tRNA + 100 proM_tRNA + 1 rib_70_elo2_b4173_25_cplx + 75 ser1_tRNA + 75 ser2_tRNA + 100 ser3_tRNA + 125 serV_tRNA + 350 thr1_tRNA + 25 thr2_tRNA + 200 thr3_tRNA + 50 thrU_tRNA + 100 trpT_tRNA + 175 tyr1_tRNA + 400 val1_tRNA + 200 val2_tRNA + 275 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_elo_b4174_12_rib1	Translation elongation 1 b4174 12 ribosome(s)	5016 EF-G.GTP + 336 EF-Tu.GTP.ala1-tRNA + 144 EF-Tu.GTP.ala2-tRNA + 384 EF-Tu.GTP.arg1-tRNA + 288 EF-Tu.GTP.asn1-tRNA + 276 EF-Tu.GTP.asp1-tRNA + 192 EF-Tu.GTP.gln1-tRNA + 72 EF-Tu.GTP.gln2-tRNA + 372 EF-Tu.GTP.glu1-tRNA + 408 EF-Tu.GTP.gly1-tRNA + 84 EF-Tu.GTP.glyT-tRNA + 24 EF-Tu.GTP.glyU-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 228 EF-Tu.GTP.ile1-tRNA + 276 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 48 EF-Tu.GTP.leuU-tRNA + 24 EF-Tu.GTP.leuZ-tRNA + 252 EF-Tu.GTP.lys1-tRNA + 96 EF-Tu.GTP.met1-tRNA + 96 EF-Tu.GTP.phe1-tRNA + 192 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proL-tRNA + 24 EF-Tu.GTP.proM-tRNA + 36 EF-Tu.GTP.ser1-tRNA + 48 EF-Tu.GTP.ser2-tRNA + 36 EF-Tu.GTP.ser3-tRNA + 12 EF-Tu.GTP.serT-tRNA + 192 EF-Tu.GTP.serV-tRNA + 156 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr2-tRNA + 84 EF-Tu.GTP.thr3-tRNA + 24 EF-Tu.GTP.thrU-tRNA + 48 EF-Tu.GTP.trpT-tRNA + 144 EF-Tu.GTP.tyr1-tRNA + 180 EF-Tu.GTP.val1-tRNA + 60 EF-Tu.GTP.val2-tRNA + 84 EF-Tu.GTP.val3-tRNA + 25080 mg2 + 1 rib_ini_b4174_12 --> 1 rib_70_elo1_b4174_12_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_elo_b4174_12_rib2	Translation elongation 2 b4174 12 ribosome(s)	5004 h2o + 1 rib_70_elo1_b4174_12_cplx --> 5004 EF-G.GDP + 5004 EF-Tu.GDP + 336 ala1_tRNA + 144 ala2_tRNA + 384 arg1_tRNA + 288 asn1_tRNA + 276 asp1_tRNA + 12 fmet_tRNA + 192 gln1_tRNA + 72 gln2_tRNA + 360 glu1_tRNA + 408 gly1_tRNA + 84 glyT_tRNA + 24 glyU_tRNA + 10008 h + 12 hisR_tRNA + 228 ile1_tRNA + 276 leu1_tRNA + 12 leu2_tRNA + 48 leuU_tRNA + 24 leuZ_tRNA + 252 lys1_tRNA + 96 met1_tRNA + 25080 mg2 + 96 phe1_tRNA + 10008 pi + 192 pro1_tRNA + 36 pro2_tRNA + 12 proL_tRNA + 24 proM_tRNA + 1 rib_70_elo2_b4174_12_cplx + 36 ser1_tRNA + 48 ser2_tRNA + 36 ser3_tRNA + 12 serT_tRNA + 192 serV_tRNA + 156 thr1_tRNA + 24 thr2_tRNA + 84 thr3_tRNA + 24 thrU_tRNA + 48 trpT_tRNA + 144 tyr1_tRNA + 180 val1_tRNA + 60 val2_tRNA + 84 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334

tl_elo_b4174_1_rib1	Translation elongation 1 b4174 1 ribosome(s)	418 EF-G.GTP + 28 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 32 EF-Tu.GTP.arg1-tRNA + 24 EF-Tu.GTP.asn1-tRNA + 23 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 31 EF-Tu.GTP.glu1-tRNA + 34 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyT-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 19 EF-Tu.GTP.ile1-tRNA + 23 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 21 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 16 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 16 EF-Tu.GTP.serV-tRNA + 13 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 7 EF-Tu.GTP.val3-tRNA + 2090 mg2 + 1 rib_ini_b4174_1 --> 1 rib_70_elo1_b4174_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_elo_b4174_1_rib2	Translation elongation 2 b4174 1 ribosome(s)	417 h2o + 1 rib_70_elo1_b4174_1_cplx --> 417 EF-G.GDP + 417 EF-Tu.GDP + 28 ala1_tRNA + 12 ala2_tRNA + 32 arg1_tRNA + 24 asn1_tRNA + 23 asp1_tRNA + 1 fmet_tRNA + 16 gln1_tRNA + 6 gln2_tRNA + 30 glu1_tRNA + 34 gly1_tRNA + 7 glyT_tRNA + 2 glyU_tRNA + 834 h + 1 hisR_tRNA + 19 ile1_tRNA + 23 leu1_tRNA + 1 leu2_tRNA + 4 leuU_tRNA + 2 leuZ_tRNA + 21 lys1_tRNA + 8 met1_tRNA + 2090 mg2 + 8 phe1_tRNA + 834 pi + 16 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b4174_1_cplx + 3 ser1_tRNA + 4 ser2_tRNA + 3 ser3_tRNA + 1 serT_tRNA + 16 serV_tRNA + 13 thr1_tRNA + 2 thr2_tRNA + 7 thr3_tRNA + 2 thrU_tRNA + 4 trpT_tRNA + 12 tyr1_tRNA + 15 val1_tRNA + 5 val2_tRNA + 7 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_elo_b4174_24_rib1	Translation elongation 1 b4174 24 ribosome(s)	10032 EF-G.GTP + 672 EF-Tu.GTP.ala1-tRNA + 288 EF-Tu.GTP.ala2-tRNA + 768 EF-Tu.GTP.arg1-tRNA + 576 EF-Tu.GTP.asn1-tRNA + 552 EF-Tu.GTP.asp1-tRNA + 384 EF-Tu.GTP.gln1-tRNA + 144 EF-Tu.GTP.gln2-tRNA + 744 EF-Tu.GTP.glu1-tRNA + 816 EF-Tu.GTP.gly1-tRNA + 168 EF-Tu.GTP.glyT-tRNA + 48 EF-Tu.GTP.glyU-tRNA + 24 EF-Tu.GTP.hisR-tRNA + 456 EF-Tu.GTP.ile1-tRNA + 552 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.leu2-tRNA + 96 EF-Tu.GTP.leuU-tRNA + 48 EF-Tu.GTP.leuZ-tRNA + 504 EF-Tu.GTP.lys1-tRNA + 192 EF-Tu.GTP.met1-tRNA + 192 EF-Tu.GTP.phe1-tRNA + 384 EF-Tu.GTP.pro1-tRNA + 72 EF-Tu.GTP.pro2-tRNA + 24 EF-Tu.GTP.proL-tRNA + 48 EF-Tu.GTP.proM-tRNA + 72 EF-Tu.GTP.ser1-tRNA + 96 EF-Tu.GTP.ser2-tRNA + 72 EF-Tu.GTP.ser3-tRNA + 24 EF-Tu.GTP.serT-tRNA + 384 EF-Tu.GTP.serV-tRNA + 312 EF-Tu.GTP.thr1-tRNA + 48 EF-Tu.GTP.thr2-tRNA + 168 EF-Tu.GTP.thr3-tRNA + 48 EF-Tu.GTP.thrU-tRNA + 96 EF-Tu.GTP.trpT-tRNA + 288 EF-Tu.GTP.tyr1-tRNA + 360 EF-Tu.GTP.val1-tRNA + 120 EF-Tu.GTP.val2-tRNA + 168 EF-Tu.GTP.val3-tRNA + 50160 mg2 + 1 rib_ini_b4174_24 --> 1 rib_70_elo1_b4174_24_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_elo_b4174_24_rib2	Translation elongation 2 b4174 24 ribosome(s)	10008 h2o + 1 rib_70_elo1_b4174_24_cplx --> 10008 EF-G.GDP + 10008 EF-Tu.GDP + 672 ala1_tRNA + 288 ala2_tRNA + 768 arg1_tRNA + 576 asn1_tRNA + 552 asp1_tRNA + 24 fmet_tRNA + 384 gln1_tRNA + 144 gln2_tRNA + 720 glu1_tRNA + 816 gly1_tRNA + 168 glyT_tRNA + 48 glyU_tRNA + 20016 h + 24 hisR_tRNA + 456 ile1_tRNA + 552 leu1_tRNA + 24 leu2_tRNA + 96 leuU_tRNA + 48 leuZ_tRNA + 504 lys1_tRNA + 192 met1_tRNA + 50160 mg2 + 192 phe1_tRNA + 20016 pi + 384 pro1_tRNA + 72 pro2_tRNA + 24 proL_tRNA + 48 proM_tRNA + 1 rib_70_elo2_b4174_24_cplx + 72 ser1_tRNA + 96 ser2_tRNA + 72 ser3_tRNA + 24 serT_tRNA + 384 serV_tRNA + 312 thr1_tRNA + 48 thr2_tRNA + 168 thr3_tRNA + 48 thrU_tRNA + 96 trpT_tRNA + 288 tyr1_tRNA + 360 val1_tRNA + 120 val2_tRNA + 168 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_elo_b4175_19_rib1	Translation elongation 1 b4175 19 ribosome(s)	6327 EF-G.GTP + 494 EF-Tu.GTP.ala1-tRNA + 133 EF-Tu.GTP.ala2-tRNA + 589 EF-Tu.GTP.arg1-tRNA + 19 EF-Tu.GTP.argU-tRNA + 190 EF-Tu.GTP.asn1-tRNA + 494 EF-Tu.GTP.asp1-tRNA + 114 EF-Tu.GTP.gln1-tRNA + 38 EF-Tu.GTP.gln2-tRNA + 513 EF-Tu.GTP.glu1-tRNA + 342 EF-Tu.GTP.gly1-tRNA + 38 EF-Tu.GTP.hisR-tRNA + 418 EF-Tu.GTP.ile1-tRNA + 19 EF-Tu.GTP.ile2-tRNA + 342 EF-Tu.GTP.leu1-tRNA + 19 EF-Tu.GTP.leu2-tRNA + 57 EF-Tu.GTP.leuU-tRNA + 380 EF-Tu.GTP.lys1-tRNA + 171 EF-Tu.GTP.met1-tRNA + 266 EF-Tu.GTP.phe1-tRNA + 171 EF-Tu.GTP.pro1-tRNA + 19 EF-Tu.GTP.pro2-tRNA + 57 EF-Tu.GTP.ser1-tRNA + 133 EF-Tu.GTP.ser2-tRNA + 19 EF-Tu.GTP.ser3-tRNA + 38 EF-Tu.GTP.serT-tRNA + 152 EF-Tu.GTP.serV-tRNA + 133 EF-Tu.GTP.thr1-tRNA + 57 EF-Tu.GTP.thr2-tRNA + 152 EF-Tu.GTP.thr3-tRNA + 19 EF-Tu.GTP.thrU-tRNA + 19 EF-Tu.GTP.trpT-tRNA + 190 EF-Tu.GTP.tyr1-tRNA + 285 EF-Tu.GTP.val1-tRNA + 152 EF-Tu.GTP.val2-tRNA + 95 EF-Tu.GTP.val3-tRNA + 31635 mg2 + 1 rib_ini_b4175_19 --> 1 rib_70_elo1_b4175_19_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_elo_b4175_19_rib2	Translation elongation 2 b4175 19 ribosome(s)	6308 h2o + 1 rib_70_elo1_b4175_19_cplx --> 6308 EF-G.GDP + 6308 EF-Tu.GDP + 494 ala1_tRNA + 133 ala2_tRNA + 570 arg1_tRNA + 19 argU_tRNA + 190 asn1_tRNA + 494 asp1_tRNA + 19 fmet_tRNA + 114 gln1_tRNA + 38 gln2_tRNA + 513 glu1_tRNA + 342 gly1_tRNA + 12616 h + 38 hisR_tRNA + 418 ile1_tRNA + 19 ile2_tRNA + 342 leu1_tRNA + 19 leu2_tRNA + 57 leuU_tRNA + 380 lys1_tRNA + 171 met1_tRNA + 31635 mg2 + 266 phe1_tRNA + 12616 pi + 171 pro1_tRNA + 19 pro2_tRNA + 1 rib_70_elo2_b4175_19_cplx + 57 ser1_tRNA + 133 ser2_tRNA + 19 ser3_tRNA + 38 serT_tRNA + 152 serV_tRNA + 133 thr1_tRNA + 57 thr2_tRNA + 152 thr3_tRNA + 19 thrU_tRNA + 19 trpT_tRNA + 190 tyr1_tRNA + 285 val1_tRNA + 152 val2_tRNA + 95 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134

tl_elo_b4175_1_rib1	Translation elongation 1 b4175 1 ribosome(s)	333 EF-G.GTP + 26 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 31 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argU-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 26 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 27 EF-Tu.GTP.glu1-tRNA + 18 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 22 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 18 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leu2-tRNA + 3 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 14 EF-Tu.GTP.phe1-tRNA + 9 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 7 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 8 EF-Tu.GTP.serV-tRNA + 7 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 10 EF-Tu.GTP.tyr1-tRNA + 15 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1665 mg2 + 1 rib_ini_b4175_1 --> 1 rib_70_elo1_b4175_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_elo_b4175_1_rib2	Translation elongation 2 b4175 1 ribosome(s)	332 h2o + 1 rib_70_elo1_b4175_1_cplx --> 332 EF-G.GDP + 332 EF-Tu.GDP + 26 ala1_tRNA + 7 ala2_tRNA + 30 arg1_tRNA + 1 argU_tRNA + 10 asn1_tRNA + 26 asp1_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 2 gln2_tRNA + 27 glu1_tRNA + 18 gly1_tRNA + 664 h + 2 hisR_tRNA + 22 ile1_tRNA + 1 ile2_tRNA + 18 leu1_tRNA + 1 leu2_tRNA + 3 leuU_tRNA + 20 lys1_tRNA + 9 met1_tRNA + 1665 mg2 + 14 phe1_tRNA + 664 pi + 9 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b4175_1_cplx + 3 ser1_tRNA + 7 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 8 serV_tRNA + 7 thr1_tRNA + 3 thr2_tRNA + 8 thr3_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 10 tyr1_tRNA + 15 val1_tRNA + 8 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_elo_b4175_9_rib1	Translation elongation 1 b4175 9 ribosome(s)	2997 EF-G.GTP + 234 EF-Tu.GTP.ala1-tRNA + 63 EF-Tu.GTP.ala2-tRNA + 279 EF-Tu.GTP.arg1-tRNA + 9 EF-Tu.GTP.argU-tRNA + 90 EF-Tu.GTP.asn1-tRNA + 234 EF-Tu.GTP.asp1-tRNA + 54 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 243 EF-Tu.GTP.glu1-tRNA + 162 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 198 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.ile2-tRNA + 162 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 27 EF-Tu.GTP.leuU-tRNA + 180 EF-Tu.GTP.lys1-tRNA + 81 EF-Tu.GTP.met1-tRNA + 126 EF-Tu.GTP.phe1-tRNA + 81 EF-Tu.GTP.pro1-tRNA + 9 EF-Tu.GTP.pro2-tRNA + 27 EF-Tu.GTP.ser1-tRNA + 63 EF-Tu.GTP.ser2-tRNA + 9 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serT-tRNA + 72 EF-Tu.GTP.serV-tRNA + 63 EF-Tu.GTP.thr1-tRNA + 27 EF-Tu.GTP.thr2-tRNA + 72 EF-Tu.GTP.thr3-tRNA + 9 EF-Tu.GTP.thrU-tRNA + 9 EF-Tu.GTP.trpT-tRNA + 90 EF-Tu.GTP.tyr1-tRNA + 135 EF-Tu.GTP.val1-tRNA + 72 EF-Tu.GTP.val2-tRNA + 45 EF-Tu.GTP.val3-tRNA + 14985 mg2 + 1 rib_ini_b4175_9 --> 1 rib_70_elo1_b4175_9_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_elo_b4175_9_rib2	Translation elongation 2 b4175 9 ribosome(s)	2988 h2o + 1 rib_70_elo1_b4175_9_cplx --> 2988 EF-G.GDP + 2988 EF-Tu.GDP + 234 ala1_tRNA + 63 ala2_tRNA + 270 arg1_tRNA + 9 argU_tRNA + 90 asn1_tRNA + 234 asp1_tRNA + 9 fmet_tRNA + 54 gln1_tRNA + 18 gln2_tRNA + 243 glu1_tRNA + 162 gly1_tRNA + 5976 h + 18 hisR_tRNA + 198 ile1_tRNA + 9 ile2_tRNA + 162 leu1_tRNA + 9 leu2_tRNA + 27 leuU_tRNA + 180 lys1_tRNA + 81 met1_tRNA + 14985 mg2 + 126 phe1_tRNA + 5976 pi + 81 pro1_tRNA + 9 pro2_tRNA + 1 rib_70_elo2_b4175_9_cplx + 27 ser1_tRNA + 63 ser2_tRNA + 9 ser3_tRNA + 18 serT_tRNA + 72 serV_tRNA + 63 thr1_tRNA + 27 thr2_tRNA + 72 thr3_tRNA + 9 thrU_tRNA + 9 trpT_tRNA + 90 tyr1_tRNA + 135 val1_tRNA + 72 val2_tRNA + 45 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_elo_b4178_1_rib1	Translation elongation 1 b4178 1 ribosome(s)	140 EF-G.GTP + 6 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.argX-tRNA + 6 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 9 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 5 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuZ-tRNA + 6 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 7 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 700 mg2 + 1 rib_ini_b4178_1 --> 1 rib_70_elo1_b4178_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718
tl_elo_b4178_1_rib2	Translation elongation 2 b4178 1 ribosome(s)	139 h2o + 1 rib_70_elo1_b4178_1_cplx --> 139 EF-G.GDP + 139 EF-Tu.GDP + 6 ala1_tRNA + 4 ala2_tRNA + 7 arg1_tRNA + 1 argW_tRNA + 1 argX_tRNA + 6 asn1_tRNA + 5 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 3 gln2_tRNA + 8 glu1_tRNA + 6 gly1_tRNA + 2 glyT_tRNA + 1 glyU_tRNA + 278 h + 2 hisR_tRNA + 6 ile1_tRNA + 2 ile2_tRNA + 6 leu1_tRNA + 4 leu2_tRNA + 5 leuU_tRNA + 4 leuZ_tRNA + 6 lys1_tRNA + 3 met1_tRNA + 700 mg2 + 3 phe1_tRNA + 278 pi + 2 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b4178_1_cplx + 1 ser1_tRNA + 2 ser2_tRNA + 1 ser3_tRNA + 1 serT_tRNA + 7 serV_tRNA + 1 thr1_tRNA + 3 thr2_tRNA + 3 thr3_tRNA + 1 thrU_tRNA + 6 tyr1_tRNA + 7 val1_tRNA + 3 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718

tl_elo_b4178_4_rib1	Translation elongation 1 b4178 4 ribosome(s)	560 EF-G.GTP + 24 EF-Tu.GTP.ala1-tRNA + 16 EF-Tu.GTP.ala2-tRNA + 28 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argW-tRNA + 4 EF-Tu.GTP.argX-tRNA + 24 EF-Tu.GTP.asn1-tRNA + 20 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 36 EF-Tu.GTP.glu1-tRNA + 24 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 24 EF-Tu.GTP.ile1-tRNA + 8 EF-Tu.GTP.ile2-tRNA + 24 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 20 EF-Tu.GTP.leuU-tRNA + 16 EF-Tu.GTP.leuZ-tRNA + 24 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 28 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 12 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 24 EF-Tu.GTP.tyr1-tRNA + 28 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 2800 mg2 + 1 rib_ini_b4178_4 --> 1 rib_70_elo1_b4178_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718
tl_elo_b4178_4_rib2	Translation elongation 2 b4178 4 ribosome(s)	556 h2o + 1 rib_70_elo1_b4178_4_cplx --> 556 EF-G.GDP + 556 EF-Tu.GDP + 24 ala1_tRNA + 16 ala2_tRNA + 28 arg1_tRNA + 4 argW_tRNA + 4 argX_tRNA + 24 asn1_tRNA + 20 asp1_tRNA + 12 cysT_tRNA + 4 fmet_tRNA + 8 gln1_tRNA + 12 gln2_tRNA + 32 glu1_tRNA + 24 gly1_tRNA + 8 glyT_tRNA + 4 glyU_tRNA + 1112 h + 8 hisR_tRNA + 24 ile1_tRNA + 8 ile2_tRNA + 24 leu1_tRNA + 16 leu2_tRNA + 20 leuU_tRNA + 16 leuZ_tRNA + 24 lys1_tRNA + 12 met1_tRNA + 2800 mg2 + 12 phe1_tRNA + 1112 pi + 8 pro1_tRNA + 4 pro2_tRNA + 4 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b4178_4_cplx + 4 ser1_tRNA + 8 ser2_tRNA + 4 ser3_tRNA + 4 serT_tRNA + 28 serV_tRNA + 4 thr1_tRNA + 12 thr2_tRNA + 12 thr3_tRNA + 4 thrU_tRNA + 24 tyr1_tRNA + 28 val1_tRNA + 12 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718
tl_elo_b4178_8_rib1	Translation elongation 1 b4178 8 ribosome(s)	1120 EF-G.GTP + 48 EF-Tu.GTP.ala1-tRNA + 32 EF-Tu.GTP.ala2-tRNA + 56 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.argW-tRNA + 8 EF-Tu.GTP.argX-tRNA + 48 EF-Tu.GTP.asn1-tRNA + 40 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.cysT-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 72 EF-Tu.GTP.glu1-tRNA + 48 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 48 EF-Tu.GTP.ile1-tRNA + 16 EF-Tu.GTP.ile2-tRNA + 48 EF-Tu.GTP.leu1-tRNA + 32 EF-Tu.GTP.leu2-tRNA + 40 EF-Tu.GTP.leuU-tRNA + 32 EF-Tu.GTP.leuZ-tRNA + 48 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 16 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proL-tRNA + 8 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 16 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serT-tRNA + 56 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 24 EF-Tu.GTP.thr2-tRNA + 24 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 48 EF-Tu.GTP.tyr1-tRNA + 56 EF-Tu.GTP.val1-tRNA + 24 EF-Tu.GTP.val2-tRNA + 16 EF-Tu.GTP.val3-tRNA + 5600 mg2 + 1 rib_ini_b4178_8 --> 1 rib_70_elo1_b4178_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718
tl_elo_b4178_8_rib2	Translation elongation 2 b4178 8 ribosome(s)	1112 h2o + 1 rib_70_elo1_b4178_8_cplx --> 1112 EF-G.GDP + 1112 EF-Tu.GDP + 48 ala1_tRNA + 32 ala2_tRNA + 56 arg1_tRNA + 8 argW_tRNA + 8 argX_tRNA + 48 asn1_tRNA + 40 asp1_tRNA + 24 cysT_tRNA + 8 fmet_tRNA + 16 gln1_tRNA + 24 gln2_tRNA + 64 glu1_tRNA + 48 gly1_tRNA + 16 glyT_tRNA + 8 glyU_tRNA + 2224 h + 16 hisR_tRNA + 48 ile1_tRNA + 16 ile2_tRNA + 48 leu1_tRNA + 32 leu2_tRNA + 40 leuU_tRNA + 32 leuZ_tRNA + 48 lys1_tRNA + 24 met1_tRNA + 5600 mg2 + 24 phe1_tRNA + 2224 pi + 16 pro1_tRNA + 8 pro2_tRNA + 8 proL_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b4178_8_cplx + 8 ser1_tRNA + 16 ser2_tRNA + 8 ser3_tRNA + 8 serT_tRNA + 56 serV_tRNA + 8 thr1_tRNA + 24 thr2_tRNA + 24 thr3_tRNA + 8 thrU_tRNA + 48 tyr1_tRNA + 56 val1_tRNA + 24 val2_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718
tl_elo_b4179_1_rib1	Translation elongation 1 b4179 1 ribosome(s)	812 EF-G.GTP + 57 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 69 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argU-tRNA + 3 EF-Tu.GTP.argX-tRNA + 17 EF-Tu.GTP.asn1-tRNA + 52 EF-Tu.GTP.asp1-tRNA + 9 EF-Tu.GTP.cysT-tRNA + 28 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 70 EF-Tu.GTP.glu1-tRNA + 52 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 34 EF-Tu.GTP.ile1-tRNA + 1 EF-Tu.GTP.ile2-tRNA + 53 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leu2-tRNA + 9 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 57 EF-Tu.GTP.lys1-tRNA + 20 EF-Tu.GTP.met1-tRNA + 29 EF-Tu.GTP.phe1-tRNA + 23 EF-Tu.GTP.pro1-tRNA + 5 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 5 EF-Tu.GTP.proM-tRNA + 5 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 13 EF-Tu.GTP.ser3-tRNA + 4 EF-Tu.GTP.serT-tRNA + 15 EF-Tu.GTP.serV-tRNA + 18 EF-Tu.GTP.thr1-tRNA + 7 EF-Tu.GTP.thr2-tRNA + 9 EF-Tu.GTP.thr3-tRNA + 5 EF-Tu.GTP.trpT-tRNA + 25 EF-Tu.GTP.tyr1-tRNA + 26 EF-Tu.GTP.val1-tRNA + 18 EF-Tu.GTP.val2-tRNA + 16 EF-Tu.GTP.val3-tRNA + 4060 mg2 + 1 rib_ini_b4179_1 --> 1 rib_70_elo1_b4179_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.51E+01	3.51E+01	0	6.08E+01	60.77454	0	1.61E+00	1.608
tl_elo_b4179_1_rib2	Translation elongation 2 b4179 1 ribosome(s)	811 h2o + 1 rib_70_elo1_b4179_1_cplx --> 811 EF-G.GDP + 811 EF-Tu.GDP + 57 ala1_tRNA + 10 ala2_tRNA + 69 arg1_tRNA + 2 argU_tRNA + 3 argX_tRNA + 17 asn1_tRNA + 52 asp1_tRNA + 9 cysT_tRNA + 1 fmet_tRNA + 28 gln1_tRNA + 6 gln2_tRNA + 69 glu1_tRNA + 52 gly1_tRNA + 7 glyU_tRNA + 1622 h + 18 hisR_tRNA + 34 ile1_tRNA + 1 ile2_tRNA + 53 leu1_tRNA + 4 leu2_tRNA + 9 leuU_tRNA + 5 leuZ_tRNA + 57 lys1_tRNA + 20 met1_tRNA + 4060 mg2 + 29 phe1_tRNA + 1622 pi + 23 pro1_tRNA + 5 pro2_tRNA + 2 proL_tRNA + 5 proM_tRNA + 1 rib_70_elo2_b4179_1_cplx + 5 ser1_tRNA + 4 ser2_tRNA + 13 ser3_tRNA + 4 serT_tRNA + 15 serV_tRNA + 18 thr1_tRNA + 7 thr2_tRNA + 9 thr3_tRNA + 5 trpT_tRNA + 25 tyr1_tRNA + 26 val1_tRNA + 18 val2_tRNA + 16 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.51E+01	3.51E+01	0	6.08E+01	60.77454	0	1.61E+00	1.608

tl_elo_b4179_23_rib1	Translation elongation 1 b4179 23 ribosome(s)	18676 EF-G.GTP + 1311 EF-Tu.GTP.ala1-tRNA + 230 EF-Tu.GTP.ala2-tRNA + 1587 EF-Tu.GTP.arg1-tRNA + 46 EF-Tu.GTP.argU-tRNA + 69 EF-Tu.GTP.argX-tRNA + 391 EF-Tu.GTP.asn1-tRNA + 1196 EF-Tu.GTP.asp1-tRNA + 207 EF-Tu.GTP.cysT-tRNA + 644 EF-Tu.GTP.gln1-tRNA + 138 EF-Tu.GTP.gln2-tRNA + 1610 EF-Tu.GTP.glu1-tRNA + 1196 EF-Tu.GTP.gly1-tRNA + 161 EF-Tu.GTP.glyU-tRNA + 414 EF-Tu.GTP.hisR-tRNA + 782 EF-Tu.GTP.ile1-tRNA + 23 EF-Tu.GTP.ile2-tRNA + 1219 EF-Tu.GTP.leu1-tRNA + 92 EF-Tu.GTP.leu2-tRNA + 207 EF-Tu.GTP.leuU-tRNA + 115 EF-Tu.GTP.leuZ-tRNA + 1311 EF-Tu.GTP.lys1-tRNA + 460 EF-Tu.GTP.met1-tRNA + 667 EF-Tu.GTP.phe1-tRNA + 529 EF-Tu.GTP.pro1-tRNA + 115 EF-Tu.GTP.pro2-tRNA + 46 EF-Tu.GTP.proL-tRNA + 115 EF-Tu.GTP.proM-tRNA + 115 EF-Tu.GTP.ser1-tRNA + 92 EF-Tu.GTP.ser2-tRNA + 299 EF-Tu.GTP.ser3-tRNA + 92 EF-Tu.GTP.serT-tRNA + 345 EF-Tu.GTP.serV-tRNA + 414 EF-Tu.GTP.thr1-tRNA + 161 EF-Tu.GTP.thr2-tRNA + 207 EF-Tu.GTP.thr3-tRNA + 115 EF-Tu.GTP.trpT-tRNA + 575 EF-Tu.GTP.tyr1-tRNA + 598 EF-Tu.GTP.val1-tRNA + 414 EF-Tu.GTP.val2-tRNA + 368 EF-Tu.GTP.val3-tRNA + 93380 mg2 + 1 rib_ini_b4179_23 --> 1 rib_70_e	irreversible	Translation	0.00E+00	1.00E+09	0	3.51E+01	3.51E+01	0	6.08E+01	60.77454	0	1.61E+00	1.608
tl_elo_b4179_23_rib2	Translation elongation 2 b4179 23 ribosome(s)	18653 h2o + 1 rib_70_elo1_b4179_23_cplx --> 18653 EF-G.GDP + 18653 EF-Tu.GDP + 1311 ala1_tRNA + 230 ala2_tRNA + 1587 arg1_tRNA + 46 argU_tRNA + 69 argX_tRNA + 391 asn1_tRNA + 1196 asp1_tRNA + 207 cysT_tRNA + 23 fmet_tRNA + 644 gln1_tRNA + 138 gln2_tRNA + 1587 glu1_tRNA + 1196 gly1_tRNA + 161 glyU_tRNA + 37306 h + 414 hisR_tRNA + 782 ile1_tRNA + 23 ile2_tRNA + 1219 leu1_tRNA + 92 leu2_tRNA + 207 leuU_tRNA + 115 leuZ_tRNA + 1311 lys1_tRNA + 460 met1_tRNA + 93380 mg2 + 667 phe1_tRNA + 37306 pi + 529 pro1_tRNA + 115 pro2_tRNA + 46 proL_tRNA + 115 proM_tRNA + 1 rib_70_elo2_b4179_23_cplx + 115 ser1_tRNA + 92 ser2_tRNA + 299 ser3_tRNA + 92 serT_tRNA + 345 serV_tRNA + 414 thr1_tRNA + 161 thr2_tRNA + 207 thr3_tRNA + 115 trpT_tRNA + 575 tyr1_tRNA + 598 val1_tRNA + 414 val2_tRNA + 368 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.51E+01	3.51E+01	0	6.08E+01	60.77454	0	1.61E+00	1.608
tl_elo_b4179_47_rib1	Translation elongation 1 b4179 47 ribosome(s)	38164 EF-G.GTP + 2679 EF-Tu.GTP.ala1-tRNA + 470 EF-Tu.GTP.ala2-tRNA + 3243 EF-Tu.GTP.arg1-tRNA + 94 EF-Tu.GTP.argU-tRNA + 141 EF-Tu.GTP.argX-tRNA + 799 EF-Tu.GTP.asn1-tRNA + 2444 EF-Tu.GTP.asp1-tRNA + 423 EF-Tu.GTP.cysT-tRNA + 1316 EF-Tu.GTP.gln1-tRNA + 282 EF-Tu.GTP.gln2-tRNA + 3290 EF-Tu.GTP.glu1-tRNA + 2444 EF-Tu.GTP.gly1-tRNA + 329 EF-Tu.GTP.glyU-tRNA + 846 EF-Tu.GTP.hisR-tRNA + 1598 EF-Tu.GTP.ile1-tRNA + 47 EF-Tu.GTP.ile2-tRNA + 2491 EF-Tu.GTP.leu1-tRNA + 188 EF-Tu.GTP.leu2-tRNA + 423 EF-Tu.GTP.leuU-tRNA + 235 EF-Tu.GTP.leuZ-tRNA + 2679 EF-Tu.GTP.lys1-tRNA + 940 EF-Tu.GTP.met1-tRNA + 1363 EF-Tu.GTP.phe1-tRNA + 1081 EF-Tu.GTP.pro1-tRNA + 235 EF-Tu.GTP.pro2-tRNA + 94 EF-Tu.GTP.proL-tRNA + 235 EF-Tu.GTP.proM-tRNA + 235 EF-Tu.GTP.ser1-tRNA + 188 EF-Tu.GTP.ser2-tRNA + 611 EF-Tu.GTP.ser3-tRNA + 188 EF-Tu.GTP.serT-tRNA + 705 EF-Tu.GTP.serV-tRNA + 846 EF-Tu.GTP.thr1-tRNA + 329 EF-Tu.GTP.thr2-tRNA + 423 EF-Tu.GTP.thr3-tRNA + 235 EF-Tu.GTP.trpT-tRNA + 1175 EF-Tu.GTP.tyr1-tRNA + 1222 EF-Tu.GTP.val1-tRNA + 846 EF-Tu.GTP.val2-tRNA + 752 EF-Tu.GTP.val3-tRNA + 190820 mg2 + 1 rib_ini_b4179_47 --> 1 rib_70_	irreversible	Translation	0.00E+00	1.00E+09	0	3.51E+01	3.51E+01	0	5.95E+01	59.4638	0	1.61E+00	1.608
tl_elo_b4179_47_rib2	Translation elongation 2 b4179 47 ribosome(s)	38117 h2o + 1 rib_70_elo1_b4179_47_cplx --> 38117 EF-G.GDP + 38117 EF-Tu.GDP + 2679 ala1_tRNA + 470 ala2_tRNA + 3243 arg1_tRNA + 94 argU_tRNA + 141 argX_tRNA + 799 asn1_tRNA + 2444 asp1_tRNA + 423 cysT_tRNA + 47 fmet_tRNA + 1316 gln1_tRNA + 282 gln2_tRNA + 3243 glu1_tRNA + 2444 gly1_tRNA + 329 glyU_tRNA + 76234 h + 846 hisR_tRNA + 1598 ile1_tRNA + 47 ile2_tRNA + 2491 leu1_tRNA + 188 leu2_tRNA + 423 leuU_tRNA + 235 leuZ_tRNA + 2679 lys1_tRNA + 940 met1_tRNA + 190820 mg2 1363 phe1_tRNA + 76234 pi + 1081 pro1_tRNA + 235 pro2_tRNA + 94 proL_tRNA + 235 proM_tRNA + 1 rib_70_elo2_b4179_47_cplx + 235 ser1_tRNA + 188 ser2_tRNA + 611 ser3_tRNA + 188 serT_tRNA + 705 serV_tRNA + 846 thr1_tRNA + 329 thr2_tRNA + 423 thr3_tRNA + 235 trpT_tRNA + 1175 tyr1_tRNA + 1222 val1_tRNA + 846 val2_tRNA + 752 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.51E+01	3.51E+01	0	5.95E+01	59.4638	0	1.61E+00	1.608
tl_elo_b4180_14_rib1	Translation elongation 1 b4180 14 ribosome(s)	3388 EF-G.GTP + 280 EF-Tu.GTP.ala1-tRNA + 98 EF-Tu.GTP.ala2-tRNA + 238 EF-Tu.GTP.arg1-tRNA + 14 EF-Tu.GTP.argX-tRNA + 98 EF-Tu.GTP.asn1-tRNA + 168 EF-Tu.GTP.asp1-tRNA + 56 EF-Tu.GTP.cysT-tRNA + 154 EF-Tu.GTP.gln1-tRNA + 28 EF-Tu.GTP.gln2-tRNA + 238 EF-Tu.GTP.glu1-tRNA + 196 EF-Tu.GTP.gly1-tRNA + 56 EF-Tu.GTP.glyT-tRNA + 98 EF-Tu.GTP.hisR-tRNA + 224 EF-Tu.GTP.ile1-tRNA + 196 EF-Tu.GTP.leu1-tRNA + 42 EF-Tu.GTP.leu2-tRNA + 112 EF-Tu.GTP.leuU-tRNA + 42 EF-Tu.GTP.leuZ-tRNA + 112 EF-Tu.GTP.lys1-tRNA + 98 EF-Tu.GTP.met1-tRNA + 56 EF-Tu.GTP.phe1-tRNA + 98 EF-Tu.GTP.pro1-tRNA + 14 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.proM-tRNA + 28 EF-Tu.GTP.ser1-tRNA + 28 EF-Tu.GTP.ser2-tRNA + 28 EF-Tu.GTP.ser3-tRNA + 112 EF-Tu.GTP.serV-tRNA + 56 EF-Tu.GTP.thr1-tRNA + 28 EF-Tu.GTP.thr2-tRNA + 28 EF-Tu.GTP.thr3-tRNA + 14 EF-Tu.GTP.thrU-tRNA + 14 EF-Tu.GTP.trpT-tRNA + 56 EF-Tu.GTP.tyr1-tRNA + 154 EF-Tu.GTP.val1-tRNA + 28 EF-Tu.GTP.val2-tRNA + 84 EF-Tu.GTP.val3-tRNA + 16940 mg2 + 1 rib_ini_b4180_14 --> 1 rib_70_elo1_b4180_14_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_elo_b4180_14_rib2	Translation elongation 2 b4180 14 ribosome(s)	3374 h2o + 1 rib_70_elo1_b4180_14_cplx --> 3374 EF-G.GDP + 3374 EF-Tu.GDP + 280 ala1_tRNA + 98 ala2_tRNA + 238 arg1_tRNA + 14 argX_tRNA + 98 asn1_tRNA + 168 asp1_tRNA + 56 cysT_tRNA + 14 fmet_tRNA + 154 gln1_tRNA + 28 gln2_tRNA + 238 glu1_tRNA + 196 gly1_tRNA + 56 glyT_tRNA + 6748 h + 98 hisR_tRNA + 224 ile1_tRNA + 196 leu1_tRNA + 42 leu2_tRNA + 112 leuU_tRNA + 42 leuZ_tRNA + 112 lys1_tRNA + 98 met1_tRNA + 16940 mg2 + 56 phe1_tRNA + 6748 pi + 98 pro1_tRNA + 14 pro2_tRNA + 14 proM_tRNA + 1 rib_70_elo2_b4180_14_cplx + 28 ser1_tRNA + 28 ser2_tRNA + 28 ser3_tRNA + 98 serV_tRNA + 56 thr1_tRNA + 28 thr2_tRNA + 28 thr3_tRNA + 14 thrU_tRNA + 14 trpT_tRNA + 56 tyr1_tRNA + 154 val1_tRNA + 28 val2_tRNA + 84 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638

tl_elo_b4180_1_rib1	Translation elongation 1 b4180 1 ribosome(s)	242 EF-G.GTP + 20 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 17 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 7 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 11 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 17 EF-Tu.GTP.glu1-tRNA + 14 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 16 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 7 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 7 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 11 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1210 mg2 + 1 rib_ini_b4180_1 --> 1 rib_70_elo1_b4180_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_elo_b4180_1_rib2	Translation elongation 2 b4180 1 ribosome(s)	241 h2o + 1 rib_70_elo1_b4180_1_cplx --> 241 EF-G.GDP + 241 EF-Tu.GDP + 20 ala1_tRNA + 7 ala2_tRNA + 17 arg1_tRNA + 1 argX_tRNA + 7 asn1_tRNA + 12 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 11 gln1_tRNA + 2 gln2_tRNA + 17 glu1_tRNA + 14 gly1_tRNA + 4 glyT_tRNA + 482 h + 7 hisR_tRNA + 16 ile1_tRNA + 14 leu1_tRNA + 3 leu2_tRNA + 8 leuU_tRNA + 3 leuZ_tRNA + 8 lys1_tRNA + 7 met1_tRNA + 1210 mg2 + 4 phe1_tRNA + 482 pi + 7 pro1_tRNA + 1 pro2_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b4180_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 2 ser3_tRNA + 7 serV_tRNA + 4 thr1_tRNA + 2 thr2_tRNA + 2 thr3_tRNA + 1 thrU_tRNA + 1 trpT_tRNA + 4 tyr1_tRNA + 11 val1_tRNA + 2 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_elo_b4180_7_rib1	Translation elongation 1 b4180 7 ribosome(s)	1694 EF-G.GTP + 140 EF-Tu.GTP.ala1-tRNA + 49 EF-Tu.GTP.ala2-tRNA + 119 EF-Tu.GTP.arg1-tRNA + 7 EF-Tu.GTP.argX-tRNA + 49 EF-Tu.GTP.asn1-tRNA + 84 EF-Tu.GTP.asp1-tRNA + 28 EF-Tu.GTP.cysT-tRNA + 77 EF-Tu.GTP.gln1-tRNA + 14 EF-Tu.GTP.gln2-tRNA + 119 EF-Tu.GTP.glu1-tRNA + 98 EF-Tu.GTP.gly1-tRNA + 28 EF-Tu.GTP.glyT-tRNA + 49 EF-Tu.GTP.hisR-tRNA + 112 EF-Tu.GTP.ile1-tRNA + 98 EF-Tu.GTP.leu1-tRNA + 21 EF-Tu.GTP.leu2-tRNA + 56 EF-Tu.GTP.leuU-tRNA + 21 EF-Tu.GTP.leuZ-tRNA + 56 EF-Tu.GTP.lys1-tRNA + 49 EF-Tu.GTP.met1-tRNA + 28 EF-Tu.GTP.phe1-tRNA + 49 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 7 EF-Tu.GTP.proM-tRNA + 14 EF-Tu.GTP.ser1-tRNA + 14 EF-Tu.GTP.ser2-tRNA + 14 EF-Tu.GTP.ser3-tRNA + 56 EF-Tu.GTP.serV-tRNA + 28 EF-Tu.GTP.thr1-tRNA + 14 EF-Tu.GTP.thr2-tRNA + 14 EF-Tu.GTP.thr3-tRNA + 7 EF-Tu.GTP.thrU-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 28 EF-Tu.GTP.tyr1-tRNA + 77 EF-Tu.GTP.val1-tRNA + 14 EF-Tu.GTP.val2-tRNA + 42 EF-Tu.GTP.val3-tRNA + 8470 mg2 + 1 rib_ini_b4180_7 --> 1 rib_70_elo1_b4180_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_elo_b4180_7_rib2	Translation elongation 2 b4180 7 ribosome(s)	1687 h2o + 1 rib_70_elo1_b4180_7_cplx --> 1687 EF-G.GDP + 1687 EF-Tu.GDP + 140 ala1_tRNA + 49 ala2_tRNA + 119 arg1_tRNA + 7 argX_tRNA + 49 asn1_tRNA + 84 asp1_tRNA + 28 cysT_tRNA + 7 fmet_tRNA + 77 gln1_tRNA + 14 gln2_tRNA + 119 glu1_tRNA + 98 gly1_tRNA + 28 glyT_tRNA + 3374 h + 49 hisR_tRNA + 112 ile1_tRNA + 98 leu1_tRNA + 21 leu2_tRNA + 56 leuU_tRNA + 21 leuZ_tRNA + 56 lys1_tRNA + 49 met1_tRNA + 8470 mg2 + 28 phe1_tRNA + 3374 pi + 49 pro1_tRNA + 7 pro2_tRNA + 7 proM_tRNA + 1 rib_70_elo2_b4180_7_cplx + 14 ser1_tRNA + 14 ser2_tRNA + 14 ser3_tRNA + 49 serV_tRNA + 28 thr1_tRNA + 14 thr2_tRNA + 14 thr3_tRNA + 7 thrU_tRNA + 7 trpT_tRNA + 28 tyr1_tRNA + 77 val1_tRNA + 14 val2_tRNA + 42 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_elo_b4200_1_rib1	Translation elongation 1 b4200 1 ribosome(s)	130 EF-G.GTP + 12 EF-Tu.GTP.ala1-tRNA + 2 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 4 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 6 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 4 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 1 EF-Tu.GTP.val1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 650 mg2 + 1 rib_ini_b4200_1 --> 1 rib_70_elo1_b4200_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.00E+02	1.00E+02	0	8.29E+01	82.88	0	6.06E+01	60.5605
tl_elo_b4200_1_rib2	Translation elongation 2 b4200 1 ribosome(s)	129 h2o + 1 rib_70_elo1_b4200_1_cplx --> 129 EF-G.GDP + 129 EF-Tu.GDP + 12 ala1_tRNA + 2 ala2_tRNA + 12 arg1_tRNA + 4 asn1_tRNA + 10 asp1_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 15 glu1_tRNA + 4 gly1_tRNA + 1 glyU_tRNA + 258 h + 6 hisR_tRNA + 7 ile1_tRNA + 5 leu1_tRNA + 6 lys1_tRNA + 6 met1_tRNA + 650 mg2 + 4 phe1_tRNA + 258 pi + 4 pro1_tRNA + 1 pro2_tRNA + 1 rib_70_elo2_b4200_1_cplx + 2 ser2_tRNA + 2 serV_tRNA + 4 thr1_tRNA + 3 thr2_tRNA + 1 trpT_tRNA + 4 tyr1_tRNA + 1 val1_tRNA + 1 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.00E+02	1.00E+02	0	8.29E+01	82.88	0	6.06E+01	60.5605
tl_elo_b4200_3_rib1	Translation elongation 1 b4200 3 ribosome(s)	390 EF-G.GTP + 36 EF-Tu.GTP.ala1-tRNA + 6 EF-Tu.GTP.ala2-tRNA + 36 EF-Tu.GTP.arg1-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 30 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 48 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 18 EF-Tu.GTP.hisR-tRNA + 21 EF-Tu.GTP.ile1-tRNA + 15 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 12 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 9 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 3 EF-Tu.GTP.val2-tRNA + 24 EF-Tu.GTP.val3-tRNA + 1950 mg2 + 1 rib_ini_b4200_3 --> 1 rib_70_elo1_b4200_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667

tl_elo_b4200_3_rib2	Translation elongation 2 b4200 3 ribosome(s)	387 h2o + 1 rib_70_elo1_b4200_3_cplx --> 387 EF-G.GDP + 387 EF-Tu.GDP + 36 ala1_tRNA + 6 ala2_tRNA + 36 arg1_tRNA + 12 asn1_tRNA + 30 asp1_tRNA + 3 fmet_tRNA + 12 gln1_tRNA + 45 glu1_tRNA + 12 gly1_tRNA + 3 glyU_tRNA + 774 h + 18 hisR_tRNA + 21 ile1_tRNA + 15 leu1_tRNA + 18 lys1_tRNA + 18 met1_tRNA + 1950 mg2 + 12 phe1_tRNA + 774 pi + 12 pro1_tRNA + 3 pro2_tRNA + 1 rib_70_elo2_b4200_3_cplx + 6 ser2_tRNA + 6 serV_tRNA + 12 thr1_tRNA + 9 thr2_tRNA + 3 trpT_tRNA + 12 tyr1_tRNA + 3 val1_tRNA + 3 val2_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_elo_b4200_7_rib1	Translation elongation 1 b4200 7 ribosome(s)	910 EF-G.GTP + 84 EF-Tu.GTP.ala1-tRNA + 14 EF-Tu.GTP.ala2-tRNA + 84 EF-Tu.GTP.arg1-tRNA + 28 EF-Tu.GTP.asn1-tRNA + 70 EF-Tu.GTP.asp1-tRNA + 28 EF-Tu.GTP.gln1-tRNA + 112 EF-Tu.GTP.glu1-tRNA + 28 EF-Tu.GTP.gly1-tRNA + 7 EF-Tu.GTP.glyU-tRNA + 42 EF-Tu.GTP.hisR-tRNA + 49 EF-Tu.GTP.ile1-tRNA + 35 EF-Tu.GTP.leu1-tRNA + 42 EF-Tu.GTP.lys1-tRNA + 42 EF-Tu.GTP.met1-tRNA + 28 EF-Tu.GTP.phe1-tRNA + 28 EF-Tu.GTP.pro1-tRNA + 7 EF-Tu.GTP.pro2-tRNA + 14 EF-Tu.GTP.ser2-tRNA + 14 EF-Tu.GTP.serV-tRNA + 28 EF-Tu.GTP.thr1-tRNA + 21 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.trpT-tRNA + 28 EF-Tu.GTP.tyr1-tRNA + 7 EF-Tu.GTP.val1-tRNA + 7 EF-Tu.GTP.val2-tRNA + 56 EF-Tu.GTP.val3-tRNA + 4550 mg2 + 1 rib_ini_b4200_7 --> 1 rib_70_elo1_b4200_7_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_elo_b4200_7_rib2	Translation elongation 2 b4200 7 ribosome(s)	903 h2o + 1 rib_70_elo1_b4200_7_cplx --> 903 EF-G.GDP + 903 EF-Tu.GDP + 84 ala1_tRNA + 14 ala2_tRNA + 84 arg1_tRNA + 28 asn1_tRNA + 70 asp1_tRNA + 7 fmet_tRNA + 28 gln1_tRNA + 105 glu1_tRNA + 28 gly1_tRNA + 7 glyU_tRNA + 1806 h + 42 hisR_tRNA + 49 ile1_tRNA + 35 leu1_tRNA + 42 lys1_tRNA + 42 met1_tRNA + 4550 mg2 + 28 phe1_tRNA + 1806 pi + 28 pro1_tRNA + 7 pro2_tRNA + 1 rib_70_elo2_b4200_7_cplx + 14 ser2_tRNA + 14 serV_tRNA + 28 thr1_tRNA + 21 thr2_tRNA + 7 trpT_tRNA + 28 tyr1_tRNA + 7 val1_tRNA + 7 val2_tRNA + 56 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_elo_b4201_1_rib1	Translation elongation 1 b4201 1 ribosome(s)	103 EF-G.GTP + 3 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 4 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 1 EF-Tu.GTP.argX-tRNA + 3 EF-Tu.GTP.asn1-tRNA + 2 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 3 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyT-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 7 EF-Tu.GTP.hisR-tRNA + 5 EF-Tu.GTP.ile1-tRNA + 3 EF-Tu.GTP.ile2-tRNA + 2 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 515 mg2 + 1 rib_ini_b4201_1 --> 1 rib_70_elo1_b4201_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089
tl_elo_b4201_1_rib2	Translation elongation 2 b4201 1 ribosome(s)	102 h2o + 1 rib_70_elo1_b4201_1_cplx --> 102 EF-G.GDP + 102 EF-Tu.GDP + 3 ala1_tRNA + 3 ala2_tRNA + 4 arg1_tRNA + 1 argW_tRNA + 1 argX_tRNA + 3 asn1_tRNA + 1 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 1 gln2_tRNA + 6 glu1_tRNA + 3 gly1_tRNA + 4 glyT_tRNA + 1 glyU_tRNA + 204 h + 7 hisR_tRNA + 5 ile1_tRNA + 3 ile2_tRNA + 2 leu1_tRNA + 3 leu2_tRNA + 2 leuU_tRNA + 4 lys1_tRNA + 2 met1_tRNA + 515 mg2 + 3 phe1_tRNA + 204 pi + 1 pro2_tRNA + 2 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b4201_1_cplx + 1 ser1_tRNA + 2 ser2_tRNA + 2 serT_tRNA + 5 serV_tRNA + 3 thr1_tRNA + 1 thr2_tRNA + 1 thr3_tRNA + 1 trpT_tRNA + 4 val1_tRNA + 2 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089
tl_elo_b4201_3_rib1	Translation elongation 1 b4201 3 ribosome(s)	309 EF-G.GTP + 9 EF-Tu.GTP.ala1-tRNA + 9 EF-Tu.GTP.ala2-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argW-tRNA + 3 EF-Tu.GTP.argX-tRNA + 9 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.cysT-tRNA + 18 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 18 EF-Tu.GTP.glu1-tRNA + 9 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 21 EF-Tu.GTP.hisR-tRNA + 15 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.ile2-tRNA + 6 EF-Tu.GTP.leu1-tRNA + 9 EF-Tu.GTP.leu2-tRNA + 6 EF-Tu.GTP.leuU-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 9 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 6 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.serT-tRNA + 15 EF-Tu.GTP.serV-tRNA + 9 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 12 EF-Tu.GTP.val1-tRNA + 6 EF-Tu.GTP.val2-tRNA + 12 EF-Tu.GTP.val3-tRNA + 1545 mg2 + 1 rib_ini_b4201_3 --> 1 rib_70_elo1_b4201_3_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089
tl_elo_b4201_3_rib2	Translation elongation 2 b4201 3 ribosome(s)	306 h2o + 1 rib_70_elo1_b4201_3_cplx --> 306 EF-G.GDP + 306 EF-Tu.GDP + 9 ala1_tRNA + 9 ala2_tRNA + 12 arg1_tRNA + 3 argW_tRNA + 3 argX_tRNA + 9 asn1_tRNA + 3 asp1_tRNA + 12 cysT_tRNA + 3 fmet_tRNA + 18 gln1_tRNA + 3 gln2_tRNA + 18 glu1_tRNA + 9 gly1_tRNA + 12 glyT_tRNA + 3 glyU_tRNA + 612 h + 21 hisR_tRNA + 15 ile1_tRNA + 9 ile2_tRNA + 6 leu1_tRNA + 9 leu2_tRNA + 6 leuU_tRNA + 12 lys1_tRNA + 6 met1_tRNA + 1545 mg2 + 9 phe1_tRNA + 612 pi + 3 pro2_tRNA + 6 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b4201_3_cplx + 3 ser1_tRNA + 6 ser2_tRNA + 6 serT_tRNA + 15 serV_tRNA + 9 thr1_tRNA + 3 thr2_tRNA + 3 thr3_tRNA + 3 trpT_tRNA + 12 val1_tRNA + 6 val2_tRNA + 12 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089

tl_elo_b4201_6_rib1	Translation elongation 1 b4201 6 ribosome(s)	618 EF-G.GTP + 18 EF-Tu.GTP.ala1-tRNA + 18 EF-Tu.GTP.ala2-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 6 EF-Tu.GTP.argW-tRNA + 6 EF-Tu.GTP.argX-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.cysT-tRNA + 36 EF-Tu.GTP.gln1-tRNA + 6 EF-Tu.GTP.gln2-tRNA + 36 EF-Tu.GTP.glu1-tRNA + 18 EF-Tu.GTP.gly1-tRNA + 24 EF-Tu.GTP.glyT-tRNA + 6 EF-Tu.GTP.glyU-tRNA + 42 EF-Tu.GTP.hisR-tRNA + 30 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.ile2-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.leu2-tRNA + 12 EF-Tu.GTP.leuU-tRNA + 24 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 18 EF-Tu.GTP.phe1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 12 EF-Tu.GTP.proL-tRNA + 6 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 12 EF-Tu.GTP.serT-tRNA + 30 EF-Tu.GTP.serV-tRNA + 18 EF-Tu.GTP.thr1-tRNA + 6 EF-Tu.GTP.thr2-tRNA + 6 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 24 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 24 EF-Tu.GTP.val3-tRNA + 3090 mg2 + 1 rib_ini_b4201_6 --> 1 rib_70_elo1_b4201_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089
tl_elo_b4201_6_rib2	Translation elongation 2 b4201 6 ribosome(s)	612 h2o + 1 rib_70_elo1_b4201_6_cplx --> 612 EF-G.GDP + 612 EF-Tu.GDP + 18 ala1_tRNA + 18 ala2_tRNA + 24 arg1_tRNA + 6 argW_tRNA + 6 argX_tRNA + 18 asn1_tRNA + 6 asp1_tRNA + 24 cysT_tRNA + 6 fmet_tRNA + 36 gln1_tRNA + 6 gln2_tRNA + 36 glu1_tRNA + 18 gly1_tRNA + 24 glyT_tRNA + 6 glyU_tRNA + 1224 h + 42 hisR_tRNA + 30 ile1_tRNA + 18 ile2_tRNA + 12 leu1_tRNA + 18 leu2_tRNA + 12 leuU_tRNA + 24 lys1_tRNA + 12 met1_tRNA + 3090 mg2 + 18 phe1_tRNA + 1224 pi + 6 pro2_tRNA + 12 proL_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b4201_6_cplx + 6 ser1_tRNA + 12 ser2_tRNA + 12 serT_tRNA + 30 serV_tRNA + 18 thr1_tRNA + 6 thr2_tRNA + 6 thr3_tRNA + 6 trpT_tRNA + 24 val1_tRNA + 12 val2_tRNA + 24 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089
tl_elo_b4202_1_rib1	Translation elongation 1 b4202 1 ribosome(s)	74 EF-G.GTP + 7 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.asn1-tRNA + 3 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 3 EF-Tu.GTP.glu1-tRNA + 3 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 5 EF-Tu.GTP.leu1-tRNA + 6 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 1 EF-Tu.GTP.val2-tRNA + 1 EF-Tu.GTP.val3-tRNA + 370 mg2 + 1 rib_ini_b4202_1 --> 1 rib_70_elo1_b4202_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b4202_1_rib2	Translation elongation 2 b4202 1 ribosome(s)	73 h2o + 1 rib_70_elo1_b4202_1_cplx --> 73 EF-G.GDP + 73 EF-Tu.GDP + 7 ala1_tRNA + 12 arg1_tRNA + 1 asn1_tRNA + 3 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 1 gln2_tRNA + 3 glu1_tRNA + 3 gly1_tRNA + 146 h + 1 hisR_tRNA + 6 ile1_tRNA + 5 leu1_tRNA + 6 lys1_tRNA + 370 mg2 + 3 phe1_tRNA + 146 pi + 1 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b4202_1_cplx + 1 ser1_tRNA + 2 serV_tRNA + 4 thr1_tRNA + 1 thr2_tRNA + 1 thr3_tRNA + 6 tyr1_tRNA + 1 val2_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_elo_b4202_2_rib1	Translation elongation 1 b4202 2 ribosome(s)	148 EF-G.GTP + 14 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 6 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 2 EF-Tu.GTP.gln2-tRNA + 6 EF-Tu.GTP.glu1-tRNA + 6 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 12 EF-Tu.GTP.ile1-tRNA + 10 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 12 EF-Tu.GTP.tyr1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 2 EF-Tu.GTP.val3-tRNA + 740 mg2 + 1 rib_ini_b4202_2 --> 1 rib_70_elo1_b4202_2_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b4202_2_rib2	Translation elongation 2 b4202 2 ribosome(s)	146 h2o + 1 rib_70_elo1_b4202_2_cplx --> 146 EF-G.GDP + 146 EF-Tu.GDP + 14 ala1_tRNA + 24 arg1_tRNA + 2 asn1_tRNA + 6 asp1_tRNA + 2 cysT_tRNA + 2 fmet_tRNA + 4 gln1_tRNA + 2 gln2_tRNA + 6 glu1_tRNA + 6 gly1_tRNA + 292 h + 2 hisR_tRNA + 12 ile1_tRNA + 10 leu1_tRNA + 12 lys1_tRNA + 740 mg2 + 6 phe1_tRNA + 292 pi + 2 pro1_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b4202_2_cplx + 2 ser1_tRNA + 4 serV_tRNA + 8 thr1_tRNA + 2 thr2_tRNA + 2 thr3_tRNA + 12 tyr1_tRNA + 2 val2_tRNA + 2 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_elo_b4202_4_rib1	Translation elongation 1 b4202 4 ribosome(s)	296 EF-G.GTP + 28 EF-Tu.GTP.ala1-tRNA + 48 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 12 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 12 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 24 EF-Tu.GTP.ile1-tRNA + 20 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.serV-tRNA + 16 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 24 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 1480 mg2 + 1 rib_ini_b4202_4 --> 1 rib_70_elo1_b4202_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_elo_b4202_4_rib2	Translation elongation 2 b4202 4 ribosome(s)	292 h2o + 1 rib_70_elo1_b4202_4_cplx --> 292 EF-G.GDP + 292 EF-Tu.GDP + 28 ala1_tRNA + 48 arg1_tRNA + 4 asn1_tRNA + 12 asp1_tRNA + 4 cysT_tRNA + 4 fmet_tRNA + 8 gln1_tRNA + 4 gln2_tRNA + 12 glu1_tRNA + 12 gly1_tRNA + 584 h + 4 hisR_tRNA + 24 ile1_tRNA + 20 leu1_tRNA + 24 lys1_tRNA + 1480 mg2 + 12 phe1_tRNA + 584 pi + 4 pro1_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b4202_4_cplx + 4 ser1_tRNA + 8 serV_tRNA + 16 thr1_tRNA + 4 thr2_tRNA + 4 thr3_tRNA + 24 tyr1_tRNA + 4 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72

tl_elo_b4203_1_rib1	Translation elongation 1 b4203 1 ribosome(s)	148 EF-G.GTP + 24 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 5 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.gln1-tRNA + 1 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 11 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.hisR-tRNA + 7 EF-Tu.GTP.ile1-tRNA + 11 EF-Tu.GTP.leu1-tRNA + 1 EF-Tu.GTP.leuU-tRNA + 11 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 11 EF-Tu.GTP.val1-tRNA + 9 EF-Tu.GTP.val3-tRNA + 740 mg2 + 1 rib_ini_b4203_1 --> 1 rib_70_elo1_b4203_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.94E+01	8.94E+01	0	8.29E+01	82.88	0	1.01E+01	10.07886
tl_elo_b4203_1_rib2	Translation elongation 2 b4203 1 ribosome(s)	147 h2o + 1 rib_70_elo1_b4203_1_cplx --> 147 EF-G.GDP + 147 EF-Tu.GDP + 24 ala1_tRNA + 7 arg1_tRNA + 8 asn1_tRNA + 5 asp1_tRNA + 1 fmet_tRNA + 3 gln1_tRNA + 1 gln2_tRNA + 13 glu1_tRNA + 11 gly1_tRNA + 294 h + 2 hisR_tRNA + 7 ile1_tRNA + 11 leu1_tRNA + 1 leuU_tRNA + 11 lys1_tRNA + 740 mg2 + 6 phe1_tRNA + 294 pi + 2 pro1_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b4203_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 4 serV_tRNA + 3 thr1_tRNA + 4 thr2_tRNA + 1 tyr1_tRNA + 11 val1_tRNA + 9 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.94E+01	8.94E+01	0	8.29E+01	82.88	0	1.01E+01	10.07886
tl_elo_b4203_4_rib1	Translation elongation 1 b4203 4 ribosome(s)	592 EF-G.GTP + 96 EF-Tu.GTP.ala1-tRNA + 28 EF-Tu.GTP.arg1-tRNA + 32 EF-Tu.GTP.asn1-tRNA + 20 EF-Tu.GTP.asp1-tRNA + 12 EF-Tu.GTP.gln1-tRNA + 4 EF-Tu.GTP.gln2-tRNA + 56 EF-Tu.GTP.glu1-tRNA + 44 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.hisR-tRNA + 28 EF-Tu.GTP.ile1-tRNA + 44 EF-Tu.GTP.leu1-tRNA + 4 EF-Tu.GTP.leuU-tRNA + 44 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 16 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 16 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 44 EF-Tu.GTP.val1-tRNA + 36 EF-Tu.GTP.val3-tRNA + 2960 mg2 + 1 rib_ini_b4203_4 --> 1 rib_70_elo1_b4203_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	2.73E+01	2.73E+01	0	2.07E+01	20.72	0	1.66E+01	16.589
tl_elo_b4203_4_rib2	Translation elongation 2 b4203 4 ribosome(s)	588 h2o + 1 rib_70_elo1_b4203_4_cplx --> 588 EF-G.GDP + 588 EF-Tu.GDP + 96 ala1_tRNA + 28 arg1_tRNA + 32 asn1_tRNA + 20 asp1_tRNA + 4 fmet_tRNA + 12 gln1_tRNA + 4 gln2_tRNA + 52 glu1_tRNA + 44 gly1_tRNA + 1176 h + 8 hisR_tRNA + 28 ile1_tRNA + 44 leu1_tRNA + 4 leuU_tRNA + 44 lys1_tRNA + 2960 mg2 + 24 phe1_tRNA + 1176 pi + 8 pro1_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b4203_4_cplx + 4 ser1_tRNA + 4 ser2_tRNA + 16 serV_tRNA + 12 thr1_tRNA + 16 thr2_tRNA + 4 tyr1_tRNA + 44 val1_tRNA + 36 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.73E+01	2.73E+01	0	2.07E+01	20.72	0	1.66E+01	16.589
tl_elo_b4203_8_rib1	Translation elongation 1 b4203 8 ribosome(s)	1184 EF-G.GTP + 192 EF-Tu.GTP.ala1-tRNA + 56 EF-Tu.GTP.arg1-tRNA + 64 EF-Tu.GTP.asn1-tRNA + 40 EF-Tu.GTP.asp1-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 8 EF-Tu.GTP.gln2-tRNA + 112 EF-Tu.GTP.glu1-tRNA + 88 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.hisR-tRNA + 56 EF-Tu.GTP.ile1-tRNA + 88 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 88 EF-Tu.GTP.lys1-tRNA + 48 EF-Tu.GTP.phe1-tRNA + 16 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 32 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 32 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 88 EF-Tu.GTP.val1-tRNA + 72 EF-Tu.GTP.val3-tRNA + 5920 mg2 + 1 rib_ini_b4203_8 --> 1 rib_70_elo1_b4203_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_elo_b4203_8_rib2	Translation elongation 2 b4203 8 ribosome(s)	1176 h2o + 1 rib_70_elo1_b4203_8_cplx --> 1176 EF-G.GDP + 1176 EF-Tu.GDP + 192 ala1_tRNA + 56 arg1_tRNA + 64 asn1_tRNA + 40 asp1_tRNA + 8 fmet_tRNA + 24 gln1_tRNA + 8 gln2_tRNA + 104 glu1_tRNA + 88 gly1_tRNA + 2352 h + 16 hisR_tRNA + 56 ile1_tRNA + 88 leu1_tRNA + 8 leuU_tRNA + 88 lys1_tRNA + 5920 mg2 + 48 phe1_tRNA + 2352 pi + 16 pro1_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b4203_8_cplx + 8 ser1_tRNA + 8 ser2_tRNA + 32 serV_tRNA + 24 thr1_tRNA + 32 thr2_tRNA + 8 tyr1_tRNA + 88 val1_tRNA + 72 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_elo_b4258_1_rib1	Translation elongation 1 b4258 1 ribosome(s)	950 EF-G.GTP + 59 EF-Tu.GTP.ala1-tRNA + 19 EF-Tu.GTP.ala2-tRNA + 61 EF-Tu.GTP.arg1-tRNA + 40 EF-Tu.GTP.asn1-tRNA + 65 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 33 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 80 EF-Tu.GTP.glu1-tRNA + 65 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 17 EF-Tu.GTP.hisR-tRNA + 63 EF-Tu.GTP.ile1-tRNA + 67 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 53 EF-Tu.GTP.lys1-tRNA + 31 EF-Tu.GTP.met1-tRNA + 35 EF-Tu.GTP.phe1-tRNA + 32 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proM-tRNA + 7 EF-Tu.GTP.ser1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 11 EF-Tu.GTP.serV-tRNA + 40 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 24 EF-Tu.GTP.trpT-tRNA + 26 EF-Tu.GTP.tyr1-tRNA + 24 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 25 EF-Tu.GTP.val3-tRNA + 4750 mg2 + 1 rib_ini_b4258_1 --> 1 rib_70_elo1_b4258_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.37E+01	4.37E+01	0	7.60E+01	75.95142	0	2.16E+00	2.16
tl_elo_b4258_1_rib2	Translation elongation 2 b4258 1 ribosome(s)	949 h2o + 1 rib_70_elo1_b4258_1_cplx --> 949 EF-G.GDP + 949 EF-Tu.GDP + 59 ala1_tRNA + 19 ala2_tRNA + 61 arg1_tRNA + 40 asn1_tRNA + 65 asp1_tRNA + 8 cysT_tRNA + 1 fmet_tRNA + 33 gln1_tRNA + 3 gln2_tRNA + 80 glu1_tRNA + 65 gly1_tRNA + 1 glyU_tRNA + 1898 h + 17 hisR_tRNA + 63 ile1_tRNA + 66 leu1_tRNA + 2 leu2_tRNA + 10 leuU_tRNA + 53 lys1_tRNA + 31 met1_tRNA + 4750 mg2 + 35 phe1_tRNA + 1898 pi + 32 pro1_tRNA + 4 pro2_tRNA + 6 proM_tRNA + 1 rib_70_elo2_b4258_1_cplx + 7 ser1_tRNA + 10 ser2_tRNA + 4 ser3_tRNA + 11 serV_tRNA + 40 thr1_tRNA + 8 thr2_tRNA + 3 thr3_tRNA + 2 thrU_tRNA + 24 trpT_tRNA + 26 tyr1_tRNA + 24 val1_tRNA + 12 val2_tRNA + 25 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.37E+01	4.37E+01	0	7.60E+01	75.95142	0	2.16E+00	2.16

tl_elo_b4258_27_rib1	Translation elongation 1 b4258 27 ribosome(s)	25650 EF-G.GTP + 1593 EF-Tu.GTP.ala1-tRNA + 513 EF-Tu.GTP.ala2-tRNA + 1647 EF-Tu.GTP.arg1-tRNA + 1080 EF-Tu.GTP.asn1-tRNA + 1755 EF-Tu.GTP.asp1-tRNA + 216 EF-Tu.GTP.cysT-tRNA + 891 EF-Tu.GTP.gln1-tRNA + 81 EF-Tu.GTP.gln2-tRNA + 2160 EF-Tu.GTP.glu1-tRNA + 1755 EF-Tu.GTP.gly1-tRNA + 27 EF-Tu.GTP.glyU-tRNA + 459 EF-Tu.GTP.hisR-tRNA + 1701 EF-Tu.GTP.ile1-tRNA + 1809 EF-Tu.GTP.leu1-tRNA + 54 EF-Tu.GTP.leu2-tRNA + 270 EF-Tu.GTP.leuU-tRNA + 1431 EF-Tu.GTP.lys1-tRNA + 837 EF-Tu.GTP.met1-tRNA + 945 EF-Tu.GTP.phe1-tRNA + 864 EF-Tu.GTP.pro1-tRNA + 108 EF-Tu.GTP.pro2-tRNA + 162 EF-Tu.GTP.proM-tRNA + 189 EF-Tu.GTP.ser1-tRNA + 270 EF-Tu.GTP.ser2-tRNA + 108 EF-Tu.GTP.ser3-tRNA + 297 EF-Tu.GTP.serV-tRNA + 1080 EF-Tu.GTP.thr1-tRNA + 216 EF-Tu.GTP.thr2-tRNA + 81 EF-Tu.GTP.thr3-tRNA + 54 EF-Tu.GTP.thrU-tRNA + 648 EF-Tu.GTP.trpT-tRNA + 702 EF-Tu.GTP.tyr1-tRNA + 648 EF-Tu.GTP.val1-tRNA + 324 EF-Tu.GTP.val2-tRNA + 675 EF-Tu.GTP.val3-tRNA + 128250 mg2 + 1 rib_ini_b4258_27 --> 1 rib_70_elo1_b4258_27_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	4.37E+01	4.37E+01	0	7.60E+01	75.95142	0	2.16E+00	2.16
tl_elo_b4258_27_rib2	Translation elongation 2 b4258 27 ribosome(s)	25623 h2o + 1 rib_70_elo1_b4258_27_cplx --> 25623 EF-G.GDP + 25623 EF-Tu.GDP + 1593 ala1_tRNA + 513 ala2_tRNA + 1647 arg1_tRNA + 1080 asn1_tRNA + 1755 asp1_tRNA + 216 cysT_tRNA + 27 fmet_tRNA + 891 gln1_tRNA + 81 gln2_tRNA + 2160 glu1_tRNA + 1755 gly1_tRNA + 27 glyU_tRNA + 51246 h + 459 hisR_tRNA + 1701 ile1_tRNA + 1782 leu1_tRNA + 54 leu2_tRNA + 270 leuU_tRNA + 1431 lys1_tRNA + 837 met1_tRNA + 128250 mg2 + 945 phe1_tRNA + 51246 pi + 864 pro1_tRNA + 108 pro2_tRNA + 162 proM_tRNA + 1 rib_70_elo2_b4258_27_cplx + 189 ser1_tRNA + 270 ser2_tRNA + 108 ser3_tRNA + 297 serV_tRNA + 1080 thr1_tRNA + 216 thr2_tRNA + 81 thr3_tRNA + 54 thrU_tRNA + 648 trpT_tRNA + 702 tyr1_tRNA + 648 val1_tRNA + 324 val2_tRNA + 675 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.37E+01	4.37E+01	0	7.60E+01	75.95142	0	2.16E+00	2.16
tl_elo_b4258_55_rib1	Translation elongation 1 b4258 55 ribosome(s)	52250 EF-G.GTP + 3245 EF-Tu.GTP.ala1-tRNA + 1045 EF-Tu.GTP.ala2-tRNA + 3355 EF-Tu.GTP.arg1-tRNA + 2200 EF-Tu.GTP.asn1-tRNA + 3575 EF-Tu.GTP.asp1-tRNA + 440 EF-Tu.GTP.cysT-tRNA + 1815 EF-Tu.GTP.gln1-tRNA + 165 EF-Tu.GTP.gln2-tRNA + 4400 EF-Tu.GTP.glu1-tRNA + 3575 EF-Tu.GTP.gly1-tRNA + 55 EF-Tu.GTP.glyU-tRNA + 935 EF-Tu.GTP.hisR-tRNA + 3465 EF-Tu.GTP.ile1-tRNA + 3685 EF-Tu.GTP.leu1-tRNA + 110 EF-Tu.GTP.leu2-tRNA + 550 EF-Tu.GTP.leuU-tRNA + 2915 EF-Tu.GTP.lys1-tRNA + 1705 EF-Tu.GTP.met1-tRNA + 1925 EF-Tu.GTP.phe1-tRNA + 1760 EF-Tu.GTP.pro1-tRNA + 220 EF-Tu.GTP.pro2-tRNA + 330 EF-Tu.GTP.proM-tRNA + 385 EF-Tu.GTP.ser1-tRNA + 550 EF-Tu.GTP.ser2-tRNA + 220 EF-Tu.GTP.ser3-tRNA + 605 EF-Tu.GTP.serV-tRNA + 2200 EF-Tu.GTP.thr1-tRNA + 440 EF-Tu.GTP.thr2-tRNA + 165 EF-Tu.GTP.thr3-tRNA + 110 EF-Tu.GTP.thrU-tRNA + 1320 EF-Tu.GTP.trpT-tRNA + 1430 EF-Tu.GTP.tyr1-tRNA + 1320 EF-Tu.GTP.val1-tRNA + 660 EF-Tu.GTP.val2-tRNA + 1375 EF-Tu.GTP.val3-tRNA + 261250 mg2 + 1 rib_ini_b4258_55 --> 1 rib_70_elo1_b4258_55_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	3.67E+01	3.67E+01	0	3.74E+01	37.39572	0	2.16E+00	2.16
tl_elo_b4258_55_rib2	Translation elongation 2 b4258 55 ribosome(s)	52195 h2o + 1 rib_70_elo1_b4258_55_cplx --> 52195 EF-G.GDP + 52195 EF-Tu.GDP + 3245 ala1_tRNA + 1045 ala2_tRNA + 3355 arg1_tRNA + 2200 asn1_tRNA + 3575 asp1_tRNA + 440 cysT_tRNA + 55 fmet_tRNA + 1815 gln1_tRNA + 165 gln2_tRNA + 4400 glu1_tRNA + 3575 gly1_tRNA + 55 glyU_tRNA + 104390 h + 935 hisR_tRNA + 3465 ile1_tRNA + 3630 leu1_tRNA + 110 leu2_tRNA + 550 leuU_tRNA + 2915 lys1_tRNA + 1705 met1_tRNA + 261250 mg2 + 1925 phe1_tRNA + 104390 pi + 1760 pro1_tRNA + 220 pro2_tRNA + 330 proM_tRNA + 1 rib_70_elo2_b4258_55_cplx + 385 ser1_tRNA + 550 ser2_tRNA + 220 ser3_tRNA + 605 serV_tRNA + 2200 thr1_tRNA + 440 thr2_tRNA + 165 thr3_tRNA + 110 thrU_tRNA + 1320 trpT_tRNA + 1430 tyr1_tRNA + 1320 val1_tRNA + 660 val2_tRNA + 1375 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.67E+01	3.67E+01	0	3.74E+01	37.39572	0	2.16E+00	2.16
tl_elo_b4292_18_rib1	Translation elongation 1 b4292 18 ribosome(s)	5688 EF-G.GTP + 306 EF-Tu.GTP.ala1-tRNA + 216 EF-Tu.GTP.ala2-tRNA + 396 EF-Tu.GTP.arg1-tRNA + 72 EF-Tu.GTP.argX-tRNA + 198 EF-Tu.GTP.asn1-tRNA + 324 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.cysT-tRNA + 396 EF-Tu.GTP.gln1-tRNA + 126 EF-Tu.GTP.gln2-tRNA + 252 EF-Tu.GTP.glu1-tRNA + 306 EF-Tu.GTP.gly1-tRNA + 36 EF-Tu.GTP.glyT-tRNA + 54 EF-Tu.GTP.glyU-tRNA + 90 EF-Tu.GTP.hisR-tRNA + 162 EF-Tu.GTP.ile1-tRNA + 36 EF-Tu.GTP.ile2-tRNA + 360 EF-Tu.GTP.leu1-tRNA + 54 EF-Tu.GTP.leu2-tRNA + 198 EF-Tu.GTP.leuU-tRNA + 36 EF-Tu.GTP.leuW-tRNA + 54 EF-Tu.GTP.leuZ-tRNA + 162 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 144 EF-Tu.GTP.phe1-tRNA + 54 EF-Tu.GTP.pro1-tRNA + 36 EF-Tu.GTP.pro2-tRNA + 72 EF-Tu.GTP.proL-tRNA + 36 EF-Tu.GTP.proM-tRNA + 54 EF-Tu.GTP.ser1-tRNA + 36 EF-Tu.GTP.ser2-tRNA + 18 EF-Tu.GTP.ser3-tRNA + 36 EF-Tu.GTP.serT-tRNA + 234 EF-Tu.GTP.serV-tRNA + 216 EF-Tu.GTP.thr1-tRNA + 36 EF-Tu.GTP.thr2-tRNA + 126 EF-Tu.GTP.thr3-tRNA + 54 EF-Tu.GTP.thrU-tRNA + 180 EF-Tu.GTP.trpT-tRNA + 108 EF-Tu.GTP.tyr1-tRNA + 198 EF-Tu.GTP.val1-tRNA + 90 EF-Tu.GTP.val2-tRNA + 90 EF-Tu.GTP.val3-tRNA + 28440 mg2 + 1 rib_ini_b4292_18 --> 1 rib_70_elo1_b4292_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_elo_b4292_18_rib2	Translation elongation 2 b4292 18 ribosome(s)	5670 h2o + 1 rib_70_elo1_b4292_18_cplx --> 5670 EF-G.GDP + 5670 EF-Tu.GDP + 306 ala1_tRNA + 216 ala2_tRNA + 396 arg1_tRNA + 72 argX_tRNA + 198 asn1_tRNA + 324 asp1_tRNA + 18 cysT_tRNA + 18 fmet_tRNA + 396 gln1_tRNA + 126 gln2_tRNA + 252 glu1_tRNA + 306 gly1_tRNA + 36 glyT_tRNA + 54 glyU_tRNA + 11340 h + 90 hisR_tRNA + 162 ile1_tRNA + 36 ile2_tRNA + 342 leu1_tRNA + 54 leu2_tRNA + 198 leuU_tRNA + 36 leuW_tRNA + 54 leuZ_tRNA + 162 lys1_tRNA + 18 met1_tRNA + 28440 mg2 + 144 phe1_tRNA + 11340 pi + 54 pro1_tRNA + 36 pro2_tRNA + 72 proL_tRNA + 36 proM_tRNA + 1 rib_70_elo2_b4292_18_cplx + 54 ser1_tRNA + 36 ser2_tRNA + 18 ser3_tRNA + 36 serT_tRNA + 234 serV_tRNA + 216 thr1_tRNA + 36 thr2_tRNA + 126 thr3_tRNA + 54 thrU_tRNA + 180 trpT_tRNA + 108 tyr1_tRNA + 198 val1_tRNA + 90 val2_tRNA + 90 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5

tl_elo_b4292_1_rib1	Translation elongation 1 b4292 1 ribosome(s)	316 EF-G.GTP + 17 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 22 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argX-tRNA + 11 EF-Tu.GTP.asn1-tRNA + 18 EF-Tu.GTP.asp1-tRNA + 1 EF-Tu.GTP.cysT-tRNA + 22 EF-Tu.GTP.gln1-tRNA + 7 EF-Tu.GTP.gln2-tRNA + 14 EF-Tu.GTP.glu1-tRNA + 17 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 9 EF-Tu.GTP.ile1-tRNA + 2 EF-Tu.GTP.ile2-tRNA + 20 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 11 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 1 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 3 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 13 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 3 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 11 EF-Tu.GTP.val1-tRNA + 5 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 1580 mg2 + 1 rib_ini_b4292_1 --> 1 rib_70_elo1_b4292_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_elo_b4292_1_rib2	Translation elongation 2 b4292 1 ribosome(s)	315 h2o + 1 rib_70_elo1_b4292_1_cplx --> 315 EF-G.GDP + 315 EF-Tu.GDP + 17 ala1_tRNA + 12 ala2_tRNA + 22 arg1_tRNA + 4 argX_tRNA + 11 asn1_tRNA + 18 asp1_tRNA + 1 cysT_tRNA + 1 fmet_tRNA + 22 gln1_tRNA + 7 gln2_tRNA + 14 glu1_tRNA + 17 gly1_tRNA + 2 glyT_tRNA + 3 glyU_tRNA + 630 h + 5 hisR_tRNA + 9 ile1_tRNA + 2 ile2_tRNA + 19 leu1_tRNA + 3 leu2_tRNA + 11 leuU_tRNA + 2 leuW_tRNA + 3 leuZ_tRNA + 9 lys1_tRNA + 1 met1_tRNA + 1580 mg2 + 8 phe1_tRNA + 630 pi + 3 pro1_tRNA + 2 pro2_tRNA + 4 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b4292_1_cplx + 3 ser1_tRNA + 2 ser2_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 13 serV_tRNA + 12 thr1_tRNA + 2 thr2_tRNA + 7 thr3_tRNA + 3 thrU_tRNA + 10 trpT_tRNA + 6 tyr1_tRNA + 11 val1_tRNA + 5 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_elo_b4292_9_rib1	Translation elongation 1 b4292 9 ribosome(s)	2844 EF-G.GTP + 153 EF-Tu.GTP.ala1-tRNA + 108 EF-Tu.GTP.ala2-tRNA + 198 EF-Tu.GTP.arg1-tRNA + 36 EF-Tu.GTP.argX-tRNA + 99 EF-Tu.GTP.asn1-tRNA + 162 EF-Tu.GTP.asp1-tRNA + 9 EF-Tu.GTP.cysT-tRNA + 198 EF-Tu.GTP.gln1-tRNA + 63 EF-Tu.GTP.gln2-tRNA + 126 EF-Tu.GTP.glu1-tRNA + 153 EF-Tu.GTP.gly1-tRNA + 18 EF-Tu.GTP.glyT-tRNA + 27 EF-Tu.GTP.glyU-tRNA + 45 EF-Tu.GTP.hisR-tRNA + 81 EF-Tu.GTP.ile1-tRNA + 18 EF-Tu.GTP.ile2-tRNA + 180 EF-Tu.GTP.leu1-tRNA + 27 EF-Tu.GTP.leu2-tRNA + 99 EF-Tu.GTP.leuU-tRNA + 18 EF-Tu.GTP.leuW-tRNA + 27 EF-Tu.GTP.leuZ-tRNA + 81 EF-Tu.GTP.lys1-tRNA + 9 EF-Tu.GTP.met1-tRNA + 72 EF-Tu.GTP.phe1-tRNA + 27 EF-Tu.GTP.pro1-tRNA + 18 EF-Tu.GTP.pro2-tRNA + 36 EF-Tu.GTP.proL-tRNA + 18 EF-Tu.GTP.proM-tRNA + 27 EF-Tu.GTP.ser1-tRNA + 18 EF-Tu.GTP.ser2-tRNA + 9 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serT-tRNA + 117 EF-Tu.GTP.serV-tRNA + 108 EF-Tu.GTP.thr1-tRNA + 18 EF-Tu.GTP.thr2-tRNA + 63 EF-Tu.GTP.thr3-tRNA + 27 EF-Tu.GTP.thrU-tRNA + 90 EF-Tu.GTP.trpT-tRNA + 54 EF-Tu.GTP.tyr1-tRNA + 99 EF-Tu.GTP.val1-tRNA + 45 EF-Tu.GTP.val2-tRNA + 45 EF-Tu.GTP.val3-tRNA + 14220 mg2 + 1 rib_ini_b4292_9 --> 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_elo_b4292_9_rib2	Translation elongation 2 b4292 9 ribosome(s)	2835 h2o + 1 rib_70_elo1_b4292_9_cplx --> 2835 EF-G.GDP + 2835 EF-Tu.GDP + 153 ala1_tRNA + 108 ala2_tRNA + 198 arg1_tRNA + 36 argX_tRNA + 99 asn1_tRNA + 162 asp1_tRNA + 9 cysT_tRNA + 9 fmet_tRNA + 198 gln1_tRNA + 63 gln2_tRNA + 126 glu1_tRNA + 153 gly1_tRNA + 18 glyT_tRNA + 27 glyU_tRNA + 5670 h + 45 hisR_tRNA + 81 ile1_tRNA + 18 ile2_tRNA + 171 leu1_tRNA + 27 leu2_tRNA + 99 leuU_tRNA + 18 leuW_tRNA + 27 leuZ_tRNA + 81 lys1_tRNA + 9 met1_tRNA + 14220 mg2 + 72 phe1_tRNA + 5670 pi + 27 pro1_tRNA + 18 pro2_tRNA + 36 proL_tRNA + 18 proM_tRNA + 1 rib_70_elo2_b4292_9_cplx + 27 ser1_tRNA + 18 ser2_tRNA + 9 ser3_tRNA + 18 serT_tRNA + 117 serV_tRNA + 108 thr1_tRNA + 18 thr2_tRNA + 63 thr3_tRNA + 27 thrU_tRNA + 90 trpT_tRNA + 54 tyr1_tRNA + 99 val1_tRNA + 45 val2_tRNA + 45 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_elo_b4293_10_rib1	Translation elongation 1 b4293 10 ribosome(s)	1720 EF-G.GTP + 100 EF-Tu.GTP.ala1-tRNA + 40 EF-Tu.GTP.ala2-tRNA + 100 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.argX-tRNA + 20 EF-Tu.GTP.asn1-tRNA + 100 EF-Tu.GTP.asp1-tRNA + 20 EF-Tu.GTP.cysT-tRNA + 20 EF-Tu.GTP.gln1-tRNA + 30 EF-Tu.GTP.gln2-tRNA + 130 EF-Tu.GTP.glu1-tRNA + 50 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 30 EF-Tu.GTP.glyU-tRNA + 40 EF-Tu.GTP.hisR-tRNA + 50 EF-Tu.GTP.ile1-tRNA + 120 EF-Tu.GTP.leu1-tRNA + 20 EF-Tu.GTP.leu2-tRNA + 100 EF-Tu.GTP.leuU-tRNA + 20 EF-Tu.GTP.leuW-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 90 EF-Tu.GTP.lys1-tRNA + 50 EF-Tu.GTP.met1-tRNA + 70 EF-Tu.GTP.phe1-tRNA + 10 EF-Tu.GTP.pro1-tRNA + 30 EF-Tu.GTP.pro2-tRNA + 40 EF-Tu.GTP.ser1-tRNA + 20 EF-Tu.GTP.ser2-tRNA + 30 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serT-tRNA + 60 EF-Tu.GTP.serV-tRNA + 20 EF-Tu.GTP.thr1-tRNA + 30 EF-Tu.GTP.thr2-tRNA + 40 EF-Tu.GTP.thr3-tRNA + 40 EF-Tu.GTP.thrU-tRNA + 20 EF-Tu.GTP.trpT-tRNA + 50 EF-Tu.GTP.tyr1-tRNA + 50 EF-Tu.GTP.val1-tRNA + 20 EF-Tu.GTP.val2-tRNA + 10 EF-Tu.GTP.val3-tRNA + 8600 mg2 + 1 rib_ini_b4293_10 --> 1 rib_70_elo1_b4293_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tl_elo_b4293_10_rib2	Translation elongation 2 b4293 10 ribosome(s)	1710 h2o + 1 rib_70_elo1_b4293_10_cplx --> 1710 EF-G.GDP + 1710 EF-Tu.GDP + 100 ala1_tRNA + 40 ala2_tRNA + 100 arg1_tRNA + 10 argX_tRNA + 20 asn1_tRNA + 100 asp1_tRNA + 20 cysT_tRNA + 10 fmet_tRNA + 20 gln1_tRNA + 30 gln2_tRNA + 130 glu1_tRNA + 50 gly1_tRNA + 10 glyT_tRNA + 30 glyU_tRNA + 3420 h + 40 hisR_tRNA + 50 ile1_tRNA + 120 leu1_tRNA + 20 leu2_tRNA + 100 leuU_tRNA + 20 leuW_tRNA + 10 leuZ_tRNA + 90 lys1_tRNA + 50 met1_tRNA + 8600 mg2 + 70 phe1_tRNA + 3420 pi + 10 pro1_tRNA + 30 pro2_tRNA + 1 rib_70_elo2_b4293_10_cplx + 40 ser1_tRNA + 20 ser2_tRNA + 30 ser3_tRNA + 10 serT_tRNA + 60 serV_tRNA + 20 thr1_tRNA + 30 thr2_tRNA + 40 thr3_tRNA + 40 thrU_tRNA + 20 trpT_tRNA + 50 tyr1_tRNA + 50 val1_tRNA + 20 val2_tRNA + 10 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0

tl_elo_b4293_1_rib1	Translation elongation 1 b4293 1 ribosome(s)	172 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 4 EF-Tu.GTP.ala2-tRNA + 10 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argX-tRNA + 2 EF-Tu.GTP.asn1-tRNA + 10 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 2 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 13 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.glyU-tRNA + 4 EF-Tu.GTP.hisR-tRNA + 5 EF-Tu.GTP.ile1-tRNA + 12 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 10 EF-Tu.GTP.leuU-tRNA + 2 EF-Tu.GTP.leuW-tRNA + 2 EF-Tu.GTP.leuZ-tRNA + 9 EF-Tu.GTP.lys1-tRNA + 5 EF-Tu.GTP.met1-tRNA + 7 EF-Tu.GTP.phe1-tRNA + 1 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 6 EF-Tu.GTP.serV-tRNA + 2 EF-Tu.GTP.thr1-tRNA + 3 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 1 EF-Tu.GTP.val3-tRNA + 860 mg2 + 1 rib_ini_b4293_1 --> 1 rib_70_elo1_b4293_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tl_elo_b4293_1_rib2	Translation elongation 2 b4293 1 ribosome(s)	171 h2o + 1 rib_70_elo1_b4293_1_cplx --> 171 EF-G.GDP + 171 EF-Tu.GDP + 10 ala1_tRNA + 4 ala2_tRNA + 10 arg1_tRNA + 1 argX_tRNA + 2 asn1_tRNA + 10 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 2 gln1_tRNA + 3 gln2_tRNA + 13 glu1_tRNA + 5 gly1_tRNA + 1 glyT_tRNA + 3 glyU_tRNA + 342 h + 4 hisR_tRNA + 5 ile1_tRNA + 12 leu1_tRNA + 2 leu2_tRNA + 10 leuU_tRNA + 2 leuW_tRNA + 1 leuZ_tRNA + 9 lys1_tRNA + 5 met1_tRNA + 860 mg2 + 7 phe1_tRNA + 342 pi + 1 pro1_tRNA + 3 pro2_tRNA + 1 rib_70_elo2_b4293_1_cplx + 4 ser1_tRNA + 2 ser2_tRNA + 3 ser3_tRNA + 1 serT_tRNA + 6 serV_tRNA + 2 thr1_tRNA + 3 thr2_tRNA + 4 thr3_tRNA + 4 thrU_tRNA + 2 trpT_tRNA + 5 tyr1_tRNA + 5 val1_tRNA + 2 val2_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tl_elo_b4293_5_rib1	Translation elongation 1 b4293 5 ribosome(s)	860 EF-G.GTP + 50 EF-Tu.GTP.ala1-tRNA + 20 EF-Tu.GTP.ala2-tRNA + 50 EF-Tu.GTP.arg1-tRNA + 5 EF-Tu.GTP.argX-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 50 EF-Tu.GTP.asp1-tRNA + 10 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 15 EF-Tu.GTP.gln2-tRNA + 65 EF-Tu.GTP.glu1-tRNA + 25 EF-Tu.GTP.gly1-tRNA + 5 EF-Tu.GTP.glyT-tRNA + 15 EF-Tu.GTP.glyU-tRNA + 20 EF-Tu.GTP.hisR-tRNA + 25 EF-Tu.GTP.ile1-tRNA + 60 EF-Tu.GTP.leu1-tRNA + 10 EF-Tu.GTP.leu2-tRNA + 50 EF-Tu.GTP.leuU-tRNA + 10 EF-Tu.GTP.leuW-tRNA + 10 EF-Tu.GTP.leuZ-tRNA + 45 EF-Tu.GTP.lys1-tRNA + 25 EF-Tu.GTP.met1-tRNA + 35 EF-Tu.GTP.phe1-tRNA + 5 EF-Tu.GTP.pro1-tRNA + 15 EF-Tu.GTP.pro2-tRNA + 20 EF-Tu.GTP.ser1-tRNA + 10 EF-Tu.GTP.ser2-tRNA + 15 EF-Tu.GTP.ser3-tRNA + 5 EF-Tu.GTP.serT-tRNA + 30 EF-Tu.GTP.serV-tRNA + 10 EF-Tu.GTP.thr1-tRNA + 15 EF-Tu.GTP.thr2-tRNA + 20 EF-Tu.GTP.thr3-tRNA + 20 EF-Tu.GTP.thrU-tRNA + 10 EF-Tu.GTP.trpT-tRNA + 25 EF-Tu.GTP.tyr1-tRNA + 25 EF-Tu.GTP.val1-tRNA + 10 EF-Tu.GTP.val2-tRNA + 5 EF-Tu.GTP.val3-tRNA + 4300 mg2 + 1 rib_ini_b4293_5 --> 1 rib_70_elo1_b4293_5_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tl_elo_b4293_5_rib2	Translation elongation 2 b4293 5 ribosome(s)	855 h2o + 1 rib_70_elo1_b4293_5_cplx --> 855 EF-G.GDP + 855 EF-Tu.GDP + 50 ala1_tRNA + 20 ala2_tRNA + 50 arg1_tRNA + 5 argX_tRNA + 10 asn1_tRNA + 50 asp1_tRNA + 10 cysT_tRNA + 5 fmet_tRNA + 10 gln1_tRNA + 15 gln2_tRNA + 65 glu1_tRNA + 25 gly1_tRNA + 5 glyT_tRNA + 15 glyU_tRNA + 1710 h + 20 hisR_tRNA + 25 ile1_tRNA + 60 leu1_tRNA + 10 leu2_tRNA + 50 leuU_tRNA + 10 leuW_tRNA + 5 leuZ_tRNA + 45 lys1_tRNA + 25 met1_tRNA + 4300 mg2 + 35 phe1_tRNA + 1710 pi + 5 pro1_tRNA + 15 pro2_tRNA + 1 rib_70_elo2_b4293_5_cplx + 20 ser1_tRNA + 10 ser2_tRNA + 15 ser3_tRNA + 5 serT_tRNA + 30 serV_tRNA + 10 thr1_tRNA + 15 thr2_tRNA + 20 thr3_tRNA + 20 thrU_tRNA + 10 trpT_tRNA + 25 tyr1_tRNA + 25 val1_tRNA + 10 val2_tRNA + 5 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tl_elo_b4371_10_rib1	Translation elongation 1 b4371 10 ribosome(s)	3420 EF-G.GTP + 220 EF-Tu.GTP.ala1-tRNA + 130 EF-Tu.GTP.ala2-tRNA + 220 EF-Tu.GTP.arg1-tRNA + 100 EF-Tu.GTP.asn1-tRNA + 250 EF-Tu.GTP.asp1-tRNA + 40 EF-Tu.GTP.cysT-tRNA + 100 EF-Tu.GTP.gln1-tRNA + 50 EF-Tu.GTP.gln2-tRNA + 150 EF-Tu.GTP.glu1-tRNA + 210 EF-Tu.GTP.gly1-tRNA + 10 EF-Tu.GTP.glyT-tRNA + 40 EF-Tu.GTP.glyU-tRNA + 90 EF-Tu.GTP.hisR-tRNA + 100 EF-Tu.GTP.ile1-tRNA + 190 EF-Tu.GTP.leu1-tRNA + 50 EF-Tu.GTP.leu2-tRNA + 70 EF-Tu.GTP.leuU-tRNA + 50 EF-Tu.GTP.leuZ-tRNA + 130 EF-Tu.GTP.lys1-tRNA + 60 EF-Tu.GTP.met1-tRNA + 200 EF-Tu.GTP.phe1-tRNA + 110 EF-Tu.GTP.pro1-tRNA + 20 EF-Tu.GTP.pro2-tRNA + 10 EF-Tu.GTP.proL-tRNA + 10 EF-Tu.GTP.proM-tRNA + 20 EF-Tu.GTP.ser1-tRNA + 30 EF-Tu.GTP.ser2-tRNA + 20 EF-Tu.GTP.ser3-tRNA + 10 EF-Tu.GTP.serT-tRNA + 160 EF-Tu.GTP.serV-tRNA + 60 EF-Tu.GTP.thr1-tRNA + 10 EF-Tu.GTP.thr2-tRNA + 70 EF-Tu.GTP.thr3-tRNA + 40 EF-Tu.GTP.thrU-tRNA + 30 EF-Tu.GTP.trpT-tRNA + 70 EF-Tu.GTP.tyr1-tRNA + 140 EF-Tu.GTP.val1-tRNA + 120 EF-Tu.GTP.val2-tRNA + 30 EF-Tu.GTP.val3-tRNA + 17100 mg2 + 1 rib_ini_b4371_10 --> 1 rib_70_elo1_b4371_10_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_elo_b4371_10_rib2	Translation elongation 2 b4371 10 ribosome(s)	3410 h2o + 1 rib_70_elo1_b4371_10_cplx --> 3410 EF-G.GDP + 3410 EF-Tu.GDP + 220 ala1_tRNA + 130 ala2_tRNA + 220 arg1_tRNA + 100 asn1_tRNA + 250 asp1_tRNA + 40 cysT_tRNA + 10 fmet_tRNA + 100 gln1_tRNA + 50 gln2_tRNA + 150 glu1_tRNA + 200 gly1_tRNA + 10 glyT_tRNA + 40 glyU_tRNA + 6820 h + 90 hisR_tRNA + 100 ile1_tRNA + 190 leu1_tRNA + 50 leu2_tRNA + 70 leuU_tRNA + 50 leuZ_tRNA + 130 lys1_tRNA + 60 met1_tRNA + 17100 mg2 + 200 phe1_tRNA + 6820 pi + 110 pro1_tRNA + 20 pro2_tRNA + 10 proL_tRNA + 10 proM_tRNA + 1 rib_70_elo2_b4371_10_cplx + 20 ser1_tRNA + 30 ser2_tRNA + 20 ser3_tRNA + 10 serT_tRNA + 160 serV_tRNA + 60 thr1_tRNA + 10 thr2_tRNA + 70 thr3_tRNA + 40 thrU_tRNA + 30 trpT_tRNA + 70 tyr1_tRNA + 140 val1_tRNA + 120 val2_tRNA + 30 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957

tl_elo_b4371_1_rib1	Translation elongation 1 b4371 1 ribosome(s)	342 EF-G.GTP + 22 EF-Tu.GTP.ala1-tRNA + 13 EF-Tu.GTP.ala2-tRNA + 22 EF-Tu.GTP.arg1-tRNA + 10 EF-Tu.GTP.asn1-tRNA + 25 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.cysT-tRNA + 10 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 15 EF-Tu.GTP.glu1-tRNA + 21 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 9 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 19 EF-Tu.GTP.leu1-tRNA + 5 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 13 EF-Tu.GTP.lys1-tRNA + 6 EF-Tu.GTP.met1-tRNA + 20 EF-Tu.GTP.phe1-tRNA + 11 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 3 EF-Tu.GTP.ser2-tRNA + 2 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 16 EF-Tu.GTP.serV-tRNA + 6 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 4 EF-Tu.GTP.thrU-tRNA + 3 EF-Tu.GTP.trpT-tRNA + 7 EF-Tu.GTP.tyr1-tRNA + 14 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 3 EF-Tu.GTP.val3-tRNA + 1710 mg2 + 1 rib_ini_b4371_1 --> 1 rib_70_elo1_b4371_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_elo_b4371_1_rib2	Translation elongation 2 b4371 1 ribosome(s)	341 h2o + 1 rib_70_elo1_b4371_1_cplx --> 341 EF-G.GDP + 341 EF-Tu.GDP + 22 ala1_tRNA + 13 ala2_tRNA + 22 arg1_tRNA + 10 asn1_tRNA + 25 asp1_tRNA + 4 cysT_tRNA + 1 fmet_tRNA + 10 gln1_tRNA + 5 gln2_tRNA + 15 glu1_tRNA + 20 gly1_tRNA + 1 glyT_tRNA + 4 glyU_tRNA + 682 h + 9 hisR_tRNA + 10 ile1_tRNA + 19 leu1_tRNA + 5 leu2_tRNA + 7 leuU_tRNA + 5 leuZ_tRNA + 13 lys1_tRNA + 6 met1_tRNA + 1710 mg2 + 20 phe1_tRNA + 682 pi + 11 pro1_tRNA + 2 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b4371_1_cplx + 2 ser1_tRNA + 3 ser2_tRNA + 2 ser3_tRNA + 1 serT_tRNA + 16 serV_tRNA + 6 thr1_tRNA + 1 thr2_tRNA + 7 thr3_tRNA + 4 thrU_tRNA + 3 trpT_tRNA + 7 tyr1_tRNA + 14 val1_tRNA + 12 val2_tRNA + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_elo_b4371_20_rib1	Translation elongation 1 b4371 20 ribosome(s)	6840 EF-G.GTP + 440 EF-Tu.GTP.ala1-tRNA + 260 EF-Tu.GTP.ala2-tRNA + 440 EF-Tu.GTP.arg1-tRNA + 200 EF-Tu.GTP.asn1-tRNA + 500 EF-Tu.GTP.asp1-tRNA + 80 EF-Tu.GTP.cysT-tRNA + 200 EF-Tu.GTP.gln1-tRNA + 100 EF-Tu.GTP.gln2-tRNA + 300 EF-Tu.GTP.glu1-tRNA + 420 EF-Tu.GTP.gly1-tRNA + 20 EF-Tu.GTP.glyT-tRNA + 80 EF-Tu.GTP.glyU-tRNA + 180 EF-Tu.GTP.hisR-tRNA + 200 EF-Tu.GTP.ile1-tRNA + 380 EF-Tu.GTP.leu1-tRNA + 100 EF-Tu.GTP.leu2-tRNA + 140 EF-Tu.GTP.leuU-tRNA + 100 EF-Tu.GTP.leuZ-tRNA + 260 EF-Tu.GTP.lys1-tRNA + 120 EF-Tu.GTP.met1-tRNA + 400 EF-Tu.GTP.phe1-tRNA + 220 EF-Tu.GTP.pro1-tRNA + 40 EF-Tu.GTP.pro2-tRNA + 20 EF-Tu.GTP.proL-tRNA + 20 EF-Tu.GTP.proM-tRNA + 40 EF-Tu.GTP.ser1-tRNA + 60 EF-Tu.GTP.ser2-tRNA + 40 EF-Tu.GTP.ser3-tRNA + 20 EF-Tu.GTP.serT-tRNA + 320 EF-Tu.GTP.serV-tRNA + 120 EF-Tu.GTP.thr1-tRNA + 20 EF-Tu.GTP.thr2-tRNA + 140 EF-Tu.GTP.thr3-tRNA + 80 EF-Tu.GTP.thrU-tRNA + 60 EF-Tu.GTP.trpT-tRNA + 140 EF-Tu.GTP.tyr1-tRNA + 280 EF-Tu.GTP.val1-tRNA + 240 EF-Tu.GTP.val2-tRNA + 60 EF-Tu.GTP.val3-tRNA + 34200 mg2 + 1 rib_ini_b4371_20 --> 1 rib_70_elo1_b4371_20_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_elo_b4371_20_rib2	Translation elongation 2 b4371 20 ribosome(s)	6820 h2o + 1 rib_70_elo1_b4371_20_cplx --> 6820 EF-G.GDP + 6820 EF-Tu.GDP + 440 ala1_tRNA + 260 ala2_tRNA + 440 arg1_tRNA + 200 asn1_tRNA + 500 asp1_tRNA + 80 cysT_tRNA + 20 fmet_tRNA + 200 gln1_tRNA + 100 gln2_tRNA + 300 glu1_tRNA + 400 gly1_tRNA + 20 glyT_tRNA + 80 glyU_tRNA + 13640 h + 180 hisR_tRNA + 200 ile1_tRNA + 380 leu1_tRNA + 100 leu2_tRNA + 140 leuU_tRNA + 100 leuZ_tRNA + 260 lys1_tRNA + 120 met1_tRNA + 34200 mg2 + 400 phe1_tRNA + 13640 pi + 220 pro1_tRNA + 40 pro2_tRNA + 20 proL_tRNA + 20 proM_tRNA + 1 rib_70_elo2_b4371_20_cplx + 40 ser1_tRNA + 60 ser2_tRNA + 40 ser3_tRNA + 20 serT_tRNA + 320 serV_tRNA + 120 thr1_tRNA + 20 thr2_tRNA + 140 thr3_tRNA + 80 thrU_tRNA + 60 trpT_tRNA + 140 tyr1_tRNA + 280 val1_tRNA + 240 val2_tRNA + 60 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_elo_b4372_1_rib1	Translation elongation 1 b4372 1 ribosome(s)	136 EF-G.GTP + 12 EF-Tu.GTP.ala1-tRNA + 3 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 2 EF-Tu.GTP.argX-tRNA + 4 EF-Tu.GTP.asn1-tRNA + 9 EF-Tu.GTP.asp1-tRNA + 2 EF-Tu.GTP.cysT-tRNA + 6 EF-Tu.GTP.gln1-tRNA + 5 EF-Tu.GTP.gln2-tRNA + 5 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyU-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 6 EF-Tu.GTP.ile1-tRNA + 9 EF-Tu.GTP.leu1-tRNA + 2 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 5 EF-Tu.GTP.leuZ-tRNA + 1 EF-Tu.GTP.lys1-tRNA + 2 EF-Tu.GTP.met1-tRNA + 2 EF-Tu.GTP.phe1-tRNA + 4 EF-Tu.GTP.pro1-tRNA + 3 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proL-tRNA + 2 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 2 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 3 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 2 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 1 EF-Tu.GTP.tyr1-tRNA + 5 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 1 EF-Tu.GTP.val3-tRNA + 680 mg2 + 1 rib_ini_b4372_1 --> 1 rib_70_elo1_b4372_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429
tl_elo_b4372_1_rib2	Translation elongation 2 b4372 1 ribosome(s)	135 h2o + 1 rib_70_elo1_b4372_1_cplx --> 135 EF-G.GDP + 135 EF-Tu.GDP + 12 ala1_tRNA + 3 ala2_tRNA + 8 arg1_tRNA + 2 argX_tRNA + 4 asn1_tRNA + 8 asp1_tRNA + 2 cysT_tRNA + 1 fmet_tRNA + 6 gln1_tRNA + 5 gln2_tRNA + 5 glu1_tRNA + 5 gly1_tRNA + 1 glyU_tRNA + 270 h + 3 hisR_tRNA + 6 ile1_tRNA + 9 leu1_tRNA + 2 leu2_tRNA + 2 leuU_tRNA + 1 leuW_tRNA + 5 leuZ_tRNA + 1 lys1_tRNA + 2 met1_tRNA + 680 mg2 + 2 phe1_tRNA + 270 pi + 4 pro1_tRNA + 3 pro2_tRNA + 2 proL_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b4372_1_cplx + 1 ser1_tRNA + 1 ser3_tRNA + 2 serT_tRNA + 4 serV_tRNA + 3 thr1_tRNA + 2 thr2_tRNA + 2 thr3_tRNA + 2 thrU_tRNA + 4 trpT_tRNA + 1 tyr1_tRNA + 5 val1_tRNA + 2 val2_tRNA + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429

tl_elo_b4372_4_rib1	Translation elongation 1 b4372 4 ribosome(s)	544 EF-G.GTP + 48 EF-Tu.GTP.ala1-tRNA + 12 EF-Tu.GTP.ala2-tRNA + 32 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.argX-tRNA + 16 EF-Tu.GTP.asn1-tRNA + 36 EF-Tu.GTP.asp1-tRNA + 8 EF-Tu.GTP.cysT-tRNA + 24 EF-Tu.GTP.gln1-tRNA + 20 EF-Tu.GTP.gln2-tRNA + 20 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 24 EF-Tu.GTP.ile1-tRNA + 36 EF-Tu.GTP.leu1-tRNA + 8 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuW-tRNA + 20 EF-Tu.GTP.leuZ-tRNA + 4 EF-Tu.GTP.lys1-tRNA + 8 EF-Tu.GTP.met1-tRNA + 8 EF-Tu.GTP.phe1-tRNA + 16 EF-Tu.GTP.pro1-tRNA + 12 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proL-tRNA + 8 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser3-tRNA + 8 EF-Tu.GTP.serT-tRNA + 16 EF-Tu.GTP.serV-tRNA + 12 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 8 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 16 EF-Tu.GTP.trpT-tRNA + 4 EF-Tu.GTP.tyr1-tRNA + 20 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 4 EF-Tu.GTP.val3-tRNA + 2720 mg2 + 1 rib_ini_b4372_4 --> 1 rib_70_elo1_b4372_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429
tl_elo_b4372_4_rib2	Translation elongation 2 b4372 4 ribosome(s)	540 h2o + 1 rib_70_elo1_b4372_4_cplx --> 540 EF-G.GDP + 540 EF-Tu.GDP + 48 ala1_tRNA + 12 ala2_tRNA + 32 arg1_tRNA + 8 argX_tRNA + 16 asn1_tRNA + 32 asp1_tRNA + 8 cysT_tRNA + 4 fmet_tRNA + 24 gln1_tRNA + 20 gln2_tRNA + 20 glu1_tRNA + 20 gly1_tRNA + 4 glyU_tRNA + 1080 h + 12 hisR_tRNA + 24 ile1_tRNA + 36 leu1_tRNA + 8 leu2_tRNA + 8 leuU_tRNA + 4 leuW_tRNA + 20 leuZ_tRNA + 4 lys1_tRNA + 8 met1_tRNA + 2720 mg2 + 8 phe1_tRNA + 1080 pi + 16 pro1_tRNA + 12 pro2_tRNA + 8 proL_tRNA + 8 proM_tRNA + 1 rib_70_elo2_b4372_4_cplx + 4 ser1_tRNA + 4 ser3_tRNA + 8 serT_tRNA + 16 serV_tRNA + 12 thr1_tRNA + 8 thr2_tRNA + 8 thr3_tRNA + 8 thrU_tRNA + 16 trpT_tRNA + 4 tyr1_tRNA + 20 val1_tRNA + 8 val2_tRNA + 4 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429
tl_elo_b4372_8_rib1	Translation elongation 1 b4372 8 ribosome(s)	1088 EF-G.GTP + 96 EF-Tu.GTP.ala1-tRNA + 24 EF-Tu.GTP.ala2-tRNA + 64 EF-Tu.GTP.arg1-tRNA + 16 EF-Tu.GTP.argX-tRNA + 32 EF-Tu.GTP.asn1-tRNA + 72 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.cysT-tRNA + 48 EF-Tu.GTP.gln1-tRNA + 40 EF-Tu.GTP.gln2-tRNA + 40 EF-Tu.GTP.glu1-tRNA + 40 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyU-tRNA + 24 EF-Tu.GTP.hisR-tRNA + 48 EF-Tu.GTP.ile1-tRNA + 72 EF-Tu.GTP.leu1-tRNA + 16 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuW-tRNA + 40 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 16 EF-Tu.GTP.met1-tRNA + 16 EF-Tu.GTP.phe1-tRNA + 32 EF-Tu.GTP.pro1-tRNA + 24 EF-Tu.GTP.pro2-tRNA + 16 EF-Tu.GTP.proL-tRNA + 16 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser3-tRNA + 16 EF-Tu.GTP.serT-tRNA + 32 EF-Tu.GTP.serV-tRNA + 24 EF-Tu.GTP.thr1-tRNA + 16 EF-Tu.GTP.thr2-tRNA + 16 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 32 EF-Tu.GTP.trpT-tRNA + 8 EF-Tu.GTP.tyr1-tRNA + 40 EF-Tu.GTP.val1-tRNA + 16 EF-Tu.GTP.val2-tRNA + 8 EF-Tu.GTP.val3-tRNA + 5440 mg2 + 1 rib_ini_b4372_8 --> 1 rib_70_elo1_b4372_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429
tl_elo_b4372_8_rib2	Translation elongation 2 b4372 8 ribosome(s)	1080 h2o + 1 rib_70_elo1_b4372_8_cplx --> 1080 EF-G.GDP + 1080 EF-Tu.GDP + 96 ala1_tRNA + 24 ala2_tRNA + 64 arg1_tRNA + 16 argX_tRNA + 32 asn1_tRNA + 64 asp1_tRNA + 16 cysT_tRNA + 8 fmet_tRNA + 48 gln1_tRNA + 40 gln2_tRNA + 40 glu1_tRNA + 40 gly1_tRNA + 8 glyU_tRNA + 2160 h + 24 hisR_tRNA + 48 ile1_tRNA + 72 leu1_tRNA + 16 leu2_tRNA + 16 leuU_tRNA + 8 leuW_tRNA + 40 leuZ_tRNA + 8 lys1_tRNA + 16 met1_tRNA + 5440 mg2 + 16 phe1_tRNA + 2160 pi + 32 pro1_tRNA + 24 pro2_tRNA + 16 proL_tRNA + 16 proM_tRNA + 1 rib_70_elo2_b4372_8_cplx + 8 ser1_tRNA + 8 ser3_tRNA + 16 serT_tRNA + 32 serV_tRNA + 24 thr1_tRNA + 16 thr2_tRNA + 16 thr3_tRNA + 16 thrU_tRNA + 32 trpT_tRNA + 8 tyr1_tRNA + 40 val1_tRNA + 16 val2_tRNA + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429
tl_elo_b4373_1_rib1	Translation elongation 1 b4373 1 ribosome(s)	147 EF-G.GTP + 13 EF-Tu.GTP.ala1-tRNA + 7 EF-Tu.GTP.ala2-tRNA + 8 EF-Tu.GTP.arg1-tRNA + 1 EF-Tu.GTP.argW-tRNA + 8 EF-Tu.GTP.asn1-tRNA + 7 EF-Tu.GTP.asp1-tRNA + 4 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 12 EF-Tu.GTP.glu1-tRNA + 5 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyT-tRNA + 3 EF-Tu.GTP.hisR-tRNA + 10 EF-Tu.GTP.ile1-tRNA + 7 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 2 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuW-tRNA + 3 EF-Tu.GTP.leuZ-tRNA + 3 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 6 EF-Tu.GTP.phe1-tRNA + 2 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 1 EF-Tu.GTP.proM-tRNA + 1 EF-Tu.GTP.ser1-tRNA + 1 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.serT-tRNA + 4 EF-Tu.GTP.serV-tRNA + 1 EF-Tu.GTP.thr1-tRNA + 1 EF-Tu.GTP.thr2-tRNA + 7 EF-Tu.GTP.thr3-tRNA + 2 EF-Tu.GTP.thrU-tRNA + 2 EF-Tu.GTP.trpT-tRNA + 6 EF-Tu.GTP.tyr1-tRNA + 3 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 735 mg2 + 1 rib_ini_b4373_1 --> 1 rib_70_elo1_b4373_1_cp	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_elo_b4373_1_rib2	Translation elongation 2 b4373 1 ribosome(s)	146 h2o + 1 rib_70_elo1_b4373_1_cplx --> 146 EF-G.GDP + 146 EF-Tu.GDP + 13 ala1_tRNA + 7 ala2_tRNA + 8 arg1_tRNA + 1 argW_tRNA + 8 asn1_tRNA + 7 asp1_tRNA + 1 fmet_tRNA + 4 gln1_tRNA + 3 gln2_tRNA + 12 glu1_tRNA + 5 gly1_tRNA + 2 glyT_tRNA + 292 h + 3 hisR_tRNA + 10 ile1_tRNA + 7 leu1_tRNA + 3 leu2_tRNA + 2 leuU_tRNA + 1 leuW_tRNA + 3 leuZ_tRNA + 3 lys1_tRNA + 2 met1_tRNA + 735 mg2 + 6 phe1_tRNA + 292 pi + 2 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 1 proM_tRNA + 1 rib_70_elo2_b4373_1_cplx + 1 ser1_tRNA + 1 ser2_tRNA + 1 serT_tRNA + 4 serV_tRNA + 1 thr1_tRNA + 1 thr2_tRNA + 7 thr3_tRNA + 2 thrU_tRNA + 2 trpT_tRNA + 6 tyr1_tRNA + 3 val1_tRNA + 2 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429

tl_elo_b4373_4_rib1	Translation elongation 1 b4373 4 ribosome(s)	588 EF-G.GTP + 52 EF-Tu.GTP.ala1-tRNA + 28 EF-Tu.GTP.ala2-tRNA + 32 EF-Tu.GTP.arg1-tRNA + 4 EF-Tu.GTP.argW-tRNA + 32 EF-Tu.GTP.asn1-tRNA + 28 EF-Tu.GTP.asp1-tRNA + 16 EF-Tu.GTP.gln1-tRNA + 12 EF-Tu.GTP.gln2-tRNA + 48 EF-Tu.GTP.glu1-tRNA + 20 EF-Tu.GTP.gly1-tRNA + 8 EF-Tu.GTP.glyT-tRNA + 12 EF-Tu.GTP.hisR-tRNA + 40 EF-Tu.GTP.ile1-tRNA + 28 EF-Tu.GTP.leu1-tRNA + 12 EF-Tu.GTP.leu2-tRNA + 8 EF-Tu.GTP.leuU-tRNA + 4 EF-Tu.GTP.leuW-tRNA + 12 EF-Tu.GTP.leuZ-tRNA + 12 EF-Tu.GTP.lys1-tRNA + 12 EF-Tu.GTP.met1-tRNA + 24 EF-Tu.GTP.phe1-tRNA + 8 EF-Tu.GTP.pro1-tRNA + 4 EF-Tu.GTP.pro2-tRNA + 4 EF-Tu.GTP.proL-tRNA + 4 EF-Tu.GTP.proM-tRNA + 4 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 4 EF-Tu.GTP.serT-tRNA + 16 EF-Tu.GTP.serV-tRNA + 4 EF-Tu.GTP.thr1-tRNA + 4 EF-Tu.GTP.thr2-tRNA + 28 EF-Tu.GTP.thr3-tRNA + 8 EF-Tu.GTP.thrU-tRNA + 8 EF-Tu.GTP.trpT-tRNA + 24 EF-Tu.GTP.tyr1-tRNA + 12 EF-Tu.GTP.val1-tRNA + 8 EF-Tu.GTP.val2-tRNA + 2940 mg2 + 1 rib_ini_b4373_4 --> 1 rib_70_elo1_b4373_4_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_elo_b4373_4_rib2	Translation elongation 2 b4373 4 ribosome(s)	584 h2o + 1 rib_70_elo1_b4373_4_cplx --> 584 EF-G.GDP + 584 EF-Tu.GDP + 52 ala1_tRNA + 28 ala2_tRNA + 32 arg1_tRNA + 4 argW_tRNA + 32 asn1_tRNA + 28 asp1_tRNA + 4 fmet_tRNA + 16 gln1_tRNA + 12 gln2_tRNA + 48 glu1_tRNA + 20 gly1_tRNA + 8 glyT_tRNA + 1168 h + 12 hisR_tRNA + 40 ile1_tRNA + 28 leu1_tRNA + 12 leu2_tRNA + 8 leuU_tRNA + 4 leuW_tRNA + 12 leuZ_tRNA + 12 lys1_tRNA + 8 met1_tRNA + 2940 mg2 + 24 phe1_tRNA + 1168 pi + 8 pro1_tRNA + 4 pro2_tRNA + 4 proL_tRNA + 4 proM_tRNA + 1 rib_70_elo2_b4373_4_cplx + 4 ser1_tRNA + 4 ser2_tRNA + 4 serT_tRNA + 16 serV_tRNA + 4 thr1_tRNA + 4 thr2_tRNA + 28 thr3_tRNA + 8 thrU_tRNA + 8 trpT_tRNA + 24 tyr1_tRNA + 12 val1_tRNA + 8 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_elo_b4373_8_rib1	Translation elongation 1 b4373 8 ribosome(s)	1176 EF-G.GTP + 104 EF-Tu.GTP.ala1-tRNA + 56 EF-Tu.GTP.ala2-tRNA + 64 EF-Tu.GTP.arg1-tRNA + 8 EF-Tu.GTP.argW-tRNA + 64 EF-Tu.GTP.asn1-tRNA + 56 EF-Tu.GTP.asp1-tRNA + 32 EF-Tu.GTP.gln1-tRNA + 24 EF-Tu.GTP.gln2-tRNA + 96 EF-Tu.GTP.glu1-tRNA + 40 EF-Tu.GTP.gly1-tRNA + 16 EF-Tu.GTP.glyT-tRNA + 24 EF-Tu.GTP.hisR-tRNA + 80 EF-Tu.GTP.ile1-tRNA + 56 EF-Tu.GTP.leu1-tRNA + 24 EF-Tu.GTP.leu2-tRNA + 16 EF-Tu.GTP.leuU-tRNA + 8 EF-Tu.GTP.leuW-tRNA + 24 EF-Tu.GTP.leuZ-tRNA + 24 EF-Tu.GTP.lys1-tRNA + 24 EF-Tu.GTP.met1-tRNA + 48 EF-Tu.GTP.phe1-tRNA + 16 EF-Tu.GTP.pro1-tRNA + 8 EF-Tu.GTP.pro2-tRNA + 8 EF-Tu.GTP.proL-tRNA + 8 EF-Tu.GTP.proM-tRNA + 8 EF-Tu.GTP.ser1-tRNA + 8 EF-Tu.GTP.ser2-tRNA + 8 EF-Tu.GTP.serT-tRNA + 32 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 56 EF-Tu.GTP.thr3-tRNA + 16 EF-Tu.GTP.thrU-tRNA + 16 EF-Tu.GTP.trpT-tRNA + 48 EF-Tu.GTP.tyr1-tRNA + 24 EF-Tu.GTP.val1-tRNA + 16 EF-Tu.GTP.val2-tRNA + 5880 mg2 + 1 rib_ini_b4373_8 --> 1 rib_70_elo1_b4373_8_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_elo_b4373_8_rib2	Translation elongation 2 b4373 8 ribosome(s)	1168 h2o + 1 rib_70_elo1_b4373_8_cplx --> 1168 EF-G.GDP + 1168 EF-Tu.GDP + 104 ala1_tRNA + 56 ala2_tRNA + 64 arg1_tRNA + 8 argW_tRNA + 64 asn1_tRNA + 56 asp1_tRNA + 8 fmet_tRNA + 32 gln1_tRNA + 24 gln2_tRNA + 96 glu1_tRNA + 40 gly1_tRNA + 16 glyT_tRNA + 2336 h + 24 hisR_tRNA + 80 ile1_tRNA + 56 leu1_tRNA + 24 leu2_tRNA + 16 leuU_tRNA + 8 leuW_tRNA + 24 leuZ_tRNA + 24 lys1_tRNA + 16 met1_tRNA + 5880 mg2 + 48 phe1_tRNA + 2336 pi + 16 pro1_tRNA + 8 pro2_tRNA + 8 proL_tRNA + 8 proM_tRNA + rib_70_elo2_b4373_8_cplx + 8 ser1_tRNA + 8 ser2_tRNA + 8 serT_tRNA + 32 serV_tRNA + 8 thr1_tRNA + 8 thr2_tRNA + 56 thr3_tRNA + 16 thrU_tRNA + 16 trpT_tRNA + 48 tyr1_tRNA + 24 val1_tRNA + 16 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_elo_b4374_13_rib1	Translation elongation 1 b4374 13 ribosome(s)	2912 EF-G.GTP + 130 EF-Tu.GTP.ala1-tRNA + 130 EF-Tu.GTP.ala2-tRNA + 91 EF-Tu.GTP.arg1-tRNA + 39 EF-Tu.GTP.argX-tRNA + 156 EF-Tu.GTP.asn1-tRNA + 182 EF-Tu.GTP.asp1-tRNA + 39 EF-Tu.GTP.cysT-tRNA + 104 EF-Tu.GTP.gln1-tRNA + 39 EF-Tu.GTP.gln2-tRNA + 208 EF-Tu.GTP.glu1-tRNA + 182 EF-Tu.GTP.gly1-tRNA + 26 EF-Tu.GTP.glyU-tRNA + 65 EF-Tu.GTP.hisR-tRNA + 169 EF-Tu.GTP.ile1-tRNA + 182 EF-Tu.GTP.leu1-tRNA + 39 EF-Tu.GTP.leu2-tRNA + 91 EF-Tu.GTP.leuU-tRNA + 13 EF-Tu.GTP.leuZ-tRNA + 104 EF-Tu.GTP.lys1-tRNA + 39 EF-Tu.GTP.met1-tRNA + 169 EF-Tu.GTP.phe1-tRNA + 39 EF-Tu.GTP.pro1-tRNA + 13 EF-Tu.GTP.pro2-tRNA + 13 EF-Tu.GTP.proL-tRNA + 39 EF-Tu.GTP.proM-tRNA + 26 EF-Tu.GTP.ser1-tRNA + 26 EF-Tu.GTP.ser2-tRNA + 13 EF-Tu.GTP.ser3-tRNA + 39 EF-Tu.GTP.serT-tRNA + 39 EF-Tu.GTP.serV-tRNA + 104 EF-Tu.GTP.thr1-tRNA + 26 EF-Tu.GTP.thr2-tRNA + 39 EF-Tu.GTP.thr3-tRNA + 78 EF-Tu.GTP.trpT-tRNA + 65 EF-Tu.GTP.tyr1-tRNA + 52 EF-Tu.GTP.val1-tRNA + 26 EF-Tu.GTP.val2-tRNA + 78 EF-Tu.GTP.val3-tRNA + 14560 mg2 + 1 rib_ini_b4374_13 --> 1 rib_70_elo1_b4374_13_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929
tl_elo_b4374_13_rib2	Translation elongation 2 b4374 13 ribosome(s)	2899 h2o + 1 rib_70_elo1_b4374_13_cplx --> 2899 EF-G.GDP + 2899 EF-Tu.GDP + 130 ala1_tRNA + 130 ala2_tRNA + 91 arg1_tRNA + 39 argX_tRNA + 156 asn1_tRNA + 182 asp1_tRNA + 39 cysT_tRNA + 13 fmet_tRNA + 104 gln1_tRNA + 39 gln2_tRNA + 208 glu1_tRNA + 182 gly1_tRNA + 26 glyU_tRNA + 5798 h + 52 hisR_tRNA + 169 ile1_tRNA + 182 leu1_tRNA + 39 leu2_tRNA + 91 leuU_tRNA + 13 leuZ_tRNA + 104 lys1_tRNA + 39 met1_tRNA + 14560 mg2 + 169 phe1_tRNA + 5798 pi + 39 pro1_tRNA + 13 pro2_tRNA + 13 proL_tRNA + 39 proM_tRNA + 1 rib_70_elo2_b4374_13_cplx + 26 ser1_tRNA + 26 ser2_tRNA + 13 ser3_tRNA + 39 serT_tRNA + 39 serV_tRNA + 104 thr1_tRNA + 26 thr2_tRNA + 39 thr3_tRNA + 78 trpT_tRNA + 65 tyr1_tRNA + 52 val1_tRNA + 26 val2_tRNA + 78 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929

tl_elo_b4374_1_rib1	Translation elongation 1 b4374 1 ribosome(s)	224 EF-G.GTP + 10 EF-Tu.GTP.ala1-tRNA + 10 EF-Tu.GTP.ala2-tRNA + 7 EF-Tu.GTP.arg1-tRNA + 3 EF-Tu.GTP.argX-tRNA + 12 EF-Tu.GTP.asn1-tRNA + 14 EF-Tu.GTP.asp1-tRNA + 3 EF-Tu.GTP.cysT-tRNA + 8 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 16 EF-Tu.GTP.glu1-tRNA + 14 EF-Tu.GTP.gly1-tRNA + 2 EF-Tu.GTP.glyU-tRNA + 5 EF-Tu.GTP.hisR-tRNA + 13 EF-Tu.GTP.ile1-tRNA + 14 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 7 EF-Tu.GTP.leuU-tRNA + 1 EF-Tu.GTP.leuZ-tRNA + 8 EF-Tu.GTP.lys1-tRNA + 3 EF-Tu.GTP.met1-tRNA + 13 EF-Tu.GTP.phe1-tRNA + 3 EF-Tu.GTP.pro1-tRNA + 1 EF-Tu.GTP.pro2-tRNA + 1 EF-Tu.GTP.proL-tRNA + 3 EF-Tu.GTP.proM-tRNA + 2 EF-Tu.GTP.ser1-tRNA + 2 EF-Tu.GTP.ser2-tRNA + 1 EF-Tu.GTP.ser3-tRNA + 3 EF-Tu.GTP.serT-tRNA + 3 EF-Tu.GTP.serV-tRNA + 8 EF-Tu.GTP.thr1-tRNA + 2 EF-Tu.GTP.thr2-tRNA + 3 EF-Tu.GTP.thr3-tRNA + 6 EF-Tu.GTP.trpT-tRNA + 5 EF-Tu.GTP.tyr1-tRNA + 4 EF-Tu.GTP.val1-tRNA + 2 EF-Tu.GTP.val2-tRNA + 6 EF-Tu.GTP.val3-tRNA + 1120 mg2 + 1 rib_ini_b4374_1 --> 1 rib_70_elo1_b4374_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929
tl_elo_b4374_1_rib2	Translation elongation 2 b4374 1 ribosome(s)	223 h2o + 1 rib_70_elo1_b4374_1_cplx --> 223 EF-G.GDP + 223 EF-Tu.GDP + 10 ala1_tRNA + 10 ala2_tRNA + 7 arg1_tRNA + 3 argX_tRNA + 12 asn1_tRNA + 14 asp1_tRNA + 3 cysT_tRNA + 1 fmet_tRNA + 8 gln1_tRNA + 3 gln2_tRNA + 16 glu1_tRNA + 14 gly1_tRNA + 2 glyU_tRNA + 446 h + 4 hisR_tRNA + 13 ile1_tRNA + 14 leu1_tRNA + 3 leu2_tRNA + 7 leuU_tRNA + 1 leuZ_tRNA + 8 lys1_tRNA + 3 met1_tRNA + 1120 mg2 + 13 phe1_tRNA + 446 pi + 3 pro1_tRNA + 1 pro2_tRNA + 1 proL_tRNA + 3 proM_tRNA + 1 rib_70_elo2_b4374_1_cplx + 2 ser1_tRNA + 2 ser2_tRNA + 1 ser3_tRNA + 3 serT_tRNA + 3 serV_tRNA + 8 thr1_tRNA + 2 thr2_tRNA + 3 thr3_tRNA + 6 trpT_tRNA + 5 tyr1_tRNA + 4 val1_tRNA + 2 val2_tRNA + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929
tl_elo_b4374_6_rib1	Translation elongation 1 b4374 6 ribosome(s)	1344 EF-G.GTP + 60 EF-Tu.GTP.ala1-tRNA + 60 EF-Tu.GTP.ala2-tRNA + 42 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.argX-tRNA + 72 EF-Tu.GTP.asn1-tRNA + 84 EF-Tu.GTP.asp1-tRNA + 18 EF-Tu.GTP.cysT-tRNA + 48 EF-Tu.GTP.gln1-tRNA + 18 EF-Tu.GTP.gln2-tRNA + 96 EF-Tu.GTP.glu1-tRNA + 84 EF-Tu.GTP.gly1-tRNA + 12 EF-Tu.GTP.glyU-tRNA + 30 EF-Tu.GTP.hisR-tRNA + 78 EF-Tu.GTP.ile1-tRNA + 84 EF-Tu.GTP.leu1-tRNA + 18 EF-Tu.GTP.leu2-tRNA + 42 EF-Tu.GTP.leuU-tRNA + 6 EF-Tu.GTP.leuZ-tRNA + 48 EF-Tu.GTP.lys1-tRNA + 18 EF-Tu.GTP.met1-tRNA + 78 EF-Tu.GTP.phe1-tRNA + 18 EF-Tu.GTP.pro1-tRNA + 6 EF-Tu.GTP.pro2-tRNA + 6 EF-Tu.GTP.proL-tRNA + 18 EF-Tu.GTP.proM-tRNA + 12 EF-Tu.GTP.ser1-tRNA + 12 EF-Tu.GTP.ser2-tRNA + 6 EF-Tu.GTP.ser3-tRNA + 18 EF-Tu.GTP.serT-tRNA + 18 EF-Tu.GTP.serV-tRNA + 48 EF-Tu.GTP.thr1-tRNA + 12 EF-Tu.GTP.thr2-tRNA + 18 EF-Tu.GTP.thr3-tRNA + 36 EF-Tu.GTP.trpT-tRNA + 30 EF-Tu.GTP.tyr1-tRNA + 24 EF-Tu.GTP.val1-tRNA + 12 EF-Tu.GTP.val2-tRNA + 36 EF-Tu.GTP.val3-tRNA + 6720 mg2 + 1 rib_ini_b4374_6 --> 1 rib_70_elo1_b4374_6_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929
tl_elo_b4374_6_rib2	Translation elongation 2 b4374 6 ribosome(s)	1338 h2o + 1 rib_70_elo1_b4374_6_cplx --> 1338 EF-G.GDP + 1338 EF-Tu.GDP + 60 ala1_tRNA + 60 ala2_tRNA + 42 arg1_tRNA + 18 argX_tRNA + 72 asn1_tRNA + 84 asp1_tRNA + 18 cysT_tRNA + 6 fmet_tRNA + 48 gln1_tRNA + 18 gln2_tRNA + 96 glu1_tRNA + 84 gly1_tRNA + 12 glyU_tRNA + 2676 h + 24 hisR_tRNA + 78 ile1_tRNA + 84 leu1_tRNA + 18 leu2_tRNA + 42 leuU_tRNA + 6 leuZ_tRNA + 48 lys1_tRNA + 18 met1_tRNA + 6720 mg2 + 78 phe1_tRNA + 2676 pi + 18 pro1_tRNA + 6 pro2_tRNA + 6 proL_tRNA + 18 proM_tRNA + 1 rib_70_elo2_b4374_6_cplx + 12 ser1_tRNA + 12 ser2_tRNA + 6 ser3_tRNA + 18 serT_tRNA + 18 serV_tRNA + 48 thr1_tRNA + 12 thr2_tRNA + 18 thr3_tRNA + 36 trpT_tRNA + 30 tyr1_tRNA + 24 val1_tRNA + 12 val2_tRNA + 36 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929
tl_elo_b4375_15_rib1	Translation elongation 1 b4375 15 ribosome(s)	7920 EF-G.GTP + 450 EF-Tu.GTP.ala1-tRNA + 120 EF-Tu.GTP.ala2-tRNA + 465 EF-Tu.GTP.arg1-tRNA + 270 EF-Tu.GTP.asn1-tRNA + 570 EF-Tu.GTP.asp1-tRNA + 90 EF-Tu.GTP.cysT-tRNA + 315 EF-Tu.GTP.gln1-tRNA + 45 EF-Tu.GTP.gln2-tRNA + 585 EF-Tu.GTP.glu1-tRNA + 495 EF-Tu.GTP.gly1-tRNA + 15 EF-Tu.GTP.glyT-tRNA + 60 EF-Tu.GTP.glyU-tRNA + 195 EF-Tu.GTP.hisR-tRNA + 375 EF-Tu.GTP.ile1-tRNA + 495 EF-Tu.GTP.leu1-tRNA + 45 EF-Tu.GTP.leu2-tRNA + 195 EF-Tu.GTP.leuU-tRNA + 510 EF-Tu.GTP.lys1-tRNA + 240 EF-Tu.GTP.met1-tRNA + 375 EF-Tu.GTP.phe1-tRNA + 240 EF-Tu.GTP.pro1-tRNA + 30 EF-Tu.GTP.pro2-tRNA + 30 EF-Tu.GTP.proM-tRNA + 90 EF-Tu.GTP.ser1-tRNA + 60 EF-Tu.GTP.ser2-tRNA + 45 EF-Tu.GTP.ser3-tRNA + 15 EF-Tu.GTP.serT-tRNA + 75 EF-Tu.GTP.serV-tRNA + 330 EF-Tu.GTP.thr1-tRNA + 120 EF-Tu.GTP.thr2-tRNA + 60 EF-Tu.GTP.thr3-tRNA + 15 EF-Tu.GTP.thrU-tRNA + 60 EF-Tu.GTP.trpT-tRNA + 195 EF-Tu.GTP.tyr1-tRNA + 375 EF-Tu.GTP.val1-tRNA + 60 EF-Tu.GTP.val2-tRNA + 210 EF-Tu.GTP.val3-tRNA + 39600 mg2 + 1 rib_ini_b4375_15 --> 1 rib_70_elo1_b4375_15_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_elo_b4375_15_rib2	Translation elongation 2 b4375 15 ribosome(s)	7905 h2o + 1 rib_70_elo1_b4375_15_cplx --> 7905 EF-G.GDP + 7905 EF-Tu.GDP + 450 ala1_tRNA + 120 ala2_tRNA + 465 arg1_tRNA + 270 asn1_tRNA + 570 asp1_tRNA + 90 cysT_tRNA + 15 fmet_tRNA + 315 gln1_tRNA + 45 gln2_tRNA + 585 glu1_tRNA + 495 gly1_tRNA + 15 glyT_tRNA + 60 glyU_tRNA + 15810 h + 180 hisR_tRNA + 375 ile1_tRNA + 495 leu1_tRNA + 45 leu2_tRNA + 195 leuU_tRNA + 510 lys1_tRNA + 240 met1_tRNA + 39600 mg2 + 375 phe1_tRNA + 15810 pi + 240 pro1_tRNA + 30 pro2_tRNA + 30 proM_tRNA + 1 rib_70_elo2_b4375_15_cplx + 90 ser1_tRNA + 60 ser2_tRNA + 45 ser3_tRNA + 15 serT_tRNA + 75 serV_tRNA + 330 thr1_tRNA + 120 thr2_tRNA + 60 thr3_tRNA + 15 thrU_tRNA + 60 trpT_tRNA + 195 tyr1_tRNA + 375 val1_tRNA + 60 val2_tRNA + 210 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948

tl_elo_b4375_1_rib1	Translation elongation 1 b4375 1 ribosome(s)	528 EF-G.GTP + 30 EF-Tu.GTP.ala1-tRNA + 8 EF-Tu.GTP.ala2-tRNA + 31 EF-Tu.GTP.arg1-tRNA + 18 EF-Tu.GTP.asn1-tRNA + 38 EF-Tu.GTP.asp1-tRNA + 6 EF-Tu.GTP.cysT-tRNA + 21 EF-Tu.GTP.gln1-tRNA + 3 EF-Tu.GTP.gln2-tRNA + 39 EF-Tu.GTP.glu1-tRNA + 33 EF-Tu.GTP.gly1-tRNA + 1 EF-Tu.GTP.glyT-tRNA + 4 EF-Tu.GTP.glyU-tRNA + 13 EF-Tu.GTP.hisR-tRNA + 25 EF-Tu.GTP.ile1-tRNA + 33 EF-Tu.GTP.leu1-tRNA + 3 EF-Tu.GTP.leu2-tRNA + 13 EF-Tu.GTP.leuU-tRNA + 34 EF-Tu.GTP.lys1-tRNA + 16 EF-Tu.GTP.met1-tRNA + 25 EF-Tu.GTP.phe1-tRNA + 16 EF-Tu.GTP.pro1-tRNA + 2 EF-Tu.GTP.pro2-tRNA + 2 EF-Tu.GTP.proM-tRNA + 6 EF-Tu.GTP.ser1-tRNA + 4 EF-Tu.GTP.ser2-tRNA + 3 EF-Tu.GTP.ser3-tRNA + 1 EF-Tu.GTP.serT-tRNA + 5 EF-Tu.GTP.serV-tRNA + 22 EF-Tu.GTP.thr1-tRNA + 8 EF-Tu.GTP.thr2-tRNA + 4 EF-Tu.GTP.thr3-tRNA + 1 EF-Tu.GTP.thrU-tRNA + 4 EF-Tu.GTP.trpT-tRNA + 13 EF-Tu.GTP.tyr1-tRNA + 25 EF-Tu.GTP.val1-tRNA + 4 EF-Tu.GTP.val2-tRNA + 14 EF-Tu.GTP.val3-tRNA + 2640 mg2 + 1 rib_ini_b4375_1 --> 1 rib_70_elo1_b4375_1_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_elo_b4375_1_rib2	Translation elongation 2 b4375 1 ribosome(s)	527 h2o + 1 rib_70_elo1_b4375_1_cplx --> 527 EF-G.GDP + 527 EF-Tu.GDP + 30 ala1_tRNA + 8 ala2_tRNA + 31 arg1_tRNA + 18 asn1_tRNA + 38 asp1_tRNA + 6 cysT_tRNA + 1 fmet_tRNA + 21 gln1_tRNA + 3 gln2_tRNA + 39 glu1_tRNA + 33 gly1_tRNA + 1 glyT_tRNA + 4 glyU_tRNA + 1054 h + 12 hisR_tRNA + 25 ile1_tRNA + 33 leu1_tRNA + 3 leu2_tRNA + 13 leuU_tRNA + 34 lys1_tRNA + 16 met1_tRNA + 2640 mg2 + 25 phe1_tRNA + 1054 pi + 16 pro1_tRNA + 2 pro2_tRNA + 2 proM_tRNA + 1 rib_70_elo2_b4375_1_cplx + 6 ser1_tRNA + 4 ser2_tRNA + 3 ser3_tRNA + 1 serT_tRNA + 5 serV_tRNA + 22 thr1_tRNA + 8 thr2_tRNA + 4 thr3_tRNA + 1 thrU_tRNA + 4 trpT_tRNA + 13 tyr1_tRNA + 25 val1_tRNA + 4 val2_tRNA + 14 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_elo_b4375_31_rib1	Translation elongation 1 b4375 31 ribosome(s)	16368 EF-G.GTP + 930 EF-Tu.GTP.ala1-tRNA + 248 EF-Tu.GTP.ala2-tRNA + 961 EF-Tu.GTP.arg1-tRNA + 558 EF-Tu.GTP.asn1-tRNA + 1178 EF-Tu.GTP.asp1-tRNA + 186 EF-Tu.GTP.cysT-tRNA + 651 EF-Tu.GTP.gln1-tRNA + 93 EF-Tu.GTP.gln2-tRNA + 1209 EF-Tu.GTP.glu1-tRNA + 1023 EF-Tu.GTP.gly1-tRNA + 31 EF-Tu.GTP.glyT-tRNA + 124 EF-Tu.GTP.glyU-tRNA + 403 EF-Tu.GTP.hisR-tRNA + 775 EF-Tu.GTP.ile1-tRNA + 1023 EF-Tu.GTP.leu1-tRNA + 93 EF-Tu.GTP.leu2-tRNA + 403 EF-Tu.GTP.leuU-tRNA + 1054 EF-Tu.GTP.lys1-tRNA + 496 EF-Tu.GTP.met1-tRNA + 775 EF-Tu.GTP.phe1-tRNA + 496 EF-Tu.GTP.pro1-tRNA + 62 EF-Tu.GTP.pro2-tRNA + 62 EF-Tu.GTP.proM-tRNA + 186 EF-Tu.GTP.ser1-tRNA + 124 EF-Tu.GTP.ser2-tRNA + 93 EF-Tu.GTP.ser3-tRNA + 31 EF-Tu.GTP.serT-tRNA + 155 EF-Tu.GTP.serV-tRNA + 682 EF-Tu.GTP.thr1-tRNA + 248 EF-Tu.GTP.thr2-tRNA + 124 EF-Tu.GTP.thr3-tRNA + 31 EF-Tu.GTP.thrU-tRNA + 124 EF-Tu.GTP.trpT-tRNA + 403 EF-Tu.GTP.tyr1-tRNA + 775 EF-Tu.GTP.val1-tRNA + 124 EF-Tu.GTP.val2-tRNA + 434 EF-Tu.GTP.val3-tRNA + 81840 mg2 + 1 rib_ini_b4375_31 --> 1 rib_70_elo1_b4375_31_cplx	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_elo_b4375_31_rib2	Translation elongation 2 b4375 31 ribosome(s)	16337 h2o + 1 rib_70_elo1_b4375_31_cplx --> 16337 EF-G.GDP + 16337 EF-Tu.GDP + 930 ala1_tRNA + 248 ala2_tRNA + 961 arg1_tRNA + 558 asn1_tRNA + 1178 asp1_tRNA + 186 cysT_tRNA + 31 fmet_tRNA + 651 gln1_tRNA + 93 gln2_tRNA + 1209 glu1_tRNA + 1023 gly1_tRNA + 31 glyT_tRNA + 124 glyU_tRNA + 32674 h + 372 hisR_tRNA + 775 ile1_tRNA + 1023 leu1_tRNA + 93 leu2_tRNA + 403 leuU_tRNA + 1054 lys1_tRNA + 496 met1_tRNA + 81840 mg2 + 775 phe1_tRNA + 32674 pi + 496 pro1_tRNA + 62 pro2_tRNA + 62 proM_tRNA + 1 rib_70_elo2_b4375_31_cplx + 186 ser1_tRNA + 124 ser2_tRNA + 93 ser3_tRNA + 31 serT_tRNA + 155 serV_tRNA + 682 thr1_tRNA + 248 thr2_tRNA + 124 thr3_tRNA + 31 thrU_tRNA + 124 trpT_tRNA + 403 tyr1_tRNA + 775 val1_tRNA + 124 val2_tRNA + 434 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_ini_b0014_18_rib	Translation initiation b0014 18 ribosome(s) bound	1 b0014_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b0014_18	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_ini_b0014_1_rib	Translation initiation b0014 1 ribosome(s) bound	1 b0014_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0014_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_ini_b0014_37_rib	Translation initiation b0014 37 ribosome(s) bound	1 b0014_mRNA_1 + 37 fmet_tRNA_met + 37 h2o + 37 rib_30_ini + 37 rib_50 --> 37 IF1_inact + 37 IF2-GDP + 37 IF3_inact + 37 h + 37 p + 1 rib_ini_b0014_37	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_ini_b0015_11_rib	Translation initiation b0015 11 ribosome(s) bound	1 b0015_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b0015_11	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_ini_b0015_1_rib	Translation initiation b0015 1 ribosome(s) bound	1 b0015_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0015_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_ini_b0015_22_rib	Translation initiation b0015 22 ribosome(s) bound	1 b0015_mRNA_1 + 22 fmet_tRNA_met + 22 h2o + 22 rib_30_ini + 22 rib_50 --> 22 IF1_inact + 22 IF2-GDP + 22 IF3_inact + 22 h + 22 p + 1 rib_ini_b0015_22	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_ini_b0023_1_rib	Translation initiation b0023 1 ribosome(s) bound	1 b0023_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0023_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b0023_2_rib	Translation initiation b0023 2 ribosome(s) bound	1 b0023_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b0023_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_ini_b0023_5_rib	Translation initiation b0023 5 ribosome(s) bound	1 b0023_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b0023_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_ini_b0025_18_rib	Translation initiation b0025 18 ribosome(s) bound	1 b0025_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b0025_18	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_ini_b0025_1_rib	Translation initiation b0025 1 ribosome(s) bound	1 b0025_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0025_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_ini_b0025_9_rib	Translation initiation b0025 9 ribosome(s) bound	1 b0025_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b0025_9	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_ini_b0026_1_rib	Translation initiation b0026 1 ribosome(s) bound	1 b0026_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0026_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.32E+01	2.32E+01	0	3.96E+01	39.62865	0	1.88E+00	1.8845
tl_ini_b0026_27_rib	Translation initiation b0026 27 ribosome(s) bound	1 b0026_mRNA_1 + 27 fmet_tRNA_met + 27 h2o + 27 rib_30_ini + 27 rib_50 --> 27 IF1_inact + 27 IF2-GDP + 27 IF3_inact + 27 h + 27 p + 1 rib_ini_b0026_27	irreversible	Translation	0.00E+00	1.00E+09	0	2.32E+01	2.32E+01	0	3.96E+01	39.62865	0	1.88E+00	1.8845
tl_ini_b0026_55_rib	Translation initiation b0026 55 ribosome(s) bound	1 b0026_mRNA_1 + 55 fmet_tRNA_met + 55 h2o + 55 rib_30_ini + 55 rib_50 --> 55 IF1_inact + 55 IF2-GDP + 55 IF3_inact + 55 h + 55 p + 1 rib_ini_b0026_55	irreversible	Translation	0.00E+00	1.00E+09	0	2.32E+01	2.32E+01	0	3.88E+01	38.78764	0	1.88E+00	1.8845

tl_ini_b0027_1_rib	Translation initiation b0027 1 ribosome(s) bound	1 b0027_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0027_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_ini_b0027_4_rib	Translation initiation b0027 4 ribosome(s) bound	1 b0027_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b0027_4	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_ini_b0027_9_rib	Translation initiation b0027 9 ribosome(s) bound	1 b0027_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b0027_9	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_ini_b0028_1_rib	Translation initiation b0028 1 ribosome(s) bound	1 b0028_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0028_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_ini_b0028_4_rib	Translation initiation b0028 4 ribosome(s) bound	1 b0028_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b0028_4	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_ini_b0028_8_rib	Translation initiation b0028 8 ribosome(s) bound	1 b0028_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b0028_8	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_ini_b0029_18_rib	Translation initiation b0029 18 ribosome(s) bound	1 b0029_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b0029_18	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_ini_b0029_1_rib	Translation initiation b0029 1 ribosome(s) bound	1 b0029_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0029_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_ini_b0029_9_rib	Translation initiation b0029 9 ribosome(s) bound	1 b0029_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b0029_9	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_ini_b0049_16_rib	Translation initiation b0049 16 ribosome(s) bound	1 b0049_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b0049_16	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_ini_b0049_1_rib	Translation initiation b0049 1 ribosome(s) bound	1 b0049_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0049_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_ini_b0049_8_rib	Translation initiation b0049 8 ribosome(s) bound	1 b0049_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b0049_8	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_ini_b0050_1_rib	Translation initiation b0050 1 ribosome(s) bound	1 b0050_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0050_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_ini_b0050_3_rib	Translation initiation b0050 3 ribosome(s) bound	1 b0050_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b0050_3	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_ini_b0050_7_rib	Translation initiation b0050 7 ribosome(s) bound	1 b0050_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b0050_7	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_ini_b0051_16_rib	Translation initiation b0051 16 ribosome(s) bound	1 b0051_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b0051_16	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_ini_b0051_1_rib	Translation initiation b0051 1 ribosome(s) bound	1 b0051_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0051_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_ini_b0051_8_rib	Translation initiation b0051 8 ribosome(s) bound	1 b0051_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b0051_8	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_ini_b0052_19_rib	Translation initiation b0052 19 ribosome(s) bound	1 b0052_mRNA_1 + 19 fmet_tRNA_met + 19 h2o + 19 rib_30_ini + 19 rib_50 --> 19 IF1_inact + 19 IF2-GDP + 19 IF3_inact + 19 h + 19 p + 1 rib_ini_b0052_19	irreversible	Translation	0.00E+00	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708
tl_ini_b0052_1_rib	Translation initiation b0052 1 ribosome(s) bound	1 b0052_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0052_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708
tl_ini_b0052_9_rib	Translation initiation b0052 9 ribosome(s) bound	1 b0052_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b0052_9	irreversible	Translation	0.00E+00	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708
tl_ini_b0053_12_rib	Translation initiation b0053 12 ribosome(s) bound	1 b0053_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b0053_12	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_ini_b0053_1_rib	Translation initiation b0053 1 ribosome(s) bound	1 b0053_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0053_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_ini_b0053_25_rib	Translation initiation b0053 25 ribosome(s) bound	1 b0053_mRNA_1 + 25 fmet_tRNA_met + 25 h2o + 25 rib_30_ini + 25 rib_50 --> 25 IF1_inact + 25 IF2-GDP + 25 IF3_inact + 25 h + 25 p + 1 rib_ini_b0053_25	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_ini_b0058_12_rib	Translation initiation b0058 12 ribosome(s) bound	1 b0058_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b0058_12	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_ini_b0058_1_rib	Translation initiation b0058 1 ribosome(s) bound	1 b0058_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0058_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_ini_b0058_6_rib	Translation initiation b0058 6 ribosome(s) bound	1 b0058_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b0058_6	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_ini_b0059_1_rib	Translation initiation b0059 1 ribosome(s) bound	1 b0059_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0059_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	6.20E+01	62.00359	0	1.83E+00	1.826
tl_ini_b0059_28_rib	Translation initiation b0059 28 ribosome(s) bound	1 b0059_mRNA_1 + 28 fmet_tRNA_met + 28 h2o + 28 rib_30_ini + 28 rib_50 --> 28 IF1_inact + 28 IF2-GDP + 28 IF3_inact + 28 h + 28 p + 1 rib_ini_b0059_28	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	6.20E+01	62.00359	0	1.83E+00	1.826
tl_ini_b0059_56_rib	Translation initiation b0059 56 ribosome(s) bound	1 b0059_mRNA_1 + 56 fmet_tRNA_met + 56 h2o + 56 rib_30_ini + 56 rib_50 --> 56 IF1_inact + 56 IF2-GDP + 56 IF3_inact + 56 h + 56 p + 1 rib_ini_b0059_56	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	4.28E+01	42.78851	0	1.83E+00	1.826
tl_ini_b0144_18_rib	Translation initiation b0144 18 ribosome(s) bound	1 b0144_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b0144_18	irreversible	Translation	0.00E+00	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353
tl_ini_b0144_1_rib	Translation initiation b0144 1 ribosome(s) bound	1 b0144_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0144_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353
tl_ini_b0144_9_rib	Translation initiation b0144 9 ribosome(s) bound	1 b0144_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b0144_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353
tl_ini_b0166_16_rib	Translation initiation b0166 16 ribosome(s) bound	1 b0166_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b0166_16	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_ini_b0166_1_rib	Translation initiation b0166 1 ribosome(s) bound	1 b0166_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0166_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_ini_b0166_8_rib	Translation initiation b0166 8 ribosome(s) bound	1 b0166_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b0166_8	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_ini_b0167_1_rib	Translation initiation b0167 1 ribosome(s) bound	1 b0167_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0167_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.95E+01	2.95E+01	0	5.06E+01	50.5931	0	2.20E+00	2.197
tl_ini_b0167_26_rib	Translation initiation b0167 26 ribosome(s) bound	1 b0167_mRNA_1 + 26 fmet_tRNA_met + 26 h2o + 26 rib_30_ini + 26 rib_50 --> 26 IF1_inact + 26 IF2-GDP + 26 IF3_inact + 26 h + 26 p + 1 rib_ini_b0167_26	irreversible	Translation	0.00E+00	1.00E+09	0	2.95E+01	2.95E+01	0	5.06E+01	50.5931	0	2.20E+00	2.197

tl_ini_b0167_52_rib	Translation initiation b0167 52 ribosome(s) bound	1 b0167_mRNA_1 + 52 fmet_tRNA_met + 52 h2o + 52 rib_30_ini + 52 rib_50 --> 52 IF1_inact + 52 IF2-GDP + 52 IF3_inact + 52 h + 52 p + 1 rib_ini_b0167_52	irreversible	Translation	0.00E+00	1.00E+09	0	2.95E+01	2.95E+01	0	3.83E+01	38.28969	0	2.20E+00	2.197
tl_ini_b0168_15_rib	Translation initiation b0168 15 ribosome(s) bound	1 b0168_mRNA_1 + 15 fmet_tRNA_met + 15 h2o + 15 rib_30_ini + 15 rib_50 --> 15 IF1_inact + 15 IF2-GDP + 15 IF3_inact + 15 h + 15 p + 1 rib_ini_b0168_15	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_ini_b0168_1_rib	Translation initiation b0168 1 ribosome(s) bound	1 b0168_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0168_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_ini_b0168_7_rib	Translation initiation b0168 7 ribosome(s) bound	1 b0168_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b0168_7	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_ini_b0169_14_rib	Translation initiation b0169 14 ribosome(s) bound	1 b0169_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b0169_14	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+00	8.04E+00	0	5.92E+00	5.92	0	5.92E+00	5.92
tl_ini_b0169_1_rib	Translation initiation b0169 1 ribosome(s) bound	1 b0169_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0169_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.76E+01	8.76E+01	0	8.29E+01	82.88	0	1.83E+01	18.284
tl_ini_b0169_7_rib	Translation initiation b0169 7 ribosome(s) bound	1 b0169_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b0169_7	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_ini_b0170_16_rib	Translation initiation b0170 16 ribosome(s) bound	1 b0170_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b0170_16	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_ini_b0170_1_rib	Translation initiation b0170 1 ribosome(s) bound	1 b0170_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0170_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_ini_b0170_8_rib	Translation initiation b0170 8 ribosome(s) bound	1 b0170_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b0170_8	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_ini_b0172_10_rib	Translation initiation b0172 10 ribosome(s) bound	1 b0172_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b0172_10	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599
tl_ini_b0172_1_rib	Translation initiation b0172 1 ribosome(s) bound	1 b0172_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0172_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599
tl_ini_b0172_5_rib	Translation initiation b0172 5 ribosome(s) bound	1 b0172_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b0172_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599
tl_ini_b0188_12_rib	Translation initiation b0188 12 ribosome(s) bound	1 b0188_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b0188_12	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.71E+02	170.9685	0	3.84E+00	3.836
tl_ini_b0188_1_rib	Translation initiation b0188 1 ribosome(s) bound	1 b0188_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0188_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.71E+02	170.9685	0	3.84E+00	3.836
tl_ini_b0188_25_rib	Translation initiation b0188 25 ribosome(s) bound	1 b0188_mRNA_1 + 25 fmet_tRNA_met + 25 h2o + 25 rib_30_ini + 25 rib_50 --> 25 IF1_inact + 25 IF2-GDP + 25 IF3_inact + 25 h + 25 p + 1 rib_ini_b0188_25	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.32E+02	131.6329	0	3.84E+00	3.836
tl_ini_b0194_16_rib	Translation initiation b0194 16 ribosome(s) bound	1 b0194_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b0194_16	irreversible	Translation	0.00E+00	1.00E+09	0	7.54E+01	7.54E+01	0	1.31E+02	130.5277	0	3.47E+00	3.467
tl_ini_b0194_1_rib	Translation initiation b0194 1 ribosome(s) bound	1 b0194_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0194_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.54E+01	7.54E+01	0	1.31E+02	130.5277	0	3.47E+00	3.467
tl_ini_b0194_33_rib	Translation initiation b0194 33 ribosome(s) bound	1 b0194_mRNA_1 + 33 fmet_tRNA_met + 33 h2o + 33 rib_30_ini + 33 rib_50 --> 33 IF1_inact + 33 IF2-GDP + 33 IF3_inact + 33 h + 33 p + 1 rib_ini_b0194_33	irreversible	Translation	0.00E+00	1.00E+09	0	7.54E+01	7.54E+01	0	1.24E+02	124.4591	0	3.47E+00	3.467
tl_ini_b0405_10_rib	Translation initiation b0405 10 ribosome(s) bound	1 b0405_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b0405_10	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_ini_b0405_1_rib	Translation initiation b0405 1 ribosome(s) bound	1 b0405_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0405_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_ini_b0405_20_rib	Translation initiation b0405 20 ribosome(s) bound	1 b0405_mRNA_1 + 20 fmet_tRNA_met + 20 h2o + 20 rib_30_ini + 20 rib_50 --> 20 IF1_inact + 20 IF2-GDP + 20 IF3_inact + 20 h + 20 p + 1 rib_ini_b0405_20	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_ini_b0406_11_rib	Translation initiation b0406 11 ribosome(s) bound	1 b0406_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b0406_11	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_ini_b0406_1_rib	Translation initiation b0406 1 ribosome(s) bound	1 b0406_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0406_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_ini_b0406_22_rib	Translation initiation b0406 22 ribosome(s) bound	1 b0406_mRNA_1 + 22 fmet_tRNA_met + 22 h2o + 22 rib_30_ini + 22 rib_50 --> 22 IF1_inact + 22 IF2-GDP + 22 IF3_inact + 22 h + 22 p + 1 rib_ini_b0406_22	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_ini_b0407_1_rib	Translation initiation b0407 1 ribosome(s) bound	1 b0407_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0407_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_ini_b0407_3_rib	Translation initiation b0407 3 ribosome(s) bound	1 b0407_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b0407_3	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_ini_b0407_6_rib	Translation initiation b0407 6 ribosome(s) bound	1 b0407_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b0407_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_ini_b0413_1_rib	Translation initiation b0413 1 ribosome(s) bound	1 b0413_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0413_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_ini_b0413_4_rib	Translation initiation b0413 4 ribosome(s) bound	1 b0413_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b0413_4	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_ini_b0413_8_rib	Translation initiation b0413 8 ribosome(s) bound	1 b0413_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b0413_8	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_ini_b0414_10_rib	Translation initiation b0414 10 ribosome(s) bound	1 b0414_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b0414_10	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113
tl_ini_b0414_1_rib	Translation initiation b0414 1 ribosome(s) bound	1 b0414_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0414_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113
tl_ini_b0414_21_rib	Translation initiation b0414 21 ribosome(s) bound	1 b0414_mRNA_1 + 21 fmet_tRNA_met + 21 h2o + 21 rib_30_ini + 21 rib_50 --> 21 IF1_inact + 21 IF2-GDP + 21 IF3_inact + 21 h + 21 p + 1 rib_ini_b0414_21	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113
tl_ini_b0415_1_rib	Translation initiation b0415 1 ribosome(s) bound	1 b0415_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0415_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913
tl_ini_b0415_4_rib	Translation initiation b0415 4 ribosome(s) bound	1 b0415_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b0415_4	irreversible	Translation	0.00E+00	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913
tl_ini_b0415_9_rib	Translation initiation b0415 9 ribosome(s) bound	1 b0415_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b0415_9	irreversible	Translation	0.00E+00	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913
tl_ini_b0416_1_rib	Translation initiation b0416 1 ribosome(s) bound	1 b0416_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0416_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913

tl_ini_b0416_4_rib	Translation initiation b0416 4 ribosome(s) bound	1 b0416_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b0416_4	irreversible	Translation	0.00E+00	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913
tl_ini_b0416_8_rib	Translation initiation b0416 8 ribosome(s) bound	1 b0416_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b0416_8	irreversible	Translation	0.00E+00	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913
tl_ini_b0423_14_rib	Translation initiation b0423 14 ribosome(s) bound	1 b0423_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_ini_b0423_1_rib	Translation initiation b0423 1 ribosome(s) bound	1 b0423_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0423_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_ini_b0423_28_rib	Translation initiation b0423 28 ribosome(s) bound	1 b0423_mRNA_1 + 28 fmet_tRNA_met + 28 h2o + 28 rib_30_ini + 28 rib_50 --> 28 IF1_inact + 28 IF2-GDP + 28 IF3_inact + 28 h + 28 p	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_ini_b0436_12_rib	Translation initiation b0436 12 ribosome(s) bound	1 b0436_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p	irreversible	Translation	0.00E+00	1.00E+09	0	9.28E+00	9.28E+00	0	6.91E+00	6.906667	0	2.87E+00	2.868462
tl_ini_b0436_1_rib	Translation initiation b0436 1 ribosome(s) bound	1 b0436_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0436_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.00E+01	9.00E+01	0	8.29E+01	82.88	0	1.55E+00	1.55375
tl_ini_b0436_25_rib	Translation initiation b0436 25 ribosome(s) bound	1 b0436_mRNA_1 + 25 fmet_tRNA_met + 25 h2o + 25 rib_30_ini + 25 rib_50 --> 25 IF1_inact + 25 IF2-GDP + 25 IF3_inact + 25 h + 25 p	irreversible	Translation	0.00E+00	1.00E+09	0	4.50E+00	4.50E+00	0	3.32E+00	3.3152	1.11E+00	3.32E+00	2.205662
tl_ini_b0503_10_rib	Translation initiation b0503 10 ribosome(s) bound	1 b0503_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_ini_b0503_1_rib	Translation initiation b0503 1 ribosome(s) bound	1 b0503_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0503_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_ini_b0503_21_rib	Translation initiation b0503 21 ribosome(s) bound	1 b0503_mRNA_1 + 21 fmet_tRNA_met + 21 h2o + 21 rib_30_ini + 21 rib_50 --> 21 IF1_inact + 21 IF2-GDP + 21 IF3_inact + 21 h + 21 p	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_ini_b0526_13_rib	Translation initiation b0526 13 ribosome(s) bound	1 b0526_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_ini_b0526_1_rib	Translation initiation b0526 1 ribosome(s) bound	1 b0526_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0526_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_ini_b0526_27_rib	Translation initiation b0526 27 ribosome(s) bound	1 b0526_mRNA_1 + 27 fmet_tRNA_met + 27 h2o + 27 rib_30_ini + 27 rib_50 --> 27 IF1_inact + 27 IF2-GDP + 27 IF3_inact + 27 h + 27 p	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_ini_b0638_11_rib	Translation initiation b0638 11 ribosome(s) bound	1 b0638_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p	irreversible	Translation	0.00E+00	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656
tl_ini_b0638_1_rib	Translation initiation b0638 1 ribosome(s) bound	1 b0638_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0638_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656
tl_ini_b0638_5_rib	Translation initiation b0638 5 ribosome(s) bound	1 b0638_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b0638_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656
tl_ini_b0639_12_rib	Translation initiation b0639 12 ribosome(s) bound	1 b0639_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p	irreversible	Translation	0.00E+00	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276
tl_ini_b0639_1_rib	Translation initiation b0639 1 ribosome(s) bound	1 b0639_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0639_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276
tl_ini_b0639_6_rib	Translation initiation b0639 6 ribosome(s) bound	1 b0639_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b0639_6	irreversible	Translation	0.00E+00	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276
tl_ini_b0640_10_rib	Translation initiation b0640 10 ribosome(s) bound	1 b0640_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226
tl_ini_b0640_1_rib	Translation initiation b0640 1 ribosome(s) bound	1 b0640_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0640_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226
tl_ini_b0640_20_rib	Translation initiation b0640 20 ribosome(s) bound	1 b0640_mRNA_1 + 20 fmet_tRNA_met + 20 h2o + 20 rib_30_ini + 20 rib_50 --> 20 IF1_inact + 20 IF2-GDP + 20 IF3_inact + 20 h + 20 p	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226
tl_ini_b0641_11_rib	Translation initiation b0641 11 ribosome(s) bound	1 b0641_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356
tl_ini_b0641_1_rib	Translation initiation b0641 1 ribosome(s) bound	1 b0641_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0641_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356
tl_ini_b0641_5_rib	Translation initiation b0641 5 ribosome(s) bound	1 b0641_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b0641_5	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356
tl_ini_b0642_1_rib	Translation initiation b0642 1 ribosome(s) bound	1 b0642_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0642_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_ini_b0642_25_rib	Translation initiation b0642 25 ribosome(s) bound	1 b0642_mRNA_1 + 25 fmet_tRNA_met + 25 h2o + 25 rib_30_ini + 25 rib_50 --> 25 IF1_inact + 25 IF2-GDP + 25 IF3_inact + 25 h + 25 p	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_ini_b0642_50_rib	Translation initiation b0642 50 ribosome(s) bound	1 b0642_mRNA_1 + 50 fmet_tRNA_met + 50 h2o + 50 rib_30_ini + 50 rib_50 --> 50 IF1_inact + 50 IF2-GDP + 50 IF3_inact + 50 h + 50 p	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_ini_b0661_13_rib	Translation initiation b0661 13 ribosome(s) bound	1 b0661_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_ini_b0661_1_rib	Translation initiation b0661 1 ribosome(s) bound	1 b0661_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0661_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_ini_b0661_27_rib	Translation initiation b0661 27 ribosome(s) bound	1 b0661_mRNA_1 + 27 fmet_tRNA_met + 27 h2o + 27 rib_30_ini + 27 rib_50 --> 27 IF1_inact + 27 IF2-GDP + 27 IF3_inact + 27 h + 27 p	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_ini_b0680_16_rib	Translation initiation b0680 16 ribosome(s) bound	1 b0680_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.39E+02	139.1751	0	6.30E+00	6.304
tl_ini_b0680_1_rib	Translation initiation b0680 1 ribosome(s) bound	1 b0680_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0680_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.39E+02	139.1751	0	6.30E+00	6.304
tl_ini_b0680_32_rib	Translation initiation b0680 32 ribosome(s) bound	1 b0680_mRNA_1 + 32 fmet_tRNA_met + 32 h2o + 32 rib_30_ini + 32 rib_50 --> 32 IF1_inact + 32 IF2-GDP + 32 IF3_inact + 32 h + 32 p	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.34E+02	133.9288	0	6.30E+00	6.304
tl_ini_b0850_1_rib	Translation initiation b0850 1 ribosome(s) bound	1 b0850_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0850_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907
tl_ini_b0850_2_rib	Translation initiation b0850 2 ribosome(s) bound	1 b0850_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b0850_2	irreversible	Translation	0.00E+00	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907
tl_ini_b0850_5_rib	Translation initiation b0850 5 ribosome(s) bound	1 b0850_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b0850_5	irreversible	Translation	0.00E+00	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907

tl_ini_b0851_14_rib	Translation initiation b0851 14 ribosome(s) bound	1 b0851_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b0851_14	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_ini_b0851_1_rib	Translation initiation b0851 1 ribosome(s) bound	1 b0851_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0851_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_ini_b0851_7_rib	Translation initiation b0851 7 ribosome(s) bound	1 b0851_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b0851_7	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_ini_b0852_17_rib	Translation initiation b0852 17 ribosome(s) bound	1 b0852_mRNA_1 + 17 fmet_tRNA_met + 17 h2o + 17 rib_30_ini + 17 rib_50 --> 17 IF1_inact + 17 IF2-GDP + 17 IF3_inact + 17 h + 17 p + 1 rib_ini_b0852_17	irreversible	Translation	0.00E+00	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867
tl_ini_b0852_1_rib	Translation initiation b0852 1 ribosome(s) bound	1 b0852_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0852_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867
tl_ini_b0852_8_rib	Translation initiation b0852 8 ribosome(s) bound	1 b0852_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b0852_8	irreversible	Translation	0.00E+00	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867
tl_ini_b0853_1_rib	Translation initiation b0853 1 ribosome(s) bound	1 b0853_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0853_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107
tl_ini_b0853_4_rib	Translation initiation b0853 4 ribosome(s) bound	1 b0853_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b0853_4	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107
tl_ini_b0853_9_rib	Translation initiation b0853 9 ribosome(s) bound	1 b0853_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b0853_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107
tl_ini_b0858_1_rib	Translation initiation b0858 1 ribosome(s) bound	1 b0858_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0858_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_ini_b0858_4_rib	Translation initiation b0858 4 ribosome(s) bound	1 b0858_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b0858_4	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_ini_b0858_9_rib	Translation initiation b0858 9 ribosome(s) bound	1 b0858_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b0858_9	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_ini_b0859_11_rib	Translation initiation b0859 11 ribosome(s) bound	1 b0859_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b0859_11	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_ini_b0859_1_rib	Translation initiation b0859 1 ribosome(s) bound	1 b0859_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0859_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_ini_b0859_22_rib	Translation initiation b0859 22 ribosome(s) bound	1 b0859_mRNA_1 + 22 fmet_tRNA_met + 22 h2o + 22 rib_30_ini + 22 rib_50 --> 22 IF1_inact + 22 IF2-GDP + 22 IF3_inact + 22 h + 22 p + 1 rib_ini_b0859_22	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_ini_b0884_1_rib	Translation initiation b0884 1 ribosome(s) bound	1 b0884_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0884_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381
tl_ini_b0884_2_rib	Translation initiation b0884 2 ribosome(s) bound	1 b0884_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b0884_2	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381
tl_ini_b0884_4_rib	Translation initiation b0884 4 ribosome(s) bound	1 b0884_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b0884_4	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381
tl_ini_b0893_12_rib	Translation initiation b0893 12 ribosome(s) bound	1 b0893_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b0893_12	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_ini_b0893_1_rib	Translation initiation b0893 1 ribosome(s) bound	1 b0893_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0893_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_ini_b0893_25_rib	Translation initiation b0893 25 ribosome(s) bound	1 b0893_mRNA_1 + 25 fmet_tRNA_met + 25 h2o + 25 rib_30_ini + 25 rib_50 --> 25 IF1_inact + 25 IF2-GDP + 25 IF3_inact + 25 h + 25 p + 1 rib_ini_b0893_25	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_ini_b0910_13_rib	Translation initiation b0910 13 ribosome(s) bound	1 b0910_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b0910_13	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_ini_b0910_1_rib	Translation initiation b0910 1 ribosome(s) bound	1 b0910_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0910_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_ini_b0910_6_rib	Translation initiation b0910 6 ribosome(s) bound	1 b0910_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b0910_6	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_ini_b0911_16_rib	Translation initiation b0911 16 ribosome(s) bound	1 b0911_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b0911_16	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+00	7.04E+00	0	5.18E+00	5.18	0	5.18E+00	5.18
tl_ini_b0911_1_rib	Translation initiation b0911 1 ribosome(s) bound	1 b0911_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0911_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.50E+01	7.50E+01	0	8.08E+01	80.77419	0	1.12E+01	11.248
tl_ini_b0911_32_rib	Translation initiation b0911 32 ribosome(s) bound	1 b0911_mRNA_1 + 32 fmet_tRNA_met + 32 h2o + 32 rib_30_ini + 32 rib_50 --> 32 IF1_inact + 32 IF2-GDP + 32 IF3_inact + 32 h + 32 p + 1 rib_ini_b0911_32	irreversible	Translation	0.00E+00	1.00E+09	0	3.52E+00	3.52E+00	0	2.59E+00	2.59	0	2.59E+00	2.59
tl_ini_b0912_1_rib	Translation initiation b0912 1 ribosome(s) bound	1 b0912_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0912_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_ini_b0912_2_rib	Translation initiation b0912 2 ribosome(s) bound	1 b0912_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b0912_2	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_ini_b0912_5_rib	Translation initiation b0912 5 ribosome(s) bound	1 b0912_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b0912_5	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_ini_b0930_13_rib	Translation initiation b0930 13 ribosome(s) bound	1 b0930_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b0930_13	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_ini_b0930_1_rib	Translation initiation b0930 1 ribosome(s) bound	1 b0930_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0930_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_ini_b0930_27_rib	Translation initiation b0930 27 ribosome(s) bound	1 b0930_mRNA_1 + 27 fmet_tRNA_met + 27 h2o + 27 rib_30_ini + 27 rib_50 --> 27 IF1_inact + 27 IF2-GDP + 27 IF3_inact + 27 h + 27 p + 1 rib_ini_b0930_27	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_ini_b0969_1_rib	Translation initiation b0969 1 ribosome(s) bound	1 b0969_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b0969_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_ini_b0969_3_rib	Translation initiation b0969 3 ribosome(s) bound	1 b0969_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b0969_3	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_ini_b0969_6_rib	Translation initiation b0969 6 ribosome(s) bound	1 b0969_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b0969_6	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_ini_b1066_11_rib	Translation initiation b1066 11 ribosome(s) bound	1 b1066_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b1066_11	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_ini_b1066_1_rib	Translation initiation b1066 1 ribosome(s) bound	1 b1066_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1066_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811

tl_ini_b1066_5_rib	Translation initiation b1066 5 ribosome(s) bound	1 b1066_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b1066_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_ini_b1084_1_rib	Translation initiation b1084 1 ribosome(s) bound	1 b1084_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1084_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.52E+01	65.23211	0	1.86E+00	1.859
tl_ini_b1084_31_rib	Translation initiation b1084 31 ribosome(s) bound	1 b1084_mRNA_1 + 31 fmet_tRNA_met + 31 h2o + 31 rib_30_ini + 31 rib_50 --> 31 IF1_inact + 31 IF2-GDP + 31 IF3_inact + 31 h + 31 p + 1 rib_ini_b1084_31	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	4.89E+01	48.91891	0	1.86E+00	1.859
tl_ini_b1084_62_rib	Translation initiation b1084 62 ribosome(s) bound	1 b1084_mRNA_1 + 62 fmet_tRNA_met + 62 h2o + 62 rib_30_ini + 62 rib_50 --> 62 IF1_inact + 62 IF2-GDP + 62 IF3_inact + 62 h + 62 p + 1 rib_ini_b1084_62	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	2.45E+01	24.45946	0	1.86E+00	1.859
tl_ini_b1086_18_rib	Translation initiation b1086 18 ribosome(s) bound	1 b1086_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b1086_18	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_ini_b1086_1_rib	Translation initiation b1086 1 ribosome(s) bound	1 b1086_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1086_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_ini_b1086_9_rib	Translation initiation b1086 9 ribosome(s) bound	1 b1086_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b1086_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_ini_b1088_10_rib	Translation initiation b1088 10 ribosome(s) bound	1 b1088_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b1088_10	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_ini_b1088_1_rib	Translation initiation b1088 1 ribosome(s) bound	1 b1088_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1088_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_ini_b1088_5_rib	Translation initiation b1088 5 ribosome(s) bound	1 b1088_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b1088_5	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_ini_b1089_1_rib	Translation initiation b1089 1 ribosome(s) bound	1 b1089_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1089_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b1089_3_rib	Translation initiation b1089 3 ribosome(s) bound	1 b1089_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b1089_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b1090_10_rib	Translation initiation b1090 10 ribosome(s) bound	1 b1090_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b1090_10	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187
tl_ini_b1090_1_rib	Translation initiation b1090 1 ribosome(s) bound	1 b1090_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1090_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187
tl_ini_b1090_20_rib	Translation initiation b1090 20 ribosome(s) bound	1 b1090_mRNA_1 + 20 fmet_tRNA_met + 20 h2o + 20 rib_30_ini + 20 rib_50 --> 20 IF1_inact + 20 IF2-GDP + 20 IF3_inact + 20 h + 20 p + 1 rib_ini_b1090_20	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187
tl_ini_b1091_18_rib	Translation initiation b1091 18 ribosome(s) bound	1 b1091_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b1091_18	irreversible	Translation	0.00E+00	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677
tl_ini_b1091_1_rib	Translation initiation b1091 1 ribosome(s) bound	1 b1091_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1091_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677
tl_ini_b1091_9_rib	Translation initiation b1091 9 ribosome(s) bound	1 b1091_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b1091_9	irreversible	Translation	0.00E+00	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677
tl_ini_b1092_18_rib	Translation initiation b1092 18 ribosome(s) bound	1 b1092_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b1092_18	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_ini_b1092_1_rib	Translation initiation b1092 1 ribosome(s) bound	1 b1092_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1092_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_ini_b1092_9_rib	Translation initiation b1092 9 ribosome(s) bound	1 b1092_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b1092_9	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_ini_b1093_14_rib	Translation initiation b1093 14 ribosome(s) bound	1 b1093_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b1093_14	irreversible	Translation	0.00E+00	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107
tl_ini_b1093_1_rib	Translation initiation b1093 1 ribosome(s) bound	1 b1093_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1093_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107
tl_ini_b1093_7_rib	Translation initiation b1093 7 ribosome(s) bound	1 b1093_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b1093_7	irreversible	Translation	0.00E+00	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107
tl_ini_b1114_1_rib	Translation initiation b1114 1 ribosome(s) bound	1 b1114_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1114_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.63E+01	3.63E+01	0	6.33E+01	63.27289	0	1.18E+00	1.182
tl_ini_b1114_33_rib	Translation initiation b1114 33 ribosome(s) bound	1 b1114_mRNA_1 + 33 fmet_tRNA_met + 33 h2o + 33 rib_30_ini + 33 rib_50 --> 33 IF1_inact + 33 IF2-GDP + 33 IF3_inact + 33 h + 33 p + 1 rib_ini_b1114_33	irreversible	Translation	0.00E+00	1.00E+09	0	3.63E+01	3.63E+01	0	6.33E+01	63.27289	0	1.18E+00	1.182
tl_ini_b1114_67_rib	Translation initiation b1114 67 ribosome(s) bound	1 b1114_mRNA_1 + 67 fmet_tRNA_met + 67 h2o + 67 rib_30_ini + 67 rib_50 --> 67 IF1_inact + 67 IF2-GDP + 67 IF3_inact + 67 h + 67 p + 1 rib_ini_b1114_67	irreversible	Translation	0.00E+00	1.00E+09	0	2.91E+01	2.91E+01	0	3.16E+01	31.6391	0	1.18E+00	1.182
tl_ini_b1133_10_rib	Translation initiation b1133 10 ribosome(s) bound	1 b1133_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b1133_10	irreversible	Translation	0.00E+00	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027
tl_ini_b1133_1_rib	Translation initiation b1133 1 ribosome(s) bound	1 b1133_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1133_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027
tl_ini_b1133_21_rib	Translation initiation b1133 21 ribosome(s) bound	1 b1133_mRNA_1 + 21 fmet_tRNA_met + 21 h2o + 21 rib_30_ini + 21 rib_50 --> 21 IF1_inact + 21 IF2-GDP + 21 IF3_inact + 21 h + 21 p + 1 rib_ini_b1133_21	irreversible	Translation	0.00E+00	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027
tl_ini_b1134_1_rib	Translation initiation b1134 1 ribosome(s) bound	1 b1134_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1134_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_ini_b1134_4_rib	Translation initiation b1134 4 ribosome(s) bound	1 b1134_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b1134_4	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_ini_b1134_9_rib	Translation initiation b1134 9 ribosome(s) bound	1 b1134_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b1134_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_ini_b1135_12_rib	Translation initiation b1135 12 ribosome(s) bound	1 b1135_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b1135_12	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_ini_b1135_1_rib	Translation initiation b1135 1 ribosome(s) bound	1 b1135_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1135_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_ini_b1135_6_rib	Translation initiation b1135 6 ribosome(s) bound	1 b1135_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b1135_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_ini_b1211_10_rib	Translation initiation b1211 10 ribosome(s) bound	1 b1211_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b1211_10	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_ini_b1211_1_rib	Translation initiation b1211 1 ribosome(s) bound	1 b1211_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1211_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708

tl_ini_b1211_21_rib	Translation initiation b1211 21 ribosome(s) bound	1 b1211_mRNA_1 + 21 fmet_tRNA_met + 21 h2o + 21 rib_30_ini + 21 rib_50 --> 21 IF1_inact + 21 IF2-GDP + 21 IF3_inact + 21 h + 21 p + 1 rib_ini_b1211_21	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_ini_b1212_16_rib	Translation initiation b1212 16 ribosome(s) bound	1 b1212_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b1212_16	irreversible	Translation	0.00E+00	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927
tl_ini_b1212_1_rib	Translation initiation b1212 1 ribosome(s) bound	1 b1212_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1212_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927
tl_ini_b1212_8_rib	Translation initiation b1212 8 ribosome(s) bound	1 b1212_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b1212_8	irreversible	Translation	0.00E+00	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927
tl_ini_b1229_1_rib	Translation initiation b1229 1 ribosome(s) bound	1 b1229_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1229_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.59E+02	2.59E+02	0	4.21E+02	421.3748	0	4.82E+01	48.207
tl_ini_b1269_17_rib	Translation initiation b1269 17 ribosome(s) bound	1 b1269_mRNA_1 + 17 fmet_tRNA_met + 17 h2o + 17 rib_30_ini + 17 rib_50 --> 17 IF1_inact + 17 IF2-GDP + 17 IF3_inact + 17 h + 17 p + 1 rib_ini_b1269_17	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_ini_b1269_1_rib	Translation initiation b1269 1 ribosome(s) bound	1 b1269_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1269_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_ini_b1269_8_rib	Translation initiation b1269 8 ribosome(s) bound	1 b1269_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b1269_8	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_ini_b1286_18_rib	Translation initiation b1286 18 ribosome(s) bound	1 b1286_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b1286_18	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.11E+02	111.1142	0	3.39E+00	3.39
tl_ini_b1286_1_rib	Translation initiation b1286 1 ribosome(s) bound	1 b1286_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1286_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.11E+02	111.1142	0	3.39E+00	3.39
tl_ini_b1286_37_rib	Translation initiation b1286 37 ribosome(s) bound	1 b1286_mRNA_1 + 37 fmet_tRNA_met + 37 h2o + 37 rib_30_ini + 37 rib_50 --> 37 IF1_inact + 37 IF2-GDP + 37 IF3_inact + 37 h + 37 p + 1 rib_ini_b1286_37	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.02E+02	102.4653	0	3.39E+00	3.39
tl_ini_b1344_18_rib	Translation initiation b1344 18 ribosome(s) bound	1 b1344_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b1344_18	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_ini_b1344_1_rib	Translation initiation b1344 1 ribosome(s) bound	1 b1344_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1344_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_ini_b1344_9_rib	Translation initiation b1344 9 ribosome(s) bound	1 b1344_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b1344_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_ini_b1427_10_rib	Translation initiation b1427 10 ribosome(s) bound	1 b1427_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b1427_10	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_ini_b1427_1_rib	Translation initiation b1427 1 ribosome(s) bound	1 b1427_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1427_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_ini_b1427_5_rib	Translation initiation b1427 5 ribosome(s) bound	1 b1427_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b1427_5	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_ini_b1480_1_rib	Translation initiation b1480 1 ribosome(s) bound	1 b1480_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1480_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b1480_2_rib	Translation initiation b1480 2 ribosome(s) bound	1 b1480_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b1480_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_ini_b1481_1_rib	Translation initiation b1481 1 ribosome(s) bound	1 b1481_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1481_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_ini_b1481_2_rib	Translation initiation b1481 2 ribosome(s) bound	1 b1481_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b1481_2	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_ini_b1481_4_rib	Translation initiation b1481 4 ribosome(s) bound	1 b1481_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b1481_4	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_ini_b1636_16_rib	Translation initiation b1636 16 ribosome(s) bound	1 b1636_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b1636_16	irreversible	Translation	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744
tl_ini_b1636_1_rib	Translation initiation b1636 1 ribosome(s) bound	1 b1636_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1636_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744
tl_ini_b1636_8_rib	Translation initiation b1636 8 ribosome(s) bound	1 b1636_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b1636_8	irreversible	Translation	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744
tl_ini_b1637_12_rib	Translation initiation b1637 12 ribosome(s) bound	1 b1637_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b1637_12	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_ini_b1637_1_rib	Translation initiation b1637 1 ribosome(s) bound	1 b1637_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1637_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_ini_b1637_24_rib	Translation initiation b1637 24 ribosome(s) bound	1 b1637_mRNA_1 + 24 fmet_tRNA_met + 24 h2o + 24 rib_30_ini + 24 rib_50 --> 24 IF1_inact + 24 IF2-GDP + 24 IF3_inact + 24 h + 24 p + 1 rib_ini_b1637_24	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_ini_b1638_12_rib	Translation initiation b1638 12 ribosome(s) bound	1 b1638_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b1638_12	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094
tl_ini_b1638_1_rib	Translation initiation b1638 1 ribosome(s) bound	1 b1638_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1638_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094
tl_ini_b1638_6_rib	Translation initiation b1638 6 ribosome(s) bound	1 b1638_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b1638_6	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094
tl_ini_b1652_12_rib	Translation initiation b1652 12 ribosome(s) bound	1 b1652_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b1652_12	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_ini_b1652_1_rib	Translation initiation b1652 1 ribosome(s) bound	1 b1652_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1652_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_ini_b1652_6_rib	Translation initiation b1652 6 ribosome(s) bound	1 b1652_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b1652_6	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_ini_b1653_1_rib	Translation initiation b1653 1 ribosome(s) bound	1 b1653_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1653_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.89E+01	38.89407	0	1.20E+00	1.201
tl_ini_b1653_45_rib	Translation initiation b1653 45 ribosome(s) bound	1 b1653_mRNA_1 + 45 fmet_tRNA_met + 45 h2o + 45 rib_30_ini + 45 rib_50 --> 45 IF1_inact + 45 IF2-GDP + 45 IF3_inact + 45 h + 45 p + 1 rib_ini_b1653_45	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.39E+01	33.88332	0	1.20E+00	1.201
tl_ini_b1653_90_rib	Translation initiation b1653 90 ribosome(s) bound	1 b1653_mRNA_1 + 90 fmet_tRNA_met + 90 h2o + 90 rib_30_ini + 90 rib_50 --> 90 IF1_inact + 90 IF2-GDP + 90 IF3_inact + 90 h + 90 p + 1 rib_ini_b1653_90	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	1.70E+01	16.95446	0	1.20E+00	1.201
tl_ini_b1712_1_rib	Translation initiation b1712 1 ribosome(s) bound	1 b1712_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1712_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988

tl_ini_b1712_2_rib	Translation initiation b1712 2 ribosome(s) bound	1 b1712_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b1712_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_ini_b1712_5_rib	Translation initiation b1712 5 ribosome(s) bound	1 b1712_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b1712_5	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_ini_b1713_1_rib	Translation initiation b1713 1 ribosome(s) bound	1 b1713_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1713_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.43E+01	3.43E+01	0	5.88E+01	58.77924	0	2.33E+00	2.3288
tl_ini_b1713_23_rib	Translation initiation b1713 23 ribosome(s) bound	1 b1713_mRNA_1 + 23 fmet_tRNA_met + 23 h2o + 23 rib_30_ini + 23 rib_50 --> 23 IF1_inact + 23 IF2-GDP + 23 IF3_inact + 23 h + 23 p + 1 rib_ini_b1713_23	irreversible	Translation	0.00E+00	1.00E+09	0	3.16E+01	3.16E+01	0	5.17E+01	51.68256	0	2.33E+00	2.3288
tl_ini_b1713_46_rib	Translation initiation b1713 46 ribosome(s) bound	1 b1713_mRNA_1 + 46 fmet_tRNA_met + 46 h2o + 46 rib_30_ini + 46 rib_50 --> 46 IF1_inact + 46 IF2-GDP + 46 IF3_inact + 46 h + 46 p + 1 rib_ini_b1713_46	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+01	1.55E+01	0	2.53E+01	25.26703	0	2.33E+00	2.3288
tl_ini_b1714_19_rib	Translation initiation b1714 19 ribosome(s) bound	1 b1714_mRNA_1 + 19 fmet_tRNA_met + 19 h2o + 19 rib_30_ini + 19 rib_50 --> 19 IF1_inact + 19 IF2-GDP + 19 IF3_inact + 19 h + 19 p + 1 rib_ini_b1714_19	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	5.64E+00	5.638148
tl_ini_b1714_1_rib	Translation initiation b1714 1 ribosome(s) bound	1 b1714_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1714_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	6.37E+00	6.3688
tl_ini_b1714_9_rib	Translation initiation b1714 9 ribosome(s) bound	1 b1714_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b1714_9	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	6.37E+00	6.3688
tl_ini_b1715_1_rib	Translation initiation b1715 1 ribosome(s) bound	1 b1715_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1715_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.19E+02	2.19E+02	0	2.24E+02	224.2242	0	1.13E+02	113.3448
tl_ini_b1716_1_rib	Translation initiation b1716 1 ribosome(s) bound	1 b1716_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1716_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	1.91E+01	19.086
tl_ini_b1716_3_rib	Translation initiation b1716 3 ribosome(s) bound	1 b1716_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b1716_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.72E+01	3.72E+01	0	2.76E+01	27.62667	0	2.63E+01	26.265
tl_ini_b1716_6_rib	Translation initiation b1716 6 ribosome(s) bound	1 b1716_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b1716_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_ini_b1717_1_rib	Translation initiation b1717 1 ribosome(s) bound	1 b1717_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1717_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.72E+01	9.72E+01	0	8.29E+01	82.88	0	7.34E+01	73.365
tl_ini_b1717_3_rib	Translation initiation b1717 3 ribosome(s) bound	1 b1717_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b1717_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b1718_10_rib	Translation initiation b1718 10 ribosome(s) bound	1 b1718_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b1718_10	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.96E+01	29.622
tl_ini_b1718_1_rib	Translation initiation b1718 1 ribosome(s) bound	1 b1718_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1718_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.60E+01	26.00667
tl_ini_b1718_5_rib	Translation initiation b1718 5 ribosome(s) bound	1 b1718_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b1718_5	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.96E+01	29.622
tl_ini_b1719_18_rib	Translation initiation b1719 18 ribosome(s) bound	1 b1719_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b1719_18	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_ini_b1719_1_rib	Translation initiation b1719 1 ribosome(s) bound	1 b1719_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1719_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_ini_b1719_37_rib	Translation initiation b1719 37 ribosome(s) bound	1 b1719_mRNA_1 + 37 fmet_tRNA_met + 37 h2o + 37 rib_30_ini + 37 rib_50 --> 37 IF1_inact + 37 IF2-GDP + 37 IF3_inact + 37 h + 37 p + 1 rib_ini_b1719_37	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_ini_b1804_11_rib	Translation initiation b1804 11 ribosome(s) bound	1 b1804_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b1804_11	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.98E+02	198.3151	0	3.32E+00	3.3245
tl_ini_b1804_1_rib	Translation initiation b1804 1 ribosome(s) bound	1 b1804_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1804_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.98E+02	198.3151	0	3.32E+00	3.3245
tl_ini_b1804_22_rib	Translation initiation b1804 22 ribosome(s) bound	1 b1804_mRNA_1 + 22 fmet_tRNA_met + 22 h2o + 22 rib_30_ini + 22 rib_50 --> 22 IF1_inact + 22 IF2-GDP + 22 IF3_inact + 22 h + 22 p + 1 rib_ini_b1804_22	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.87E+02	186.9786	0	3.32E+00	3.3245
tl_ini_b1822_15_rib	Translation initiation b1822 15 ribosome(s) bound	1 b1822_mRNA_1 + 15 fmet_tRNA_met + 15 h2o + 15 rib_30_ini + 15 rib_50 --> 15 IF1_inact + 15 IF2-GDP + 15 IF3_inact + 15 h + 15 p + 1 rib_ini_b1822_15	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_ini_b1822_1_rib	Translation initiation b1822 1 ribosome(s) bound	1 b1822_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1822_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_ini_b1822_7_rib	Translation initiation b1822 7 ribosome(s) bound	1 b1822_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b1822_7	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_ini_b1866_17_rib	Translation initiation b1866 17 ribosome(s) bound	1 b1866_mRNA_1 + 17 fmet_tRNA_met + 17 h2o + 17 rib_30_ini + 17 rib_50 --> 17 IF1_inact + 17 IF2-GDP + 17 IF3_inact + 17 h + 17 p + 1 rib_ini_b1866_17	irreversible	Translation	0.00E+00	1.00E+09	0	7.30E+01	7.30E+01	0	1.27E+02	127.2202	0	2.31E+00	2.314
tl_ini_b1866_1_rib	Translation initiation b1866 1 ribosome(s) bound	1 b1866_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1866_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.30E+01	7.30E+01	0	1.27E+02	127.2202	0	2.31E+00	2.314
tl_ini_b1866_34_rib	Translation initiation b1866 34 ribosome(s) bound	1 b1866_mRNA_1 + 34 fmet_tRNA_met + 34 h2o + 34 rib_30_ini + 34 rib_50 --> 34 IF1_inact + 34 IF2-GDP + 34 IF3_inact + 34 h + 34 p + 1 rib_ini_b1866_34	irreversible	Translation	0.00E+00	1.00E+09	0	7.30E+01	7.30E+01	0	1.24E+02	124.3597	0	2.31E+00	2.314
tl_ini_b1869_1_rib	Translation initiation b1869 1 ribosome(s) bound	1 b1869_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1869_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258
tl_ini_b1869_3_rib	Translation initiation b1869 3 ribosome(s) bound	1 b1869_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b1869_3	irreversible	Translation	0.00E+00	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258
tl_ini_b1869_7_rib	Translation initiation b1869 7 ribosome(s) bound	1 b1869_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b1869_7	irreversible	Translation	0.00E+00	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258
tl_ini_b1870_14_rib	Translation initiation b1870 14 ribosome(s) bound	1 b1870_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b1870_14	irreversible	Translation	0.00E+00	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578
tl_ini_b1870_1_rib	Translation initiation b1870 1 ribosome(s) bound	1 b1870_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1870_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578
tl_ini_b1870_7_rib	Translation initiation b1870 7 ribosome(s) bound	1 b1870_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b1870_7	irreversible	Translation	0.00E+00	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578
tl_ini_b1871_19_rib	Translation initiation b1871 19 ribosome(s) bound	1 b1871_mRNA_1 + 19 fmet_tRNA_met + 19 h2o + 19 rib_30_ini + 19 rib_50 --> 19 IF1_inact + 19 IF2-GDP + 19 IF3_inact + 19 h + 19 p + 1 rib_ini_b1871_19	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_ini_b1871_1_rib	Translation initiation b1871 1 ribosome(s) bound	1 b1871_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1871_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_ini_b1871_9_rib	Translation initiation b1871 9 ribosome(s) bound	1 b1871_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b1871_9	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068

tl_ini_b1876_16_rib	Translation initiation b1876 16 ribosome(s) bound	1 b1876_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b1876_16	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.32E+02	132.061	0	3.08E+00	3.076
tl_ini_b1876_1_rib	Translation initiation b1876 1 ribosome(s) bound	1 b1876_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1876_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.32E+02	132.061	0	3.08E+00	3.076
tl_ini_b1876_33_rib	Translation initiation b1876 33 ribosome(s) bound	1 b1876_mRNA_1 + 33 fmet_tRNA_met + 33 h2o + 33 rib_30_ini + 33 rib_50 --> 33 IF1_inact + 33 IF2-GDP + 33 IF3_inact + 33 h + 33 p + 1 rib_ini_b1876_33	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.24E+02	124.4591	0	3.08E+00	3.076
tl_ini_b1920_15_rib	Translation initiation b1920 15 ribosome(s) bound	1 b1920_mRNA_1 + 15 fmet_tRNA_met + 15 h2o + 15 rib_30_ini + 15 rib_50 --> 15 IF1_inact + 15 IF2-GDP + 15 IF3_inact + 15 h + 15 p + 1 rib_ini_b1920_15	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_ini_b1920_1_rib	Translation initiation b1920 1 ribosome(s) bound	1 b1920_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1920_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_ini_b1920_7_rib	Translation initiation b1920 7 ribosome(s) bound	1 b1920_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b1920_7	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_ini_b1921_10_rib	Translation initiation b1921 10 ribosome(s) bound	1 b1921_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b1921_10	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_ini_b1921_1_rib	Translation initiation b1921 1 ribosome(s) bound	1 b1921_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1921_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_ini_b1921_5_rib	Translation initiation b1921 5 ribosome(s) bound	1 b1921_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b1921_5	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_ini_b1922_14_rib	Translation initiation b1922 14 ribosome(s) bound	1 b1922_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b1922_14	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_ini_b1922_1_rib	Translation initiation b1922 1 ribosome(s) bound	1 b1922_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b1922_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_ini_b1922_7_rib	Translation initiation b1922 7 ribosome(s) bound	1 b1922_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b1922_7	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_ini_b2114_19_rib	Translation initiation b2114 19 ribosome(s) bound	1 b2114_mRNA_1 + 19 fmet_tRNA_met + 19 h2o + 19 rib_30_ini + 19 rib_50 --> 19 IF1_inact + 19 IF2-GDP + 19 IF3_inact + 19 h + 19 p + 1 rib_ini_b2114_19	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.08E+02	107.9198	0	2.85E+00	2.853
tl_ini_b2114_1_rib	Translation initiation b2114 1 ribosome(s) bound	1 b2114_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2114_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.08E+02	107.9198	0	2.85E+00	2.853
tl_ini_b2114_39_rib	Translation initiation b2114 39 ribosome(s) bound	1 b2114_mRNA_1 + 39 fmet_tRNA_met + 39 h2o + 39 rib_30_ini + 39 rib_50 --> 39 IF1_inact + 39 IF2-GDP + 39 IF3_inact + 39 h + 39 p + 1 rib_ini_b2114_39	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.06E+02	106.4596	0	2.85E+00	2.853
tl_ini_b2140_18_rib	Translation initiation b2140 18 ribosome(s) bound	1 b2140_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b2140_18	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_ini_b2140_1_rib	Translation initiation b2140 1 ribosome(s) bound	1 b2140_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2140_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_ini_b2140_9_rib	Translation initiation b2140 9 ribosome(s) bound	1 b2140_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b2140_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_ini_b2183_13_rib	Translation initiation b2183 13 ribosome(s) bound	1 b2183_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b2183_13	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_ini_b2183_1_rib	Translation initiation b2183 1 ribosome(s) bound	1 b2183_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2183_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_ini_b2183_6_rib	Translation initiation b2183 6 ribosome(s) bound	1 b2183_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b2183_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_ini_b2185_1_rib	Translation initiation b2185 1 ribosome(s) bound	1 b2185_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2185_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	5.06E+01	50.6475
tl_ini_b2185_2_rib	Translation initiation b2185 2 ribosome(s) bound	1 b2185_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b2185_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.62E+01	5.62E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_ini_b2185_5_rib	Translation initiation b2185 5 ribosome(s) bound	1 b2185_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b2185_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_ini_b2268_17_rib	Translation initiation b2268 17 ribosome(s) bound	1 b2268_mRNA_1 + 17 fmet_tRNA_met + 17 h2o + 17 rib_30_ini + 17 rib_50 --> 17 IF1_inact + 17 IF2-GDP + 17 IF3_inact + 17 h + 17 p + 1 rib_ini_b2268_17	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_ini_b2268_1_rib	Translation initiation b2268 1 ribosome(s) bound	1 b2268_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2268_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_ini_b2268_8_rib	Translation initiation b2268 8 ribosome(s) bound	1 b2268_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b2268_8	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_ini_b2317_12_rib	Translation initiation b2317 12 ribosome(s) bound	1 b2317_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b2317_12	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_ini_b2317_1_rib	Translation initiation b2317 1 ribosome(s) bound	1 b2317_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2317_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_ini_b2317_6_rib	Translation initiation b2317 6 ribosome(s) bound	1 b2317_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b2317_6	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_ini_b2318_15_rib	Translation initiation b2318 15 ribosome(s) bound	1 b2318_mRNA_1 + 15 fmet_tRNA_met + 15 h2o + 15 rib_30_ini + 15 rib_50 --> 15 IF1_inact + 15 IF2-GDP + 15 IF3_inact + 15 h + 15 p + 1 rib_ini_b2318_15	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_ini_b2318_1_rib	Translation initiation b2318 1 ribosome(s) bound	1 b2318_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2318_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_ini_b2318_7_rib	Translation initiation b2318 7 ribosome(s) bound	1 b2318_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b2318_7	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_ini_b2319_19_rib	Translation initiation b2319 19 ribosome(s) bound	1 b2319_mRNA_1 + 19 fmet_tRNA_met + 19 h2o + 19 rib_30_ini + 19 rib_50 --> 19 IF1_inact + 19 IF2-GDP + 19 IF3_inact + 19 h + 19 p + 1 rib_ini_b2319_19	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_ini_b2319_1_rib	Translation initiation b2319 1 ribosome(s) bound	1 b2319_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2319_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_ini_b2319_9_rib	Translation initiation b2319 9 ribosome(s) bound	1 b2319_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b2319_9	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_ini_b2320_11_rib	Translation initiation b2320 11 ribosome(s) bound	1 b2320_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b2320_11	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_ini_b2320_1_rib	Translation initiation b2320 1 ribosome(s) bound	1 b2320_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2320_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445

tl_ini_b2320_22_rib	Translation initiation b2320 22 ribosome(s) bound	1 b2320_mRNA_1 + 22 fmet_tRNA_met + 22 h2o + 22 rib_30_ini + 22 rib_50 --> 22 IF1_inact + 22 IF2-GDP + 22 IF3_inact + 22 h + 22 p + 1 rib_ini_b2320_22	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_ini_b2324_19_rib	Translation initiation b2324 19 ribosome(s) bound	1 b2324_mRNA_1 + 19 fmet_tRNA_met + 19 h2o + 19 rib_30_ini + 19 rib_50 --> 19 IF1_inact + 19 IF2-GDP + 19 IF3_inact + 19 h + 19 p + 1 rib_ini_b2324_19	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	1.19E+02	119.1375	0	1.80E+00	1.797
tl_ini_b2324_1_rib	Translation initiation b2324 1 ribosome(s) bound	1 b2324_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2324_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	1.19E+02	119.1375	0	1.80E+00	1.797
tl_ini_b2324_39_rib	Translation initiation b2324 39 ribosome(s) bound	1 b2324_mRNA_1 + 39 fmet_tRNA_met + 39 h2o + 39 rib_30_ini + 39 rib_50 --> 39 IF1_inact + 39 IF2-GDP + 39 IF3_inact + 39 h + 39 p + 1 rib_ini_b2324_39	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	8.44E+01	84.38009	0	1.80E+00	1.797
tl_ini_b2325_1_rib	Translation initiation b2325 1 ribosome(s) bound	1 b2325_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2325_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_ini_b2325_2_rib	Translation initiation b2325 2 ribosome(s) bound	1 b2325_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b2325_2	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_ini_b2325_5_rib	Translation initiation b2325 5 ribosome(s) bound	1 b2325_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b2325_5	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_ini_b2326_10_rib	Translation initiation b2326 10 ribosome(s) bound	1 b2326_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b2326_10	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276
tl_ini_b2326_1_rib	Translation initiation b2326 1 ribosome(s) bound	1 b2326_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2326_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276
tl_ini_b2326_5_rib	Translation initiation b2326 5 ribosome(s) bound	1 b2326_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b2326_5	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276
tl_ini_b2327_15_rib	Translation initiation b2327 15 ribosome(s) bound	1 b2327_mRNA_1 + 15 fmet_tRNA_met + 15 h2o + 15 rib_30_ini + 15 rib_50 --> 15 IF1_inact + 15 IF2-GDP + 15 IF3_inact + 15 h + 15 p + 1 rib_ini_b2327_15	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_ini_b2327_1_rib	Translation initiation b2327 1 ribosome(s) bound	1 b2327_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2327_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_ini_b2327_7_rib	Translation initiation b2327 7 ribosome(s) bound	1 b2327_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b2327_7	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_ini_b2328_16_rib	Translation initiation b2328 16 ribosome(s) bound	1 b2328_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b2328_16	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_ini_b2328_1_rib	Translation initiation b2328 1 ribosome(s) bound	1 b2328_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2328_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_ini_b2328_8_rib	Translation initiation b2328 8 ribosome(s) bound	1 b2328_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b2328_8	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_ini_b2329_10_rib	Translation initiation b2329 10 ribosome(s) bound	1 b2329_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b2329_10	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_ini_b2329_1_rib	Translation initiation b2329 1 ribosome(s) bound	1 b2329_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2329_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_ini_b2329_21_rib	Translation initiation b2329 21 ribosome(s) bound	1 b2329_mRNA_1 + 21 fmet_tRNA_met + 21 h2o + 21 rib_30_ini + 21 rib_50 --> 21 IF1_inact + 21 IF2-GDP + 21 IF3_inact + 21 h + 21 p + 1 rib_ini_b2329_21	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_ini_b2330_18_rib	Translation initiation b2330 18 ribosome(s) bound	1 b2330_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b2330_18	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_ini_b2330_1_rib	Translation initiation b2330 1 ribosome(s) bound	1 b2330_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2330_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_ini_b2330_9_rib	Translation initiation b2330 9 ribosome(s) bound	1 b2330_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b2330_9	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_ini_b2400_13_rib	Translation initiation b2400 13 ribosome(s) bound	1 b2400_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b2400_13	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.66E+02	165.6044	0	6.92E+00	6.917
tl_ini_b2400_1_rib	Translation initiation b2400 1 ribosome(s) bound	1 b2400_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2400_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.66E+02	165.6044	0	6.92E+00	6.917
tl_ini_b2400_27_rib	Translation initiation b2400 27 ribosome(s) bound	1 b2400_mRNA_1 + 27 fmet_tRNA_met + 27 h2o + 27 rib_30_ini + 27 rib_50 --> 27 IF1_inact + 27 IF2-GDP + 27 IF3_inact + 27 h + 27 p + 1 rib_ini_b2400_27	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.48E+02	148.3353	0	6.92E+00	6.917
tl_ini_b2514_12_rib	Translation initiation b2514 12 ribosome(s) bound	1 b2514_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b2514_12	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_ini_b2514_1_rib	Translation initiation b2514 1 ribosome(s) bound	1 b2514_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2514_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_ini_b2514_24_rib	Translation initiation b2514 24 ribosome(s) bound	1 b2514_mRNA_1 + 24 fmet_tRNA_met + 24 h2o + 24 rib_30_ini + 24 rib_50 --> 24 IF1_inact + 24 IF2-GDP + 24 IF3_inact + 24 h + 24 p + 1 rib_ini_b2514_24	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_ini_b2528_1_rib	Translation initiation b2528 1 ribosome(s) bound	1 b2528_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2528_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868
tl_ini_b2528_3_rib	Translation initiation b2528 3 ribosome(s) bound	1 b2528_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b2528_3	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868
tl_ini_b2528_6_rib	Translation initiation b2528 6 ribosome(s) bound	1 b2528_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b2528_6	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868
tl_ini_b2529_1_rib	Translation initiation b2529 1 ribosome(s) bound	1 b2529_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2529_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_ini_b2529_3_rib	Translation initiation b2529 3 ribosome(s) bound	1 b2529_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b2529_3	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_ini_b2529_7_rib	Translation initiation b2529 7 ribosome(s) bound	1 b2529_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b2529_7	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_ini_b2530_11_rib	Translation initiation b2530 11 ribosome(s) bound	1 b2530_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b2530_11	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_ini_b2530_1_rib	Translation initiation b2530 1 ribosome(s) bound	1 b2530_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2530_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_ini_b2530_23_rib	Translation initiation b2530 23 ribosome(s) bound	1 b2530_mRNA_1 + 23 fmet_tRNA_met + 23 h2o + 23 rib_30_ini + 23 rib_50 --> 23 IF1_inact + 23 IF2-GDP + 23 IF3_inact + 23 h + 23 p + 1 rib_ini_b2530_23	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_ini_b2531_1_rib	Translation initiation b2531 1 ribosome(s) bound	1 b2531_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2531_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958

tl_ini_b2531_4_rib	Translation initiation b2531 4 ribosome(s) bound	1 b2531_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b2531_4	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_ini_b2531_9_rib	Translation initiation b2531 9 ribosome(s) bound	1 b2531_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b2531_9	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_ini_b2559_10_rib	Translation initiation b2559 10 ribosome(s) bound	1 b2559_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b2559_10	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_ini_b2559_1_rib	Translation initiation b2559 1 ribosome(s) bound	1 b2559_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2559_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_ini_b2559_5_rib	Translation initiation b2559 5 ribosome(s) bound	1 b2559_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b2559_5	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_ini_b2560_12_rib	Translation initiation b2560 12 ribosome(s) bound	1 b2560_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b2560_12	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641
tl_ini_b2560_1_rib	Translation initiation b2560 1 ribosome(s) bound	1 b2560_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2560_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641
tl_ini_b2560_6_rib	Translation initiation b2560 6 ribosome(s) bound	1 b2560_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b2560_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641
tl_ini_b2563_1_rib	Translation initiation b2563 1 ribosome(s) bound	1 b2563_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2563_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_ini_b2563_3_rib	Translation initiation b2563 3 ribosome(s) bound	1 b2563_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b2563_3	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_ini_b2563_7_rib	Translation initiation b2563 7 ribosome(s) bound	1 b2563_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b2563_7	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_ini_b2564_14_rib	Translation initiation b2564 14 ribosome(s) bound	1 b2564_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b2564_14	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_ini_b2564_1_rib	Translation initiation b2564 1 ribosome(s) bound	1 b2564_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2564_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_ini_b2564_7_rib	Translation initiation b2564 7 ribosome(s) bound	1 b2564_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b2564_7	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_ini_b2565_14_rib	Translation initiation b2565 14 ribosome(s) bound	1 b2565_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b2565_14	irreversible	Translation	0.00E+00	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726
tl_ini_b2565_1_rib	Translation initiation b2565 1 ribosome(s) bound	1 b2565_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2565_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726
tl_ini_b2565_7_rib	Translation initiation b2565 7 ribosome(s) bound	1 b2565_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b2565_7	irreversible	Translation	0.00E+00	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726
tl_ini_b2566_17_rib	Translation initiation b2566 17 ribosome(s) bound	1 b2566_mRNA_1 + 17 fmet_tRNA_met + 17 h2o + 17 rib_30_ini + 17 rib_50 --> 17 IF1_inact + 17 IF2-GDP + 17 IF3_inact + 17 h + 17 p + 1 rib_ini_b2566_17	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_ini_b2566_1_rib	Translation initiation b2566 1 ribosome(s) bound	1 b2566_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2566_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_ini_b2566_8_rib	Translation initiation b2566 8 ribosome(s) bound	1 b2566_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b2566_8	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_ini_b2567_13_rib	Translation initiation b2567 13 ribosome(s) bound	1 b2567_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b2567_13	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085
tl_ini_b2567_1_rib	Translation initiation b2567 1 ribosome(s) bound	1 b2567_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2567_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085
tl_ini_b2567_6_rib	Translation initiation b2567 6 ribosome(s) bound	1 b2567_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b2567_6	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085
tl_ini_b2570_1_rib	Translation initiation b2570 1 ribosome(s) bound	1 b2570_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2570_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269
tl_ini_b2570_4_rib	Translation initiation b2570 4 ribosome(s) bound	1 b2570_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b2570_4	irreversible	Translation	0.00E+00	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269
tl_ini_b2570_9_rib	Translation initiation b2570 9 ribosome(s) bound	1 b2570_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b2570_9	irreversible	Translation	0.00E+00	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269
tl_ini_b2571_18_rib	Translation initiation b2571 18 ribosome(s) bound	1 b2571_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b2571_18	irreversible	Translation	0.00E+00	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459
tl_ini_b2571_1_rib	Translation initiation b2571 1 ribosome(s) bound	1 b2571_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2571_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459
tl_ini_b2571_9_rib	Translation initiation b2571 9 ribosome(s) bound	1 b2571_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b2571_9	irreversible	Translation	0.00E+00	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459
tl_ini_b2572_12_rib	Translation initiation b2572 12 ribosome(s) bound	1 b2572_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b2572_12	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_ini_b2572_1_rib	Translation initiation b2572 1 ribosome(s) bound	1 b2572_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2572_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_ini_b2572_6_rib	Translation initiation b2572 6 ribosome(s) bound	1 b2572_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b2572_6	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_ini_b2573_11_rib	Translation initiation b2573 11 ribosome(s) bound	1 b2573_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b2573_11	irreversible	Translation	0.00E+00	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579
tl_ini_b2573_1_rib	Translation initiation b2573 1 ribosome(s) bound	1 b2573_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2573_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579
tl_ini_b2573_5_rib	Translation initiation b2573 5 ribosome(s) bound	1 b2573_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b2573_5	irreversible	Translation	0.00E+00	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579
tl_ini_b2593_14_rib	Translation initiation b2593 14 ribosome(s) bound	1 b2593_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b2593_14	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_ini_b2593_1_rib	Translation initiation b2593 1 ribosome(s) bound	1 b2593_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2593_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_ini_b2593_7_rib	Translation initiation b2593 7 ribosome(s) bound	1 b2593_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b2593_7	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716

tl_ini_b2594_19_rib	Translation initiation b2594 19 ribosome(s) bound	1 b2594_mRNA_1 + 19 fmet_tRNA_met + 19 h2o + 19 rib_30_ini + 19 rib_50 --> 19 IF1_inact + 19 IF2-GDP + 19 IF3_inact + 19 h + 19 p + 1 rib_ini_b2594_19	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916
tl_ini_b2594_1_rib	Translation initiation b2594 1 ribosome(s) bound	1 b2594_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2594_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916
tl_ini_b2594_9_rib	Translation initiation b2594 9 ribosome(s) bound	1 b2594_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b2594_9	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916
tl_ini_b2606_1_rib	Translation initiation b2606 1 ribosome(s) bound	1 b2606_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2606_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	2.29E+01	22.9428
tl_ini_b2606_3_rib	Translation initiation b2606 3 ribosome(s) bound	1 b2606_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b2606_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.65E+01	3.65E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b2606_6_rib	Translation initiation b2606 6 ribosome(s) bound	1 b2606_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b2606_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_ini_b2607_15_rib	Translation initiation b2607 15 ribosome(s) bound	1 b2607_mRNA_1 + 15 fmet_tRNA_met + 15 h2o + 15 rib_30_ini + 15 rib_50 --> 15 IF1_inact + 15 IF2-GDP + 15 IF3_inact + 15 h + 15 p + 1 rib_ini_b2607_15	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_ini_b2607_1_rib	Translation initiation b2607 1 ribosome(s) bound	1 b2607_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2607_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_ini_b2607_7_rib	Translation initiation b2607 7 ribosome(s) bound	1 b2607_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b2607_7	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_ini_b2608_10_rib	Translation initiation b2608 10 ribosome(s) bound	1 b2608_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b2608_10	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_ini_b2608_1_rib	Translation initiation b2608 1 ribosome(s) bound	1 b2608_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2608_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_ini_b2608_5_rib	Translation initiation b2608 5 ribosome(s) bound	1 b2608_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b2608_5	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_ini_b2609_1_rib	Translation initiation b2609 1 ribosome(s) bound	1 b2609_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2609_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.02E+01	9.02E+01	0	8.29E+01	82.88	0	2.67E+01	26.71867
tl_ini_b2609_2_rib	Translation initiation b2609 2 ribosome(s) bound	1 b2609_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b2609_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.28E+01	5.28E+01	0	4.14E+01	41.44	0	3.56E+01	35.579
tl_ini_b2609_4_rib	Translation initiation b2609 4 ribosome(s) bound	1 b2609_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b2609_4	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_ini_b2614_11_rib	Translation initiation b2614 11 ribosome(s) bound	1 b2614_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b2614_11	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_ini_b2614_1_rib	Translation initiation b2614 1 ribosome(s) bound	1 b2614_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2614_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_ini_b2614_5_rib	Translation initiation b2614 5 ribosome(s) bound	1 b2614_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b2614_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_ini_b2697_1_rib	Translation initiation b2697 1 ribosome(s) bound	1 b2697_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2697_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	9.04E+01	90.428	0	2.46E+00	2.459
tl_ini_b2697_25_rib	Translation initiation b2697 25 ribosome(s) bound	1 b2697_mRNA_1 + 25 fmet_tRNA_met + 25 h2o + 25 rib_30_ini + 25 rib_50 --> 25 IF1_inact + 25 IF2-GDP + 25 IF3_inact + 25 h + 25 p + 1 rib_ini_b2697_25	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	9.04E+01	90.428	0	2.46E+00	2.459
tl_ini_b2697_51_rib	Translation initiation b2697 51 ribosome(s) bound	1 b2697_mRNA_1 + 51 fmet_tRNA_met + 51 h2o + 51 rib_30_ini + 51 rib_50 --> 51 IF1_inact + 51 IF2-GDP + 51 IF3_inact + 51 h + 51 p + 1 rib_ini_b2697_51	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	6.04E+01	60.39927	0	2.46E+00	2.459
tl_ini_b2741_19_rib	Translation initiation b2741 19 ribosome(s) bound	1 b2741_mRNA_1 + 19 fmet_tRNA_met + 19 h2o + 19 rib_30_ini + 19 rib_50 --> 19 IF1_inact + 19 IF2-GDP + 19 IF3_inact + 19 h + 19 p + 1 rib_ini_b2741_19	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.53E+02	253.0722	0	7.30E+00	7.301
tl_ini_b2741_1_rib	Translation initiation b2741 1 ribosome(s) bound	1 b2741_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2741_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.58E+02	257.646	0	7.30E+00	7.301
tl_ini_b2741_9_rib	Translation initiation b2741 9 ribosome(s) bound	1 b2741_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b2741_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.58E+02	257.646	0	7.30E+00	7.301
tl_ini_b2742_11_rib	Translation initiation b2742 11 ribosome(s) bound	1 b2742_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b2742_11	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_ini_b2742_1_rib	Translation initiation b2742 1 ribosome(s) bound	1 b2742_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2742_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_ini_b2742_22_rib	Translation initiation b2742 22 ribosome(s) bound	1 b2742_mRNA_1 + 22 fmet_tRNA_met + 22 h2o + 22 rib_30_ini + 22 rib_50 --> 22 IF1_inact + 22 IF2-GDP + 22 IF3_inact + 22 h + 22 p + 1 rib_ini_b2742_22	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_ini_b2745_10_rib	Translation initiation b2745 10 ribosome(s) bound	1 b2745_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b2745_10	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_ini_b2745_1_rib	Translation initiation b2745 1 ribosome(s) bound	1 b2745_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2745_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_ini_b2745_20_rib	Translation initiation b2745 20 ribosome(s) bound	1 b2745_mRNA_1 + 20 fmet_tRNA_met + 20 h2o + 20 rib_30_ini + 20 rib_50 --> 20 IF1_inact + 20 IF2-GDP + 20 IF3_inact + 20 h + 20 p + 1 rib_ini_b2745_20	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_ini_b2779_12_rib	Translation initiation b2779 12 ribosome(s) bound	1 b2779_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b2779_12	irreversible	Translation	0.00E+00	1.00E+09	0	2.91E+01	2.91E+01	0	3.96E+01	39.60592	0	4.80E+00	4.802417
tl_ini_b2779_1_rib	Translation initiation b2779 1 ribosome(s) bound	1 b2779_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2779_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.17E+01	5.17E+01	0	8.35E+01	83.50058	0	9.05E+00	9.054
tl_ini_b2779_25_rib	Translation initiation b2779 25 ribosome(s) bound	1 b2779_mRNA_1 + 25 fmet_tRNA_met + 25 h2o + 25 rib_30_ini + 25 rib_50 --> 25 IF1_inact + 25 IF2-GDP + 25 IF3_inact + 25 h + 25 p + 1 rib_ini_b2779_25	irreversible	Translation	0.00E+00	1.00E+09	0	1.76E+01	1.76E+01	0	1.91E+01	19.09647	0	2.31E+00	2.30516
tl_ini_b2780_16_rib	Translation initiation b2780 16 ribosome(s) bound	1 b2780_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b2780_16	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_ini_b2780_1_rib	Translation initiation b2780 1 ribosome(s) bound	1 b2780_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2780_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_ini_b2780_32_rib	Translation initiation b2780 32 ribosome(s) bound	1 b2780_mRNA_1 + 32 fmet_tRNA_met + 32 h2o + 32 rib_30_ini + 32 rib_50 --> 32 IF1_inact + 32 IF2-GDP + 32 IF3_inact + 32 h + 32 p + 1 rib_ini_b2780_32	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_ini_b2785_12_rib	Translation initiation b2785 12 ribosome(s) bound	1 b2785_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b2785_12	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145
tl_ini_b2785_1_rib	Translation initiation b2785 1 ribosome(s) bound	1 b2785_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2785_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145

tl_ini_b2785_25_rib	Translation initiation b2785 25 ribosome(s) bound	1 b2785_mRNA_1 + 25 fmet_tRNA_met + 25 h2o + 25 rib_30_ini + 25 rib_50 --> 25 IF1_inact + 25 IF2-GDP + 25 IF3_inact + 25 h + 25 p + 1 rib_ini_b2785_25	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145
tl_ini_b2790_1_rib	Translation initiation b2790 1 ribosome(s) bound	1 b2790_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2790_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789
tl_ini_b2790_4_rib	Translation initiation b2790 4 ribosome(s) bound	1 b2790_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b2790_4	irreversible	Translation	0.00E+00	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789
tl_ini_b2790_8_rib	Translation initiation b2790 8 ribosome(s) bound	1 b2790_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b2790_8	irreversible	Translation	0.00E+00	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789
tl_ini_b2791_15_rib	Translation initiation b2791 15 ribosome(s) bound	1 b2791_mRNA_1 + 15 fmet_tRNA_met + 15 h2o + 15 rib_30_ini + 15 rib_50 --> 15 IF1_inact + 15 IF2-GDP + 15 IF3_inact + 15 h + 15 p + 1 rib_ini_b2791_15	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_ini_b2791_1_rib	Translation initiation b2791 1 ribosome(s) bound	1 b2791_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2791_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_ini_b2791_7_rib	Translation initiation b2791 7 ribosome(s) bound	1 b2791_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b2791_7	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_ini_b2792_1_rib	Translation initiation b2792 1 ribosome(s) bound	1 b2792_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2792_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_ini_b2792_3_rib	Translation initiation b2792 3 ribosome(s) bound	1 b2792_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b2792_3	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_ini_b2792_6_rib	Translation initiation b2792 6 ribosome(s) bound	1 b2792_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b2792_6	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_ini_b2794_16_rib	Translation initiation b2794 16 ribosome(s) bound	1 b2794_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b2794_16	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_ini_b2794_1_rib	Translation initiation b2794 1 ribosome(s) bound	1 b2794_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2794_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_ini_b2794_8_rib	Translation initiation b2794 8 ribosome(s) bound	1 b2794_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b2794_8	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_ini_b2890_14_rib	Translation initiation b2890 14 ribosome(s) bound	1 b2890_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b2890_14	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_ini_b2890_1_rib	Translation initiation b2890 1 ribosome(s) bound	1 b2890_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2890_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_ini_b2890_29_rib	Translation initiation b2890 29 ribosome(s) bound	1 b2890_mRNA_1 + 29 fmet_tRNA_met + 29 h2o + 29 rib_30_ini + 29 rib_50 --> 29 IF1_inact + 29 IF2-GDP + 29 IF3_inact + 29 h + 29 p + 1 rib_ini_b2890_29	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_ini_b2891_10_rib	Translation initiation b2891 10 ribosome(s) bound	1 b2891_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b2891_10	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121
tl_ini_b2891_1_rib	Translation initiation b2891 1 ribosome(s) bound	1 b2891_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2891_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121
tl_ini_b2891_21_rib	Translation initiation b2891 21 ribosome(s) bound	1 b2891_mRNA_1 + 21 fmet_tRNA_met + 21 h2o + 21 rib_30_ini + 21 rib_50 --> 21 IF1_inact + 21 IF2-GDP + 21 IF3_inact + 21 h + 21 p + 1 rib_ini_b2891_21	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121
tl_ini_b2892_16_rib	Translation initiation b2892 16 ribosome(s) bound	1 b2892_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b2892_16	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922
tl_ini_b2892_1_rib	Translation initiation b2892 1 ribosome(s) bound	1 b2892_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2892_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922
tl_ini_b2892_33_rib	Translation initiation b2892 33 ribosome(s) bound	1 b2892_mRNA_1 + 33 fmet_tRNA_met + 33 h2o + 33 rib_30_ini + 33 rib_50 --> 33 IF1_inact + 33 IF2-GDP + 33 IF3_inact + 33 h + 33 p + 1 rib_ini_b2892_33	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922
tl_ini_b2893_13_rib	Translation initiation b2893 13 ribosome(s) bound	1 b2893_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b2893_13	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_ini_b2893_1_rib	Translation initiation b2893 1 ribosome(s) bound	1 b2893_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2893_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_ini_b2893_6_rib	Translation initiation b2893 6 ribosome(s) bound	1 b2893_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b2893_6	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_ini_b2946_14_rib	Translation initiation b2946 14 ribosome(s) bound	1 b2946_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b2946_14	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_ini_b2946_1_rib	Translation initiation b2946 1 ribosome(s) bound	1 b2946_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2946_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_ini_b2946_7_rib	Translation initiation b2946 7 ribosome(s) bound	1 b2946_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b2946_7	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_ini_b2947_18_rib	Translation initiation b2947 18 ribosome(s) bound	1 b2947_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b2947_18	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_ini_b2947_1_rib	Translation initiation b2947 1 ribosome(s) bound	1 b2947_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2947_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_ini_b2947_9_rib	Translation initiation b2947 9 ribosome(s) bound	1 b2947_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b2947_9	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_ini_b2959_1_rib	Translation initiation b2959 1 ribosome(s) bound	1 b2959_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2959_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_ini_b2959_3_rib	Translation initiation b2959 3 ribosome(s) bound	1 b2959_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b2959_3	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_ini_b2959_6_rib	Translation initiation b2959 6 ribosome(s) bound	1 b2959_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b2959_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_ini_b2960_14_rib	Translation initiation b2960 14 ribosome(s) bound	1 b2960_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b2960_14	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_ini_b2960_1_rib	Translation initiation b2960 1 ribosome(s) bound	1 b2960_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b2960_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_ini_b2960_7_rib	Translation initiation b2960 7 ribosome(s) bound	1 b2960_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b2960_7	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_ini_b3065_1_rib	Translation initiation b3065 1 ribosome(s) bound	1 b3065_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3065_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88

tl_ini_b3065_2_rib	Translation initiation b3065 2 ribosome(s) bound	1 b3065_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3065_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_ini_b3065_4_rib	Translation initiation b3065 4 ribosome(s) bound	1 b3065_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3065_4	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_ini_b3066_17_rib	Translation initiation b3066 17 ribosome(s) bound	1 b3066_mRNA_1 + 17 fmet_tRNA_met + 17 h2o + 17 rib_30_ini + 17 rib_50 --> 17 IF1_inact + 17 IF2-GDP + 17 IF3_inact + 17 h + 17 p + 1 rib_ini_b3066_17	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015
tl_ini_b3066_1_rib	Translation initiation b3066 1 ribosome(s) bound	1 b3066_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3066_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015
tl_ini_b3066_34_rib	Translation initiation b3066 34 ribosome(s) bound	1 b3066_mRNA_1 + 34 fmet_tRNA_met + 34 h2o + 34 rib_30_ini + 34 rib_50 --> 34 IF1_inact + 34 IF2-GDP + 34 IF3_inact + 34 h + 34 p + 1 rib_ini_b3066_34	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015
tl_ini_b3067_18_rib	Translation initiation b3067 18 ribosome(s) bound	1 b3067_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b3067_18	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	1.21E+02	120.6262	0	2.83E+00	2.829
tl_ini_b3067_1_rib	Translation initiation b3067 1 ribosome(s) bound	1 b3067_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3067_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	1.21E+02	120.6262	0	2.83E+00	2.829
tl_ini_b3067_36_rib	Translation initiation b3067 36 ribosome(s) bound	1 b3067_mRNA_1 + 36 fmet_tRNA_met + 36 h2o + 36 rib_30_ini + 36 rib_50 --> 36 IF1_inact + 36 IF2-GDP + 36 IF3_inact + 36 h + 36 p + 1 rib_ini_b3067_36	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	7.71E+01	77.12959	0	2.83E+00	2.829
tl_ini_b3124_12_rib	Translation initiation b3124 12 ribosome(s) bound	1 b3124_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b3124_12	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399
tl_ini_b3124_1_rib	Translation initiation b3124 1 ribosome(s) bound	1 b3124_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3124_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399
tl_ini_b3124_24_rib	Translation initiation b3124 24 ribosome(s) bound	1 b3124_mRNA_1 + 24 fmet_tRNA_met + 24 h2o + 24 rib_30_ini + 24 rib_50 --> 24 IF1_inact + 24 IF2-GDP + 24 IF3_inact + 24 h + 24 p + 1 rib_ini_b3124_24	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399
tl_ini_b3125_17_rib	Translation initiation b3125 17 ribosome(s) bound	1 b3125_mRNA_1 + 17 fmet_tRNA_met + 17 h2o + 17 rib_30_ini + 17 rib_50 --> 17 IF1_inact + 17 IF2-GDP + 17 IF3_inact + 17 h + 17 p + 1 rib_ini_b3125_17	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_ini_b3125_1_rib	Translation initiation b3125 1 ribosome(s) bound	1 b3125_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3125_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_ini_b3125_8_rib	Translation initiation b3125 8 ribosome(s) bound	1 b3125_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3125_8	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_ini_b3126_15_rib	Translation initiation b3126 15 ribosome(s) bound	1 b3126_mRNA_1 + 15 fmet_tRNA_met + 15 h2o + 15 rib_30_ini + 15 rib_50 --> 15 IF1_inact + 15 IF2-GDP + 15 IF3_inact + 15 h + 15 p + 1 rib_ini_b3126_15	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_ini_b3126_1_rib	Translation initiation b3126 1 ribosome(s) bound	1 b3126_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3126_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_ini_b3126_7_rib	Translation initiation b3126 7 ribosome(s) bound	1 b3126_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3126_7	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_ini_b3127_13_rib	Translation initiation b3127 13 ribosome(s) bound	1 b3127_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b3127_13	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_ini_b3127_1_rib	Translation initiation b3127 1 ribosome(s) bound	1 b3127_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3127_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_ini_b3127_26_rib	Translation initiation b3127 26 ribosome(s) bound	1 b3127_mRNA_1 + 26 fmet_tRNA_met + 26 h2o + 26 rib_30_ini + 26 rib_50 --> 26 IF1_inact + 26 IF2-GDP + 26 IF3_inact + 26 h + 26 p + 1 rib_ini_b3127_26	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_ini_b3164_1_rib	Translation initiation b3164 1 ribosome(s) bound	1 b3164_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3164_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.09E+01	6.09E+01	0	1.04E+02	103.7766	0	4.46E+00	4.456
tl_ini_b3164_21_rib	Translation initiation b3164 21 ribosome(s) bound	1 b3164_mRNA_1 + 21 fmet_tRNA_met + 21 h2o + 21 rib_30_ini + 21 rib_50 --> 21 IF1_inact + 21 IF2-GDP + 21 IF3_inact + 21 h + 21 p + 1 rib_ini_b3164_21	irreversible	Translation	0.00E+00	1.00E+09	0	2.76E+01	2.76E+01	0	3.41E+01	34.10083	0	4.12E+00	4.116357
tl_ini_b3164_43_rib	Translation initiation b3164 43 ribosome(s) bound	1 b3164_mRNA_1 + 43 fmet_tRNA_met + 43 h2o + 43 rib_30_ini + 43 rib_50 --> 43 IF1_inact + 43 IF2-GDP + 43 IF3_inact + 43 h + 43 p + 1 rib_ini_b3164_43	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	1.67E+01	16.65389	0	2.01E+00	2.010314
tl_ini_b3165_1_rib	Translation initiation b3165 1 ribosome(s) bound	1 b3165_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3165_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	5.44E+01	54.43625
tl_ini_b3165_2_rib	Translation initiation b3165 2 ribosome(s) bound	1 b3165_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3165_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_ini_b3165_5_rib	Translation initiation b3165 5 ribosome(s) bound	1 b3165_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3165_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_ini_b3166_18_rib	Translation initiation b3166 18 ribosome(s) bound	1 b3166_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b3166_18	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_ini_b3166_1_rib	Translation initiation b3166 1 ribosome(s) bound	1 b3166_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3166_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_ini_b3166_9_rib	Translation initiation b3166 9 ribosome(s) bound	1 b3166_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b3166_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_ini_b3167_1_rib	Translation initiation b3167 1 ribosome(s) bound	1 b3167_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3167_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_ini_b3167_3_rib	Translation initiation b3167 3 ribosome(s) bound	1 b3167_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3167_3	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_ini_b3167_7_rib	Translation initiation b3167 7 ribosome(s) bound	1 b3167_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3167_7	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_ini_b3168_1_rib	Translation initiation b3168 1 ribosome(s) bound	1 b3168_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3168_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.97E+01	2.97E+01	0	5.26E+01	52.64525	0	9.63E-01	0.9631374
tl_ini_b3168_26_rib	Translation initiation b3168 26 ribosome(s) bound	1 b3168_mRNA_1 + 26 fmet_tRNA_met + 26 h2o + 26 rib_30_ini + 26 rib_50 --> 26 IF1_inact + 26 IF2-GDP + 26 IF3_inact + 26 h + 26 p + 1 rib_ini_b3168_26	irreversible	Translation	0.00E+00	1.00E+09	0	3.08E+01	3.08E+01	0	5.28E+01	52.82823	0	1.89E+00	1.889231
tl_ini_b3168_52_rib	Translation initiation b3168 52 ribosome(s) bound	1 b3168_mRNA_1 + 52 fmet_tRNA_met + 52 h2o + 52 rib_30_ini + 52 rib_50 --> 52 IF1_inact + 52 IF2-GDP + 52 IF3_inact + 52 h + 52 p + 1 rib_ini_b3168_52	irreversible	Translation	0.00E+00	1.00E+09	0	3.08E+01	3.08E+01	0	3.90E+01	39.00161	2.51E-01	2.14E+00	1.8892309
tl_ini_b3169_14_rib	Translation initiation b3169 14 ribosome(s) bound	1 b3169_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b3169_14	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_ini_b3169_1_rib	Translation initiation b3169 1 ribosome(s) bound	1 b3169_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3169_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_ini_b3169_29_rib	Translation initiation b3169 29 ribosome(s) bound	1 b3169_mRNA_1 + 29 fmet_tRNA_met + 29 h2o + 29 rib_30_ini + 29 rib_50 --> 29 IF1_inact + 29 IF2-GDP + 29 IF3_inact + 29 h + 29 p + 1 rib_ini_b3169_29	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79

tl_ini_b3170_1_rib	Translation initiation b3170 1 ribosome(s) bound	1 b3170_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3170_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_ini_b3170_4_rib	Translation initiation b3170 4 ribosome(s) bound	1 b3170_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3170_4	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_ini_b3170_8_rib	Translation initiation b3170 8 ribosome(s) bound	1 b3170_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3170_8	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_ini_b3178_18_rib	Translation initiation b3178 18 ribosome(s) bound	1 b3178_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b3178_18	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_ini_b3178_1_rib	Translation initiation b3178 1 ribosome(s) bound	1 b3178_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3178_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_ini_b3178_37_rib	Translation initiation b3178 37 ribosome(s) bound	1 b3178_mRNA_1 + 37 fmet_tRNA_met + 37 h2o + 37 rib_30_ini + 37 rib_50 --> 37 IF1_inact + 37 IF2-GDP + 37 IF3_inact + 37 h + 37 p + 1 rib_ini_b3178_37	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_ini_b3179_12_rib	Translation initiation b3179 12 ribosome(s) bound	1 b3179_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b3179_12	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_ini_b3179_1_rib	Translation initiation b3179 1 ribosome(s) bound	1 b3179_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3179_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_ini_b3179_6_rib	Translation initiation b3179 6 ribosome(s) bound	1 b3179_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3179_6	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_ini_b3181_1_rib	Translation initiation b3181 1 ribosome(s) bound	1 b3181_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3181_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_ini_b3181_4_rib	Translation initiation b3181 4 ribosome(s) bound	1 b3181_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3181_4	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_ini_b3181_9_rib	Translation initiation b3181 9 ribosome(s) bound	1 b3181_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b3181_9	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_ini_b3185_1_rib	Translation initiation b3185 1 ribosome(s) bound	1 b3185_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3185_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	2.63E+01	26.25875
tl_ini_b3185_2_rib	Translation initiation b3185 2 ribosome(s) bound	1 b3185_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3185_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.51E+01	5.51E+01	0	4.14E+01	41.44	0	3.34E+01	33.439
tl_ini_b3185_5_rib	Translation initiation b3185 5 ribosome(s) bound	1 b3185_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3185_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_ini_b3186_1_rib	Translation initiation b3186 1 ribosome(s) bound	1 b3186_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3186_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	3.71E+01	37.0548
tl_ini_b3186_3_rib	Translation initiation b3186 3 ribosome(s) bound	1 b3186_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3186_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b3186_6_rib	Translation initiation b3186 6 ribosome(s) bound	1 b3186_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3186_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_ini_b3201_14_rib	Translation initiation b3201 14 ribosome(s) bound	1 b3201_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b3201_14	irreversible	Translation	0.00E+00	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007
tl_ini_b3201_1_rib	Translation initiation b3201 1 ribosome(s) bound	1 b3201_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3201_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007
tl_ini_b3201_7_rib	Translation initiation b3201 7 ribosome(s) bound	1 b3201_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3201_7	irreversible	Translation	0.00E+00	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007
tl_ini_b3202_14_rib	Translation initiation b3202 14 ribosome(s) bound	1 b3202_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b3202_14	irreversible	Translation	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917
tl_ini_b3202_1_rib	Translation initiation b3202 1 ribosome(s) bound	1 b3202_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3202_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917
tl_ini_b3202_28_rib	Translation initiation b3202 28 ribosome(s) bound	1 b3202_mRNA_1 + 28 fmet_tRNA_met + 28 h2o + 28 rib_30_ini + 28 rib_50 --> 28 IF1_inact + 28 IF2-GDP + 28 IF3_inact + 28 h + 28 p + 1 rib_ini_b3202_28	irreversible	Translation	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917
tl_ini_b3203_1_rib	Translation initiation b3203 1 ribosome(s) bound	1 b3203_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3203_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_ini_b3203_2_rib	Translation initiation b3203 2 ribosome(s) bound	1 b3203_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3203_2	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_ini_b3203_5_rib	Translation initiation b3203 5 ribosome(s) bound	1 b3203_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3203_5	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_ini_b3204_1_rib	Translation initiation b3204 1 ribosome(s) bound	1 b3204_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3204_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607
tl_ini_b3204_4_rib	Translation initiation b3204 4 ribosome(s) bound	1 b3204_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3204_4	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607
tl_ini_b3204_9_rib	Translation initiation b3204 9 ribosome(s) bound	1 b3204_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b3204_9	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607
tl_ini_b3205_16_rib	Translation initiation b3205 16 ribosome(s) bound	1 b3205_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b3205_16	irreversible	Translation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087
tl_ini_b3205_1_rib	Translation initiation b3205 1 ribosome(s) bound	1 b3205_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3205_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087
tl_ini_b3205_8_rib	Translation initiation b3205 8 ribosome(s) bound	1 b3205_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3205_8	irreversible	Translation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087
tl_ini_b3206_1_rib	Translation initiation b3206 1 ribosome(s) bound	1 b3206_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3206_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_ini_b3206_2_rib	Translation initiation b3206 2 ribosome(s) bound	1 b3206_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3206_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_ini_b3206_5_rib	Translation initiation b3206 5 ribosome(s) bound	1 b3206_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3206_5	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_ini_b3230_1_rib	Translation initiation b3230 1 ribosome(s) bound	1 b3230_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3230_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.88E+01	9.88E+01	0	8.29E+01	82.88	0	1.95E+01	19.46933
tl_ini_b3230_3_rib	Translation initiation b3230 3 ribosome(s) bound	1 b3230_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3230_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.68E+01	3.68E+01	0	2.76E+01	27.62667	0	2.56E+01	25.568

tl_ini_b3230_7_rib	Translation initiation b3230 7 ribosome(s) bound	1 b3230_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3230_7	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_ini_b3231_1_rib	Translation initiation b3231 1 ribosome(s) bound	1 b3231_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3231_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.07E+01	60.68343
tl_ini_b3231_4_rib	Translation initiation b3231 4 ribosome(s) bound	1 b3231_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3231_4	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_ini_b3231_8_rib	Translation initiation b3231 8 ribosome(s) bound	1 b3231_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3231_8	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_ini_b3247_14_rib	Translation initiation b3247 14 ribosome(s) bound	1 b3247_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b3247_14	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_ini_b3247_1_rib	Translation initiation b3247 1 ribosome(s) bound	1 b3247_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3247_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_ini_b3247_28_rib	Translation initiation b3247 28 ribosome(s) bound	1 b3247_mRNA_1 + 28 fmet_tRNA_met + 28 h2o + 28 rib_30_ini + 28 rib_50 --> 28 IF1_inact + 28 IF2-GDP + 28 IF3_inact + 28 h + 28 p + 1 rib_ini_b3247_28	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_ini_b3248_11_rib	Translation initiation b3248 11 ribosome(s) bound	1 b3248_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b3248_11	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734
tl_ini_b3248_1_rib	Translation initiation b3248 1 ribosome(s) bound	1 b3248_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3248_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734
tl_ini_b3248_5_rib	Translation initiation b3248 5 ribosome(s) bound	1 b3248_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3248_5	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734
tl_ini_b3249_1_rib	Translation initiation b3249 1 ribosome(s) bound	1 b3249_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3249_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_ini_b3249_4_rib	Translation initiation b3249 4 ribosome(s) bound	1 b3249_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3249_4	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_ini_b3249_9_rib	Translation initiation b3249 9 ribosome(s) bound	1 b3249_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b3249_9	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_ini_b3250_10_rib	Translation initiation b3250 10 ribosome(s) bound	1 b3250_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b3250_10	irreversible	Translation	0.00E+00	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404
tl_ini_b3250_1_rib	Translation initiation b3250 1 ribosome(s) bound	1 b3250_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3250_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404
tl_ini_b3250_21_rib	Translation initiation b3250 21 ribosome(s) bound	1 b3250_mRNA_1 + 21 fmet_tRNA_met + 21 h2o + 21 rib_30_ini + 21 rib_50 --> 21 IF1_inact + 21 IF2-GDP + 21 IF3_inact + 21 h + 21 p + 1 rib_ini_b3250_21	irreversible	Translation	0.00E+00	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404
tl_ini_b3251_10_rib	Translation initiation b3251 10 ribosome(s) bound	1 b3251_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b3251_10	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_ini_b3251_1_rib	Translation initiation b3251 1 ribosome(s) bound	1 b3251_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3251_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_ini_b3251_20_rib	Translation initiation b3251 20 ribosome(s) bound	1 b3251_mRNA_1 + 20 fmet_tRNA_met + 20 h2o + 20 rib_30_ini + 20 rib_50 --> 20 IF1_inact + 20 IF2-GDP + 20 IF3_inact + 20 h + 20 p + 1 rib_ini_b3251_20	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_ini_b3257_1_rib	Translation initiation b3257 1 ribosome(s) bound	1 b3257_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3257_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996
tl_ini_b3257_2_rib	Translation initiation b3257 2 ribosome(s) bound	1 b3257_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3257_2	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996
tl_ini_b3257_4_rib	Translation initiation b3257 4 ribosome(s) bound	1 b3257_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3257_4	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996
tl_ini_b3258_14_rib	Translation initiation b3258 14 ribosome(s) bound	1 b3258_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b3258_14	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_ini_b3258_1_rib	Translation initiation b3258 1 ribosome(s) bound	1 b3258_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3258_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_ini_b3258_28_rib	Translation initiation b3258 28 ribosome(s) bound	1 b3258_mRNA_1 + 28 fmet_tRNA_met + 28 h2o + 28 rib_30_ini + 28 rib_50 --> 28 IF1_inact + 28 IF2-GDP + 28 IF3_inact + 28 h + 28 p + 1 rib_ini_b3258_28	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_ini_b3259_17_rib	Translation initiation b3259 17 ribosome(s) bound	1 b3259_mRNA_1 + 17 fmet_tRNA_met + 17 h2o + 17 rib_30_ini + 17 rib_50 --> 17 IF1_inact + 17 IF2-GDP + 17 IF3_inact + 17 h + 17 p + 1 rib_ini_b3259_17	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_ini_b3259_1_rib	Translation initiation b3259 1 ribosome(s) bound	1 b3259_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3259_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_ini_b3259_8_rib	Translation initiation b3259 8 ribosome(s) bound	1 b3259_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3259_8	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_ini_b3260_18_rib	Translation initiation b3260 18 ribosome(s) bound	1 b3260_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b3260_18	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_ini_b3260_1_rib	Translation initiation b3260 1 ribosome(s) bound	1 b3260_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3260_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_ini_b3260_9_rib	Translation initiation b3260 9 ribosome(s) bound	1 b3260_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b3260_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_ini_b3261_1_rib	Translation initiation b3261 1 ribosome(s) bound	1 b3261_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3261_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_ini_b3261_2_rib	Translation initiation b3261 2 ribosome(s) bound	1 b3261_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3261_2	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_ini_b3261_5_rib	Translation initiation b3261 5 ribosome(s) bound	1 b3261_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3261_5	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_ini_b3280_1_rib	Translation initiation b3280 1 ribosome(s) bound	1 b3280_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3280_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_ini_b3280_2_rib	Translation initiation b3280 2 ribosome(s) bound	1 b3280_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3280_2	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_ini_b3280_5_rib	Translation initiation b3280 5 ribosome(s) bound	1 b3280_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3280_5	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_ini_b3281_16_rib	Translation initiation b3281 16 ribosome(s) bound	1 b3281_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b3281_16	irreversible	Translation	0.00E+00	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582

tl_ini_b3281_1_rib	Translation initiation b3281 1 ribosome(s) bound	1 b3281_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3281_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582
tl_ini_b3281_8_rib	Translation initiation b3281 8 ribosome(s) bound	1 b3281_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3281_8	irreversible	Translation	0.00E+00	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582
tl_ini_b3282_11_rib	Translation initiation b3282 11 ribosome(s) bound	1 b3282_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b3282_11	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_ini_b3282_1_rib	Translation initiation b3282 1 ribosome(s) bound	1 b3282_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3282_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_ini_b3282_5_rib	Translation initiation b3282 5 ribosome(s) bound	1 b3282_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3282_5	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_ini_b3283_10_rib	Translation initiation b3283 10 ribosome(s) bound	1 b3283_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b3283_10	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_ini_b3283_1_rib	Translation initiation b3283 1 ribosome(s) bound	1 b3283_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3283_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_ini_b3283_5_rib	Translation initiation b3283 5 ribosome(s) bound	1 b3283_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3283_5	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_ini_b3287_1_rib	Translation initiation b3287 1 ribosome(s) bound	1 b3287_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3287_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_ini_b3287_4_rib	Translation initiation b3287 4 ribosome(s) bound	1 b3287_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3287_4	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_ini_b3287_9_rib	Translation initiation b3287 9 ribosome(s) bound	1 b3287_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b3287_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_ini_b3288_18_rib	Translation initiation b3288 18 ribosome(s) bound	1 b3288_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b3288_18	irreversible	Translation	0.00E+00	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724
tl_ini_b3288_1_rib	Translation initiation b3288 1 ribosome(s) bound	1 b3288_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3288_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724
tl_ini_b3288_9_rib	Translation initiation b3288 9 ribosome(s) bound	1 b3288_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b3288_9	irreversible	Translation	0.00E+00	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724
tl_ini_b3289_12_rib	Translation initiation b3289 12 ribosome(s) bound	1 b3289_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b3289_12	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147
tl_ini_b3289_1_rib	Translation initiation b3289 1 ribosome(s) bound	1 b3289_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3289_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147
tl_ini_b3289_25_rib	Translation initiation b3289 25 ribosome(s) bound	1 b3289_mRNA_1 + 25 fmet_tRNA_met + 25 h2o + 25 rib_30_ini + 25 rib_50 --> 25 IF1_inact + 25 IF2-GDP + 25 IF3_inact + 25 h + 25 p + 1 rib_ini_b3289_25	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147
tl_ini_b3294_1_rib	Translation initiation b3294 1 ribosome(s) bound	1 b3294_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3294_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.08E+01	8.08E+01	0	8.24E+01	82.41571	0	3.12E+01	31.17567
tl_ini_b3294_3_rib	Translation initiation b3294 3 ribosome(s) bound	1 b3294_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3294_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b3294_7_rib	Translation initiation b3294 7 ribosome(s) bound	1 b3294_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3294_7	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_ini_b3295_19_rib	Translation initiation b3295 19 ribosome(s) bound	1 b3295_mRNA_1 + 19 fmet_tRNA_met + 19 h2o + 19 rib_30_ini + 19 rib_50 --> 19 IF1_inact + 19 IF2-GDP + 19 IF3_inact + 19 h + 19 p + 1 rib_ini_b3295_19	irreversible	Translation	0.00E+00	1.00E+09	0	5.08E+01	5.08E+01	0	6.85E+01	68.48818	0	1.08E+01	10.78084
tl_ini_b3295_1_rib	Translation initiation b3295 1 ribosome(s) bound	1 b3295_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3295_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.57E+01	6.57E+01	0	8.90E+01	89.02961	0	2.00E+01	20.002
tl_ini_b3295_9_rib	Translation initiation b3295 9 ribosome(s) bound	1 b3295_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b3295_9	irreversible	Translation	0.00E+00	1.00E+09	0	5.90E+01	5.90E+01	0	8.48E+01	84.82002	0	2.00E+01	20.002
tl_ini_b3296_12_rib	Translation initiation b3296 12 ribosome(s) bound	1 b3296_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b3296_12	irreversible	Translation	0.00E+00	1.00E+09	0	9.38E+00	9.38E+00	0	6.91E+00	6.906667	0	6.91E+00	6.906667
tl_ini_b3296_1_rib	Translation initiation b3296 1 ribosome(s) bound	1 b3296_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3296_1	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	8.18E+01	81.79139	0	3.13E+01	31.33309
tl_ini_b3296_6_rib	Translation initiation b3296 6 ribosome(s) bound	1 b3296_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3296_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_ini_b3297_1_rib	Translation initiation b3297 1 ribosome(s) bound	1 b3297_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3297_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.47E+01	8.47E+01	0	8.29E+01	82.88	0	3.56E+01	35.609
tl_ini_b3297_3_rib	Translation initiation b3297 3 ribosome(s) bound	1 b3297_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3297_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b3297_7_rib	Translation initiation b3297 7 ribosome(s) bound	1 b3297_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3297_7	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_ini_b3298_1_rib	Translation initiation b3298 1 ribosome(s) bound	1 b3298_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3298_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b3298_3_rib	Translation initiation b3298 3 ribosome(s) bound	1 b3298_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3298_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b3298_6_rib	Translation initiation b3298 6 ribosome(s) bound	1 b3298_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3298_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_ini_b3299_1_rib	Translation initiation b3299 1 ribosome(s) bound	1 b3299_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3299_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b3299_2_rib	Translation initiation b3299 2 ribosome(s) bound	1 b3299_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3299_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_ini_b3300_13_rib	Translation initiation b3300 13 ribosome(s) bound	1 b3300_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b3300_13	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_ini_b3300_1_rib	Translation initiation b3300 1 ribosome(s) bound	1 b3300_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3300_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_ini_b3300_26_rib	Translation initiation b3300 26 ribosome(s) bound	1 b3300_mRNA_1 + 26 fmet_tRNA_met + 26 h2o + 26 rib_30_ini + 26 rib_50 --> 26 IF1_inact + 26 IF2-GDP + 26 IF3_inact + 26 h + 26 p + 1 rib_ini_b3300_26	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_ini_b3301_1_rib	Translation initiation b3301 1 ribosome(s) bound	1 b3301_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3301_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.20E+01	4.20E+01	0	6.43E+01	64.27959	0	1.72E+01	17.22971

tl_ini_b3301_4_rib	Translation initiation b3301 4 ribosome(s) bound	1 b3301_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3301_4	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_ini_b3301_8_rib	Translation initiation b3301 8 ribosome(s) bound	1 b3301_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3301_8	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_ini_b3302_1_rib	Translation initiation b3302 1 ribosome(s) bound	1 b3302_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3302_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.81E+01	9.81E+01	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b3302_3_rib	Translation initiation b3302 3 ribosome(s) bound	1 b3302_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3302_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b3303_1_rib	Translation initiation b3303 1 ribosome(s) bound	1 b3303_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3303_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.48E+01	4.48E+01	0	6.53E+01	65.2924	0	2.01E+01	20.06925
tl_ini_b3303_4_rib	Translation initiation b3303 4 ribosome(s) bound	1 b3303_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3303_4	irreversible	Translation	0.00E+00	1.00E+09	0	2.74E+01	2.74E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_ini_b3303_9_rib	Translation initiation b3303 9 ribosome(s) bound	1 b3303_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b3303_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.25E+01	1.25E+01	0	9.21E+00	9.208889	0	9.21E+00	9.208889
tl_ini_b3304_1_rib	Translation initiation b3304 1 ribosome(s) bound	1 b3304_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3304_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.34E+01	9.34E+01	0	8.29E+01	82.88	0	7.66E+01	76.646
tl_ini_b3304_3_rib	Translation initiation b3304 3 ribosome(s) bound	1 b3304_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3304_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b3304_6_rib	Translation initiation b3304 6 ribosome(s) bound	1 b3304_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3304_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_ini_b3305_10_rib	Translation initiation b3305 10 ribosome(s) bound	1 b3305_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b3305_10	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_ini_b3305_1_rib	Translation initiation b3305 1 ribosome(s) bound	1 b3305_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3305_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.48E+01	4.48E+01	0	6.51E+01	65.07918	0	2.01E+01	20.14445
tl_ini_b3305_5_rib	Translation initiation b3305 5 ribosome(s) bound	1 b3305_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3305_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_ini_b3306_1_rib	Translation initiation b3306 1 ribosome(s) bound	1 b3306_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3306_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b3306_3_rib	Translation initiation b3306 3 ribosome(s) bound	1 b3306_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3306_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b3306_7_rib	Translation initiation b3306 7 ribosome(s) bound	1 b3306_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3306_7	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_ini_b3307_1_rib	Translation initiation b3307 1 ribosome(s) bound	1 b3307_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3307_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b3307_2_rib	Translation initiation b3307 2 ribosome(s) bound	1 b3307_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3307_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_ini_b3307_5_rib	Translation initiation b3307 5 ribosome(s) bound	1 b3307_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3307_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_ini_b3308_10_rib	Translation initiation b3308 10 ribosome(s) bound	1 b3308_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b3308_10	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_ini_b3308_1_rib	Translation initiation b3308 1 ribosome(s) bound	1 b3308_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3308_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	7.43E+01	74.33847	0	3.96E+01	39.58889
tl_ini_b3308_5_rib	Translation initiation b3308 5 ribosome(s) bound	1 b3308_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3308_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_ini_b3309_1_rib	Translation initiation b3309 1 ribosome(s) bound	1 b3309_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3309_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b3309_3_rib	Translation initiation b3309 3 ribosome(s) bound	1 b3309_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3309_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b3309_6_rib	Translation initiation b3309 6 ribosome(s) bound	1 b3309_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3309_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_ini_b3310_1_rib	Translation initiation b3310 1 ribosome(s) bound	1 b3310_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3310_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.49E+01	8.49E+01	0	8.29E+01	82.88	0	6.06E+01	60.627
tl_ini_b3310_3_rib	Translation initiation b3310 3 ribosome(s) bound	1 b3310_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3310_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b3310_7_rib	Translation initiation b3310 7 ribosome(s) bound	1 b3310_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3310_7	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_ini_b3311_1_rib	Translation initiation b3311 1 ribosome(s) bound	1 b3311_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3311_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.74E+01	8.74E+01	0	8.29E+01	82.88	0	6.35E+01	63.472
tl_ini_b3311_2_rib	Translation initiation b3311 2 ribosome(s) bound	1 b3311_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3311_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_ini_b3311_4_rib	Translation initiation b3311 4 ribosome(s) bound	1 b3311_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3311_4	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_ini_b3312_1_rib	Translation initiation b3312 1 ribosome(s) bound	1 b3312_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3312_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b3312_3_rib	Translation initiation b3312 3 ribosome(s) bound	1 b3312_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3312_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b3313_1_rib	Translation initiation b3313 1 ribosome(s) bound	1 b3313_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3313_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.45E+01	4.45E+01	0	6.62E+01	66.1957	0	1.71E+01	17.14514
tl_ini_b3313_4_rib	Translation initiation b3313 4 ribosome(s) bound	1 b3313_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3313_4	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_ini_b3313_8_rib	Translation initiation b3313 8 ribosome(s) bound	1 b3313_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3313_8	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_ini_b3314_13_rib	Translation initiation b3314 13 ribosome(s) bound	1 b3314_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b3314_13	irreversible	Translation	0.00E+00	1.00E+09	0	8.66E+00	8.66E+00	0	6.38E+00	6.375385	0	6.38E+00	6.375385
tl_ini_b3314_1_rib	Translation initiation b3314 1 ribosome(s) bound	1 b3314_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3314_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.73E+01	3.73E+01	0	6.14E+01	61.39904	0	1.02E+01	10.173

tl_ini_b3314_6_rib	Translation initiation b3314 6 ribosome(s) bound	1 b3314_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3314_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_ini_b3315_1_rib	Translation initiation b3315 1 ribosome(s) bound	1 b3315_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3315_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.01E+01	6.01E+01	0	7.37E+01	73.65124	0	3.25E+01	32.5344
tl_ini_b3315_3_rib	Translation initiation b3315 3 ribosome(s) bound	1 b3315_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3315_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b3315_6_rib	Translation initiation b3315 6 ribosome(s) bound	1 b3315_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3315_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_ini_b3316_1_rib	Translation initiation b3316 1 ribosome(s) bound	1 b3316_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3316_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b3316_2_rib	Translation initiation b3316 2 ribosome(s) bound	1 b3316_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3316_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_ini_b3316_5_rib	Translation initiation b3316 5 ribosome(s) bound	1 b3316_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3316_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_ini_b3317_16_rib	Translation initiation b3317 16 ribosome(s) bound	1 b3317_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b3317_16	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+00	7.04E+00	0	5.18E+00	5.18	0	5.18E+00	5.18
tl_ini_b3317_1_rib	Translation initiation b3317 1 ribosome(s) bound	1 b3317_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3317_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.04E+01	5.04E+01	0	6.77E+01	67.7286	0	2.33E+01	23.34613
tl_ini_b3317_8_rib	Translation initiation b3317 8 ribosome(s) bound	1 b3317_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3317_8	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_ini_b3318_1_rib	Translation initiation b3318 1 ribosome(s) bound	1 b3318_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3318_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b3318_2_rib	Translation initiation b3318 2 ribosome(s) bound	1 b3318_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3318_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_ini_b3318_5_rib	Translation initiation b3318 5 ribosome(s) bound	1 b3318_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3318_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_ini_b3319_11_rib	Translation initiation b3319 11 ribosome(s) bound	1 b3319_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b3319_11	irreversible	Translation	0.00E+00	1.00E+09	0	1.02E+01	1.02E+01	0	7.53E+00	7.534545	0	7.53E+00	7.534545
tl_ini_b3319_1_rib	Translation initiation b3319 1 ribosome(s) bound	1 b3319_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3319_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.27E+01	62.72106	0	1.14E+01	11.3532
tl_ini_b3319_5_rib	Translation initiation b3319 5 ribosome(s) bound	1 b3319_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3319_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	1.66E+01	16.576	0	1.60E+01	15.972
tl_ini_b3320_12_rib	Translation initiation b3320 12 ribosome(s) bound	1 b3320_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b3320_12	irreversible	Translation	0.00E+00	1.00E+09	0	9.38E+00	9.38E+00	0	6.91E+00	6.906667	0	6.91E+00	6.906667
tl_ini_b3320_1_rib	Translation initiation b3320 1 ribosome(s) bound	1 b3320_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3320_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	6.88E+01	68.80163	0	2.48E+01	24.75491
tl_ini_b3320_6_rib	Translation initiation b3320 6 ribosome(s) bound	1 b3320_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3320_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_ini_b3321_1_rib	Translation initiation b3321 1 ribosome(s) bound	1 b3321_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3321_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b3321_3_rib	Translation initiation b3321 3 ribosome(s) bound	1 b3321_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3321_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b3321_6_rib	Translation initiation b3321 6 ribosome(s) bound	1 b3321_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3321_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_ini_b3339_11_rib	Translation initiation b3339 11 ribosome(s) bound	1 b3339_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b3339_11	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_ini_b3339_1_rib	Translation initiation b3339 1 ribosome(s) bound	1 b3339_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3339_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_ini_b3339_23_rib	Translation initiation b3339 23 ribosome(s) bound	1 b3339_mRNA_1 + 23 fmet_tRNA_met + 23 h2o + 23 rib_30_ini + 23 rib_50 --> 23 IF1_inact + 23 IF2-GDP + 23 IF3_inact + 23 h + 23 p + 1 rib_ini_b3339_23	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_ini_b3340_1_rib	Translation initiation b3340 1 ribosome(s) bound	1 b3340_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3340_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.91E+01	79.05913	0	1.25E+01	12.458
tl_ini_b3340_20_rib	Translation initiation b3340 20 ribosome(s) bound	1 b3340_mRNA_1 + 20 fmet_tRNA_met + 20 h2o + 20 rib_30_ini + 20 rib_50 --> 20 IF1_inact + 20 IF2-GDP + 20 IF3_inact + 20 h + 20 p + 1 rib_ini_b3340_20	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.91E+01	79.05913	0	1.25E+01	12.458
tl_ini_b3340_41_rib	Translation initiation b3340 41 ribosome(s) bound	1 b3340_mRNA_1 + 41 fmet_tRNA_met + 41 h2o + 41 rib_30_ini + 41 rib_50 --> 41 IF1_inact + 41 IF2-GDP + 41 IF3_inact + 41 h + 41 p + 1 rib_ini_b3340_41	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.66E+01	76.60959	0	1.25E+01	12.458
tl_ini_b3341_10_rib	Translation initiation b3341 10 ribosome(s) bound	1 b3341_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b3341_10	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_ini_b3341_1_rib	Translation initiation b3341 1 ribosome(s) bound	1 b3341_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3341_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.67E+01	5.67E+01	0	7.18E+01	71.82262	0	2.73E+01	27.27889
tl_ini_b3341_5_rib	Translation initiation b3341 5 ribosome(s) bound	1 b3341_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3341_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_ini_b3342_1_rib	Translation initiation b3342 1 ribosome(s) bound	1 b3342_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3342_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.32E+01	9.32E+01	0	8.29E+01	82.88	0	7.36E+01	73.567
tl_ini_b3342_3_rib	Translation initiation b3342 3 ribosome(s) bound	1 b3342_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3342_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b3342_7_rib	Translation initiation b3342 7 ribosome(s) bound	1 b3342_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3342_7	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_ini_b3343_1_rib	Translation initiation b3343 1 ribosome(s) bound	1 b3343_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3343_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.48E+01	14.812
tl_ini_b3343_2_rib	Translation initiation b3343 2 ribosome(s) bound	1 b3343_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3343_2	irreversible	Translation	0.00E+00	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.48E+01	14.812
tl_ini_b3343_5_rib	Translation initiation b3343 5 ribosome(s) bound	1 b3343_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3343_5	irreversible	Translation	0.00E+00	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.34E+01	13.4148
tl_ini_b3344_1_rib	Translation initiation b3344 1 ribosome(s) bound	1 b3344_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3344_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.76E+01	8.76E+01	0	1.44E+02	144.4153	0	1.34E+01	13.412

tl_ini_b3344_3_rib	Translation initiation b3344 3 ribosome(s) bound	1 b3344_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3344_3	irreversible	Translation	0.00E+00	1.00E+09	0	8.76E+01	8.76E+01	0	1.44E+02	144.4153	0	1.34E+01	13.412
tl_ini_b3344_7_rib	Translation initiation b3344 7 ribosome(s) bound	1 b3344_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3344_7	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	9.97E+01	99.66022	0	9.58E+00	9.582
tl_ini_b3345_1_rib	Translation initiation b3345 1 ribosome(s) bound	1 b3345_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3345_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.37E+01	8.37E+01	0	1.41E+02	140.5853	0	9.58E+00	9.582
tl_ini_b3345_3_rib	Translation initiation b3345 3 ribosome(s) bound	1 b3345_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3345_3	irreversible	Translation	0.00E+00	1.00E+09	0	8.37E+01	8.37E+01	0	1.41E+02	140.5853	0	9.58E+00	9.582
tl_ini_b3345_7_rib	Translation initiation b3345 7 ribosome(s) bound	1 b3345_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3345_7	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	9.97E+01	99.66022	0	9.58E+00	9.582
tl_ini_b3346_14_rib	Translation initiation b3346 14 ribosome(s) bound	1 b3346_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b3346_14	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_ini_b3346_1_rib	Translation initiation b3346 1 ribosome(s) bound	1 b3346_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3346_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_ini_b3346_7_rib	Translation initiation b3346 7 ribosome(s) bound	1 b3346_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3346_7	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_ini_b3384_19_rib	Translation initiation b3384 19 ribosome(s) bound	1 b3384_mRNA_1 + 19 fmet_tRNA_met + 19 h2o + 19 rib_30_ini + 19 rib_50 --> 19 IF1_inact + 19 IF2-GDP + 19 IF3_inact + 19 h + 19 p + 1 rib_ini_b3384_19	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_ini_b3384_1_rib	Translation initiation b3384 1 ribosome(s) bound	1 b3384_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3384_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_ini_b3384_9_rib	Translation initiation b3384 9 ribosome(s) bound	1 b3384_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b3384_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_ini_b3385_14_rib	Translation initiation b3385 14 ribosome(s) bound	1 b3385_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b3385_14	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_ini_b3385_1_rib	Translation initiation b3385 1 ribosome(s) bound	1 b3385_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3385_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_ini_b3385_7_rib	Translation initiation b3385 7 ribosome(s) bound	1 b3385_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3385_7	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_ini_b3386_13_rib	Translation initiation b3386 13 ribosome(s) bound	1 b3386_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b3386_13	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_ini_b3386_1_rib	Translation initiation b3386 1 ribosome(s) bound	1 b3386_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3386_1	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_ini_b3386_6_rib	Translation initiation b3386 6 ribosome(s) bound	1 b3386_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3386_6	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_ini_b3387_16_rib	Translation initiation b3387 16 ribosome(s) bound	1 b3387_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b3387_16	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_ini_b3387_1_rib	Translation initiation b3387 1 ribosome(s) bound	1 b3387_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3387_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_ini_b3387_8_rib	Translation initiation b3387 8 ribosome(s) bound	1 b3387_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3387_8	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_ini_b3388_12_rib	Translation initiation b3388 12 ribosome(s) bound	1 b3388_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b3388_12	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_ini_b3388_1_rib	Translation initiation b3388 1 ribosome(s) bound	1 b3388_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3388_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_ini_b3388_25_rib	Translation initiation b3388 25 ribosome(s) bound	1 b3388_mRNA_1 + 25 fmet_tRNA_met + 25 h2o + 25 rib_30_ini + 25 rib_50 --> 25 IF1_inact + 25 IF2-GDP + 25 IF3_inact + 25 h + 25 p + 1 rib_ini_b3388_25	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_ini_b3389_10_rib	Translation initiation b3389 10 ribosome(s) bound	1 b3389_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b3389_10	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_ini_b3389_1_rib	Translation initiation b3389 1 ribosome(s) bound	1 b3389_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3389_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_ini_b3389_21_rib	Translation initiation b3389 21 ribosome(s) bound	1 b3389_mRNA_1 + 21 fmet_tRNA_met + 21 h2o + 21 rib_30_ini + 21 rib_50 --> 21 IF1_inact + 21 IF2-GDP + 21 IF3_inact + 21 h + 21 p + 1 rib_ini_b3389_21	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_ini_b3390_10_rib	Translation initiation b3390 10 ribosome(s) bound	1 b3390_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b3390_10	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_ini_b3390_1_rib	Translation initiation b3390 1 ribosome(s) bound	1 b3390_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3390_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_ini_b3390_5_rib	Translation initiation b3390 5 ribosome(s) bound	1 b3390_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3390_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_ini_b3406_1_rib	Translation initiation b3406 1 ribosome(s) bound	1 b3406_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3406_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_ini_b3406_4_rib	Translation initiation b3406 4 ribosome(s) bound	1 b3406_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3406_4	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_ini_b3406_9_rib	Translation initiation b3406 9 ribosome(s) bound	1 b3406_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b3406_9	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_ini_b3461_16_rib	Translation initiation b3461 16 ribosome(s) bound	1 b3461_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b3461_16	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_ini_b3461_1_rib	Translation initiation b3461 1 ribosome(s) bound	1 b3461_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3461_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_ini_b3461_8_rib	Translation initiation b3461 8 ribosome(s) bound	1 b3461_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3461_8	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_ini_b3470_1_rib	Translation initiation b3470 1 ribosome(s) bound	1 b3470_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3470_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9
tl_ini_b3470_2_rib	Translation initiation b3470 2 ribosome(s) bound	1 b3470_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3470_2	irreversible	Translation	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9
tl_ini_b3470_4_rib	Translation initiation b3470 4 ribosome(s) bound	1 b3470_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3470_4	irreversible	Translation	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9

tl_ini_b3559_1_rib	Translation initiation b3559 1 ribosome(s) bound	1 b3559_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3559_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.18E+01	4.18E+01	0	7.26E+01	72.62705	0	1.83E+00	1.827
tl_ini_b3559_20_rib	Translation initiation b3559 20 ribosome(s) bound	1 b3559_mRNA_1 + 20 fmet_tRNA_met + 20 h2o + 20 rib_30_ini + 20 rib_50 --> 20 IF1_inact + 20 IF2-GDP + 20 IF3_inact + 20 h + 20 p + 1 rib_ini_b3559_20	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	6.34E+01	63.37435	0	1.83E+00	1.827
tl_ini_b3559_40_rib	Translation initiation b3559 40 ribosome(s) bound	1 b3559_mRNA_1 + 40 fmet_tRNA_met + 40 h2o + 40 rib_30_ini + 40 rib_50 --> 40 IF1_inact + 40 IF2-GDP + 40 IF3_inact + 40 h + 40 p + 1 rib_ini_b3559_40	irreversible	Translation	0.00E+00	1.00E+09	0	1.82E+01	1.82E+01	0	3.09E+01	30.87469	0	1.79E+00	1.787975
tl_ini_b3560_17_rib	Translation initiation b3560 17 ribosome(s) bound	1 b3560_mRNA_1 + 17 fmet_tRNA_met + 17 h2o + 17 rib_30_ini + 17 rib_50 --> 17 IF1_inact + 17 IF2-GDP + 17 IF3_inact + 17 h + 17 p + 1 rib_ini_b3560_17	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_ini_b3560_1_rib	Translation initiation b3560 1 ribosome(s) bound	1 b3560_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3560_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_ini_b3560_8_rib	Translation initiation b3560 8 ribosome(s) bound	1 b3560_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3560_8	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_ini_b3590_18_rib	Translation initiation b3590 18 ribosome(s) bound	1 b3590_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b3590_18	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	7.61E-01	0.7611111	0	7.61E-01	0.7611111
tl_ini_b3590_1_rib	Translation initiation b3590 1 ribosome(s) bound	1 b3590_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3590_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.86E+01	3.86E+01	0	1.37E+01	13.7	0	1.86E+00	1.856
tl_ini_b3590_36_rib	Translation initiation b3590 36 ribosome(s) bound	1 b3590_mRNA_1 + 36 fmet_tRNA_met + 36 h2o + 36 rib_30_ini + 36 rib_50 --> 36 IF1_inact + 36 IF2-GDP + 36 IF3_inact + 36 h + 36 p + 1 rib_ini_b3590_36	irreversible	Translation	0.00E+00	1.00E+09	0	1.77E+01	1.77E+01	0	3.81E-01	0.3805556	0	3.81E-01	0.3805556
tl_ini_b3591_13_rib	Translation initiation b3591 13 ribosome(s) bound	1 b3591_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b3591_13	irreversible	Translation	0.00E+00	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606
tl_ini_b3591_1_rib	Translation initiation b3591 1 ribosome(s) bound	1 b3591_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3591_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606
tl_ini_b3591_27_rib	Translation initiation b3591 27 ribosome(s) bound	1 b3591_mRNA_1 + 27 fmet_tRNA_met + 27 h2o + 27 rib_30_ini + 27 rib_50 --> 27 IF1_inact + 27 IF2-GDP + 27 IF3_inact + 27 h + 27 p + 1 rib_ini_b3591_27	irreversible	Translation	0.00E+00	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606
tl_ini_b3635_15_rib	Translation initiation b3635 15 ribosome(s) bound	1 b3635_mRNA_1 + 15 fmet_tRNA_met + 15 h2o + 15 rib_30_ini + 15 rib_50 --> 15 IF1_inact + 15 IF2-GDP + 15 IF3_inact + 15 h + 15 p + 1 rib_ini_b3635_15	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_ini_b3635_1_rib	Translation initiation b3635 1 ribosome(s) bound	1 b3635_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3635_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_ini_b3635_7_rib	Translation initiation b3635 7 ribosome(s) bound	1 b3635_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3635_7	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_ini_b3636_1_rib	Translation initiation b3636 1 ribosome(s) bound	1 b3636_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3636_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	8.20E+01	82.041
tl_ini_b3636_3_rib	Translation initiation b3636 3 ribosome(s) bound	1 b3636_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3636_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b3637_1_rib	Translation initiation b3637 1 ribosome(s) bound	1 b3637_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3637_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b3637_2_rib	Translation initiation b3637 2 ribosome(s) bound	1 b3637_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3637_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_ini_b3637_4_rib	Translation initiation b3637 4 ribosome(s) bound	1 b3637_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3637_4	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_ini_b3638_13_rib	Translation initiation b3638 13 ribosome(s) bound	1 b3638_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b3638_13	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_ini_b3638_1_rib	Translation initiation b3638 1 ribosome(s) bound	1 b3638_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3638_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_ini_b3638_6_rib	Translation initiation b3638 6 ribosome(s) bound	1 b3638_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3638_6	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_ini_b3649_1_rib	Translation initiation b3649 1 ribosome(s) bound	1 b3649_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3649_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_ini_b3649_2_rib	Translation initiation b3649 2 ribosome(s) bound	1 b3649_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3649_2	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_ini_b3649_5_rib	Translation initiation b3649 5 ribosome(s) bound	1 b3649_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3649_5	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_ini_b3650_1_rib	Translation initiation b3650 1 ribosome(s) bound	1 b3650_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3650_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_ini_b3650_20_rib	Translation initiation b3650 20 ribosome(s) bound	1 b3650_mRNA_1 + 20 fmet_tRNA_met + 20 h2o + 20 rib_30_ini + 20 rib_50 --> 20 IF1_inact + 20 IF2-GDP + 20 IF3_inact + 20 h + 20 p + 1 rib_ini_b3650_20	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_ini_b3650_41_rib	Translation initiation b3650 41 ribosome(s) bound	1 b3650_mRNA_1 + 41 fmet_tRNA_met + 41 h2o + 41 rib_30_ini + 41 rib_50 --> 41 IF1_inact + 41 IF2-GDP + 41 IF3_inact + 41 h + 41 p + 1 rib_ini_b3650_41	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_ini_b3651_13_rib	Translation initiation b3651 13 ribosome(s) bound	1 b3651_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b3651_13	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_ini_b3651_1_rib	Translation initiation b3651 1 ribosome(s) bound	1 b3651_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3651_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_ini_b3651_6_rib	Translation initiation b3651 6 ribosome(s) bound	1 b3651_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3651_6	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_ini_b3652_1_rib	Translation initiation b3652 1 ribosome(s) bound	1 b3652_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3652_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_ini_b3652_20_rib	Translation initiation b3652 20 ribosome(s) bound	1 b3652_mRNA_1 + 20 fmet_tRNA_met + 20 h2o + 20 rib_30_ini + 20 rib_50 --> 20 IF1_inact + 20 IF2-GDP + 20 IF3_inact + 20 h + 20 p + 1 rib_ini_b3652_20	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_ini_b3652_40_rib	Translation initiation b3652 40 ribosome(s) bound	1 b3652_mRNA_1 + 40 fmet_tRNA_met + 40 h2o + 40 rib_30_ini + 40 rib_50 --> 40 IF1_inact + 40 IF2-GDP + 40 IF3_inact + 40 h + 40 p + 1 rib_ini_b3652_40	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_ini_b3703_1_rib	Translation initiation b3703 1 ribosome(s) bound	1 b3703_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3703_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b3703_2_rib	Translation initiation b3703 2 ribosome(s) bound	1 b3703_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3703_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_ini_b3704_1_rib	Translation initiation b3704 1 ribosome(s) bound	1 b3704_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3704_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	5.43E+01	54.28861	0	1.08E+01	10.8499

tl_ini_b3704_3_rib	Translation initiation b3704 3 ribosome(s) bound	1 b3704_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3704_3	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.96E+01	19.61562	0	3.62E+00	3.616633
tl_ini_b3704_7_rib	Translation initiation b3704 7 ribosome(s) bound	1 b3704_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3704_7	irreversible	Translation	0.00E+00	1.00E+09	0	4.02E+01	4.02E+01	0	8.47E+00	8.465205	0	1.55E+00	1.549986
tl_ini_b3706_13_rib	Translation initiation b3706 13 ribosome(s) bound	1 b3706_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b3706_13	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_ini_b3706_1_rib	Translation initiation b3706 1 ribosome(s) bound	1 b3706_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3706_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_ini_b3706_26_rib	Translation initiation b3706 26 ribosome(s) bound	1 b3706_mRNA_1 + 26 fmet_tRNA_met + 26 h2o + 26 rib_30_ini + 26 rib_50 --> 26 IF1_inact + 26 IF2-GDP + 26 IF3_inact + 26 h + 26 p + 1 rib_ini_b3706_26	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_ini_b3740_12_rib	Translation initiation b3740 12 ribosome(s) bound	1 b3740_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b3740_12	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_ini_b3740_1_rib	Translation initiation b3740 1 ribosome(s) bound	1 b3740_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3740_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_ini_b3740_6_rib	Translation initiation b3740 6 ribosome(s) bound	1 b3740_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3740_6	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_ini_b3741_18_rib	Translation initiation b3741 18 ribosome(s) bound	1 b3741_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b3741_18	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_ini_b3741_1_rib	Translation initiation b3741 1 ribosome(s) bound	1 b3741_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3741_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_ini_b3741_37_rib	Translation initiation b3741 37 ribosome(s) bound	1 b3741_mRNA_1 + 37 fmet_tRNA_met + 37 h2o + 37 rib_30_ini + 37 rib_50 --> 37 IF1_inact + 37 IF2-GDP + 37 IF3_inact + 37 h + 37 p + 1 rib_ini_b3741_37	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_ini_b3780_12_rib	Translation initiation b3780 12 ribosome(s) bound	1 b3780_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b3780_12	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	3.98E+01	39.7843	0	4.10E+00	4.096
tl_ini_b3780_1_rib	Translation initiation b3780 1 ribosome(s) bound	1 b3780_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3780_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.69E+01	9.69E+01	0	1.62E+02	162.3678	0	4.10E+00	4.096
tl_ini_b3780_24_rib	Translation initiation b3780 24 ribosome(s) bound	1 b3780_mRNA_1 + 24 fmet_tRNA_met + 24 h2o + 24 rib_30_ini + 24 rib_50 --> 24 IF1_inact + 24 IF2-GDP + 24 IF3_inact + 24 h + 24 p + 1 rib_ini_b3780_24	irreversible	Translation	0.00E+00	1.00E+09	0	1.83E+01	1.83E+01	0	1.99E+01	19.89215	0	2.40E+00	2.401208
tl_ini_b3782_1_rib	Translation initiation b3782 1 ribosome(s) bound	1 b3782_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3782_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+02	1.72E+02	0	2.38E+02	238.0054	0	8.50E+01	85.007
tl_ini_b3783_12_rib	Translation initiation b3783 12 ribosome(s) bound	1 b3783_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b3783_12	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_ini_b3783_1_rib	Translation initiation b3783 1 ribosome(s) bound	1 b3783_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3783_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_ini_b3783_24_rib	Translation initiation b3783 24 ribosome(s) bound	1 b3783_mRNA_1 + 24 fmet_tRNA_met + 24 h2o + 24 rib_30_ini + 24 rib_50 --> 24 IF1_inact + 24 IF2-GDP + 24 IF3_inact + 24 h + 24 p + 1 rib_ini_b3783_24	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_ini_b3885_11_rib	Translation initiation b3885 11 ribosome(s) bound	1 b3885_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b3885_11	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_ini_b3885_1_rib	Translation initiation b3885 1 ribosome(s) bound	1 b3885_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3885_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_ini_b3885_5_rib	Translation initiation b3885 5 ribosome(s) bound	1 b3885_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3885_5	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_ini_b3886_17_rib	Translation initiation b3886 17 ribosome(s) bound	1 b3886_mRNA_1 + 17 fmet_tRNA_met + 17 h2o + 17 rib_30_ini + 17 rib_50 --> 17 IF1_inact + 17 IF2-GDP + 17 IF3_inact + 17 h + 17 p + 1 rib_ini_b3886_17	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284
tl_ini_b3886_1_rib	Translation initiation b3886 1 ribosome(s) bound	1 b3886_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3886_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284
tl_ini_b3886_8_rib	Translation initiation b3886 8 ribosome(s) bound	1 b3886_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3886_8	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284
tl_ini_b3887_1_rib	Translation initiation b3887 1 ribosome(s) bound	1 b3887_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3887_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754
tl_ini_b3887_4_rib	Translation initiation b3887 4 ribosome(s) bound	1 b3887_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3887_4	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754
tl_ini_b3887_8_rib	Translation initiation b3887 8 ribosome(s) bound	1 b3887_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3887_8	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754
tl_ini_b3888_19_rib	Translation initiation b3888 19 ribosome(s) bound	1 b3888_mRNA_1 + 19 fmet_tRNA_met + 19 h2o + 19 rib_30_ini + 19 rib_50 --> 19 IF1_inact + 19 IF2-GDP + 19 IF3_inact + 19 h + 19 p + 1 rib_ini_b3888_19	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354
tl_ini_b3888_1_rib	Translation initiation b3888 1 ribosome(s) bound	1 b3888_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3888_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354
tl_ini_b3888_9_rib	Translation initiation b3888 9 ribosome(s) bound	1 b3888_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b3888_9	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354
tl_ini_b3936_1_rib	Translation initiation b3936 1 ribosome(s) bound	1 b3936_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3936_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	5.62E+01	56.176
tl_ini_b3936_2_rib	Translation initiation b3936 2 ribosome(s) bound	1 b3936_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b3936_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_ini_b3936_4_rib	Translation initiation b3936 4 ribosome(s) bound	1 b3936_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3936_4	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_ini_b3965_10_rib	Translation initiation b3965 10 ribosome(s) bound	1 b3965_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b3965_10	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_ini_b3965_1_rib	Translation initiation b3965 1 ribosome(s) bound	1 b3965_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3965_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_ini_b3965_21_rib	Translation initiation b3965 21 ribosome(s) bound	1 b3965_mRNA_1 + 21 fmet_tRNA_met + 21 h2o + 21 rib_30_ini + 21 rib_50 --> 21 IF1_inact + 21 IF2-GDP + 21 IF3_inact + 21 h + 21 p + 1 rib_ini_b3965_21	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_ini_b3980_11_rib	Translation initiation b3980 11 ribosome(s) bound	1 b3980_mRNA_1 + 11 fmet_tRNA_met + 11 h2o + 11 rib_30_ini + 11 rib_50 --> 11 IF1_inact + 11 IF2-GDP + 11 IF3_inact + 11 h + 11 p + 1 rib_ini_b3980_11	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.39E+02	238.5469	0	5.64E+01	56.41
tl_ini_b3980_1_rib	Translation initiation b3980 1 ribosome(s) bound	1 b3980_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3980_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.39E+02	238.5469	0	5.64E+01	56.41

tl_ini_b3980_23_rib	Translation initiation b3980 23 ribosome(s) bound	1 b3980_mRNA_1 + 23 fmet_tRNA_met + 23 h2o + 23 rib_30_ini + 23 rib_50 --> 23 IF1_inact + 23 IF2-GDP + 23 IF3_inact + 23 h + 23 p + 1 rib_ini_b3980_23	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.32E+02	231.6607	0	5.64E+01	56.41
tl_ini_b3981_1_rib	Translation initiation b3981 1 ribosome(s) bound	1 b3981_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3981_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739
tl_ini_b3981_3_rib	Translation initiation b3981 3 ribosome(s) bound	1 b3981_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3981_3	irreversible	Translation	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739
tl_ini_b3981_7_rib	Translation initiation b3981 7 ribosome(s) bound	1 b3981_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3981_7	irreversible	Translation	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739
tl_ini_b3982_10_rib	Translation initiation b3982 10 ribosome(s) bound	1 b3982_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b3982_10	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_ini_b3982_1_rib	Translation initiation b3982 1 ribosome(s) bound	1 b3982_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3982_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_ini_b3982_5_rib	Translation initiation b3982 5 ribosome(s) bound	1 b3982_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b3982_5	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_ini_b3983_1_rib	Translation initiation b3983 1 ribosome(s) bound	1 b3983_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3983_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.60E+01	4.60E+01	0	5.92E+01	59.18534	0	3.64E+01	36.36457
tl_ini_b3983_4_rib	Translation initiation b3983 4 ribosome(s) bound	1 b3983_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3983_4	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_ini_b3983_8_rib	Translation initiation b3983 8 ribosome(s) bound	1 b3983_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b3983_8	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_ini_b3984_13_rib	Translation initiation b3984 13 ribosome(s) bound	1 b3984_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b3984_13	irreversible	Translation	0.00E+00	1.00E+09	0	8.66E+00	8.66E+00	0	6.38E+00	6.375385	0	6.38E+00	6.375385
tl_ini_b3984_1_rib	Translation initiation b3984 1 ribosome(s) bound	1 b3984_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3984_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.96E+01	1.96E+01	0	3.10E+01	30.95693	0	9.32E+00	9.32475
tl_ini_b3984_6_rib	Translation initiation b3984 6 ribosome(s) bound	1 b3984_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b3984_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	1.38E+01	13.81333	0	1.34E+01	13.389
tl_ini_b3985_1_rib	Translation initiation b3985 1 ribosome(s) bound	1 b3985_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3985_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.34E+01	2.34E+01	0	3.75E+01	37.54288	0	1.16E+01	11.56763
tl_ini_b3985_4_rib	Translation initiation b3985 4 ribosome(s) bound	1 b3985_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b3985_4	irreversible	Translation	0.00E+00	1.00E+09	0	2.43E+01	2.43E+01	0	2.07E+01	20.72	0	1.72E+01	17.189
tl_ini_b3985_9_rib	Translation initiation b3985 9 ribosome(s) bound	1 b3985_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b3985_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.25E+01	1.25E+01	0	9.21E+00	9.208889	0	9.21E+00	9.208889
tl_ini_b3986_1_rib	Translation initiation b3986 1 ribosome(s) bound	1 b3986_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3986_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	3.32E+02	331.52	0	1.22E+02	121.5037
tl_ini_b3986_3_rib	Translation initiation b3986 3 ribosome(s) bound	1 b3986_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b3986_3	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	1.11E+02	110.5067	0	1.11E+02	110.5067
tl_ini_b3986_7_rib	Translation initiation b3986 7 ribosome(s) bound	1 b3986_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b3986_7	irreversible	Translation	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	4.74E+01	47.36	0	4.74E+01	47.36
tl_ini_b3987_1_rib	Translation initiation b3987 1 ribosome(s) bound	1 b3987_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3987_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.69E+01	1.69E+01	0	2.83E+01	28.32872	0	2.21E+00	2.209
tl_ini_b3987_39_rib	Translation initiation b3987 39 ribosome(s) bound	1 b3987_mRNA_1 + 39 fmet_tRNA_met + 39 h2o + 39 rib_30_ini + 39 rib_50 --> 39 IF1_inact + 39 IF2-GDP + 39 IF3_inact + 39 h + 39 p + 1 rib_ini_b3987_39	irreversible	Translation	0.00E+00	1.00E+09	0	9.99E+00	9.99E+00	0	1.49E+01	14.89415	0	2.21E+00	2.209
tl_ini_b3987_78_rib	Translation initiation b3987 78 ribosome(s) bound	1 b3987_mRNA_1 + 78 fmet_tRNA_met + 78 h2o + 78 rib_30_ini + 78 rib_50 --> 78 IF1_inact + 78 IF2-GDP + 78 IF3_inact + 78 h + 78 p + 1 rib_ini_b3987_78	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+00	6.18E+00	0	8.34E+00	8.341509	0	1.31E+00	1.313051
tl_ini_b3988_1_rib	Translation initiation b3988 1 ribosome(s) bound	1 b3988_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b3988_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.60E+01	1.60E+01	0	2.74E+01	27.36872	0	1.25E+00	1.249
tl_ini_b3988_41_rib	Translation initiation b3988 41 ribosome(s) bound	1 b3988_mRNA_1 + 41 fmet_tRNA_met + 41 h2o + 41 rib_30_ini + 41 rib_50 --> 41 IF1_inact + 41 IF2-GDP + 41 IF3_inact + 41 h + 41 p + 1 rib_ini_b3988_41	irreversible	Translation	0.00E+00	1.00E+09	0	9.31E+00	9.31E+00	0	1.41E+01	14.07016	0	1.25E+00	1.249
tl_ini_b3988_82_rib	Translation initiation b3988 82 ribosome(s) bound	1 b3988_mRNA_1 + 82 fmet_tRNA_met + 82 h2o + 82 rib_30_ini + 82 rib_50 --> 82 IF1_inact + 82 IF2-GDP + 82 IF3_inact + 82 h + 82 p + 1 rib_ini_b3988_82	irreversible	Translation	0.00E+00	1.00E+09	0	5.88E+00	5.88E+00	0	7.93E+00	7.934606	0	1.25E+00	1.249
tl_ini_b4022_17_rib	Translation initiation b4022 17 ribosome(s) bound	1 b4022_mRNA_1 + 17 fmet_tRNA_met + 17 h2o + 17 rib_30_ini + 17 rib_50 --> 17 IF1_inact + 17 IF2-GDP + 17 IF3_inact + 17 h + 17 p + 1 rib_ini_b4022_17	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641
tl_ini_b4022_1_rib	Translation initiation b4022 1 ribosome(s) bound	1 b4022_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4022_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641
tl_ini_b4022_8_rib	Translation initiation b4022 8 ribosome(s) bound	1 b4022_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b4022_8	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641
tl_ini_b4049_10_rib	Translation initiation b4049 10 ribosome(s) bound	1 b4049_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b4049_10	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_ini_b4049_1_rib	Translation initiation b4049 1 ribosome(s) bound	1 b4049_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4049_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_ini_b4049_20_rib	Translation initiation b4049 20 ribosome(s) bound	1 b4049_mRNA_1 + 20 fmet_tRNA_met + 20 h2o + 20 rib_30_ini + 20 rib_50 --> 20 IF1_inact + 20 IF2-GDP + 20 IF3_inact + 20 h + 20 p + 1 rib_ini_b4049_20	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_ini_b4129_14_rib	Translation initiation b4129 14 ribosome(s) bound	1 b4129_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b4129_14	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.70E+02	169.7023	0	4.09E+00	4.087
tl_ini_b4129_1_rib	Translation initiation b4129 1 ribosome(s) bound	1 b4129_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4129_1	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.70E+02	169.7023	0	4.09E+00	4.087
tl_ini_b4129_29_rib	Translation initiation b4129 29 ribosome(s) bound	1 b4129_mRNA_1 + 29 fmet_tRNA_met + 29 h2o + 29 rib_30_ini + 29 rib_50 --> 29 IF1_inact + 29 IF2-GDP + 29 IF3_inact + 29 h + 29 p + 1 rib_ini_b4129_29	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.48E+02	147.7835	0	4.09E+00	4.087
tl_ini_b4142_1_rib	Translation initiation b4142 1 ribosome(s) bound	1 b4142_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4142_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_ini_b4142_2_rib	Translation initiation b4142 2 ribosome(s) bound	1 b4142_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b4142_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_ini_b4142_5_rib	Translation initiation b4142 5 ribosome(s) bound	1 b4142_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b4142_5	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_ini_b4143_16_rib	Translation initiation b4143 16 ribosome(s) bound	1 b4143_mRNA_1 + 16 fmet_tRNA_met + 16 h2o + 16 rib_30_ini + 16 rib_50 --> 16 IF1_inact + 16 IF2-GDP + 16 IF3_inact + 16 h + 16 p + 1 rib_ini_b4143_16	irreversible	Translation	0.00E+00	1.00E+09	0	7.82E+01	7.82E+01	0	1.28E+02	128.0933	0	7.29E+00	7.292

tl_ini_b4143_1_rib	Translation initiation b4143 1 ribosome(s) bound	1 b4143_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4143_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.80E+01	8.80E+01	0	1.50E+02	150.0754	0	7.29E+00	7.292
tl_ini_b4143_32_rib	Translation initiation b4143 32 ribosome(s) bound	1 b4143_mRNA_1 + 32 fmet_tRNA_met + 32 h2o + 32 rib_30_ini + 32 rib_50 --> 32 IF1_inact + 32 IF2-GDP + 32 IF3_inact + 32 h + 32 p + 1 rib_ini_b4143_32	irreversible	Translation	0.00E+00	1.00E+09	0	6.54E+01	6.54E+01	0	1.07E+02	107.1087	0	7.29E+00	7.292
tl_ini_b4162_10_rib	Translation initiation b4162 10 ribosome(s) bound	1 b4162_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b4162_10	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_ini_b4162_1_rib	Translation initiation b4162 1 ribosome(s) bound	1 b4162_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4162_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_ini_b4162_5_rib	Translation initiation b4162 5 ribosome(s) bound	1 b4162_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b4162_5	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_ini_b4167_15_rib	Translation initiation b4167 15 ribosome(s) bound	1 b4167_mRNA_1 + 15 fmet_tRNA_met + 15 h2o + 15 rib_30_ini + 15 rib_50 --> 15 IF1_inact + 15 IF2-GDP + 15 IF3_inact + 15 h + 15 p + 1 rib_ini_b4167_15	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184
tl_ini_b4167_1_rib	Translation initiation b4167 1 ribosome(s) bound	1 b4167_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4167_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184
tl_ini_b4167_30_rib	Translation initiation b4167 30 ribosome(s) bound	1 b4167_mRNA_1 + 30 fmet_tRNA_met + 30 h2o + 30 rib_30_ini + 30 rib_50 --> 30 IF1_inact + 30 IF2-GDP + 30 IF3_inact + 30 h + 30 p + 1 rib_ini_b4167_30	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184
tl_ini_b4168_1_rib	Translation initiation b4168 1 ribosome(s) bound	1 b4168_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4168_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_ini_b4168_4_rib	Translation initiation b4168 4 ribosome(s) bound	1 b4168_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b4168_4	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_ini_b4168_9_rib	Translation initiation b4168 9 ribosome(s) bound	1 b4168_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b4168_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_ini_b4169_13_rib	Translation initiation b4169 13 ribosome(s) bound	1 b4169_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b4169_13	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_ini_b4169_1_rib	Translation initiation b4169 1 ribosome(s) bound	1 b4169_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4169_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_ini_b4169_26_rib	Translation initiation b4169 26 ribosome(s) bound	1 b4169_mRNA_1 + 26 fmet_tRNA_met + 26 h2o + 26 rib_30_ini + 26 rib_50 --> 26 IF1_inact + 26 IF2-GDP + 26 IF3_inact + 26 h + 26 p + 1 rib_ini_b4169_26	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_ini_b4170_18_rib	Translation initiation b4170 18 ribosome(s) bound	1 b4170_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b4170_18	irreversible	Translation	0.00E+00	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924
tl_ini_b4170_1_rib	Translation initiation b4170 1 ribosome(s) bound	1 b4170_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4170_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924
tl_ini_b4170_36_rib	Translation initiation b4170 36 ribosome(s) bound	1 b4170_mRNA_1 + 36 fmet_tRNA_met + 36 h2o + 36 rib_30_ini + 36 rib_50 --> 36 IF1_inact + 36 IF2-GDP + 36 IF3_inact + 36 h + 36 p + 1 rib_ini_b4170_36	irreversible	Translation	0.00E+00	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924
tl_ini_b4171_18_rib	Translation initiation b4171 18 ribosome(s) bound	1 b4171_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b4171_18	irreversible	Translation	0.00E+00	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954
tl_ini_b4171_1_rib	Translation initiation b4171 1 ribosome(s) bound	1 b4171_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4171_1	irreversible	Translation	0.00E+00	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954
tl_ini_b4171_9_rib	Translation initiation b4171 9 ribosome(s) bound	1 b4171_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b4171_9	irreversible	Translation	0.00E+00	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954
tl_ini_b4172_1_rib	Translation initiation b4172 1 ribosome(s) bound	1 b4172_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4172_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_ini_b4172_3_rib	Translation initiation b4172 3 ribosome(s) bound	1 b4172_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b4172_3	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_ini_b4172_6_rib	Translation initiation b4172 6 ribosome(s) bound	1 b4172_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b4172_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_ini_b4173_12_rib	Translation initiation b4173 12 ribosome(s) bound	1 b4173_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b4173_12	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_ini_b4173_1_rib	Translation initiation b4173 1 ribosome(s) bound	1 b4173_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4173_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_ini_b4173_25_rib	Translation initiation b4173 25 ribosome(s) bound	1 b4173_mRNA_1 + 25 fmet_tRNA_met + 25 h2o + 25 rib_30_ini + 25 rib_50 --> 25 IF1_inact + 25 IF2-GDP + 25 IF3_inact + 25 h + 25 p + 1 rib_ini_b4173_25	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_ini_b4174_12_rib	Translation initiation b4174 12 ribosome(s) bound	1 b4174_mRNA_1 + 12 fmet_tRNA_met + 12 h2o + 12 rib_30_ini + 12 rib_50 --> 12 IF1_inact + 12 IF2-GDP + 12 IF3_inact + 12 h + 12 p + 1 rib_ini_b4174_12	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_ini_b4174_1_rib	Translation initiation b4174 1 ribosome(s) bound	1 b4174_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4174_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_ini_b4174_24_rib	Translation initiation b4174 24 ribosome(s) bound	1 b4174_mRNA_1 + 24 fmet_tRNA_met + 24 h2o + 24 rib_30_ini + 24 rib_50 --> 24 IF1_inact + 24 IF2-GDP + 24 IF3_inact + 24 h + 24 p + 1 rib_ini_b4174_24	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_ini_b4175_19_rib	Translation initiation b4175 19 ribosome(s) bound	1 b4175_mRNA_1 + 19 fmet_tRNA_met + 19 h2o + 19 rib_30_ini + 19 rib_50 --> 19 IF1_inact + 19 IF2-GDP + 19 IF3_inact + 19 h + 19 p + 1 rib_ini_b4175_19	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_ini_b4175_1_rib	Translation initiation b4175 1 ribosome(s) bound	1 b4175_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4175_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_ini_b4175_9_rib	Translation initiation b4175 9 ribosome(s) bound	1 b4175_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b4175_9	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_ini_b4178_1_rib	Translation initiation b4178 1 ribosome(s) bound	1 b4178_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4178_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718
tl_ini_b4178_4_rib	Translation initiation b4178 4 ribosome(s) bound	1 b4178_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b4178_4	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718
tl_ini_b4178_8_rib	Translation initiation b4178 8 ribosome(s) bound	1 b4178_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b4178_8	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718
tl_ini_b4179_1_rib	Translation initiation b4179 1 ribosome(s) bound	1 b4179_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4179_1	irreversible	Translation	0.00E+00	1.00E+09	0	3.51E+01	3.51E+01	0	6.08E+01	60.77454	0	1.61E+00	1.608
tl_ini_b4179_23_rib	Translation initiation b4179 23 ribosome(s) bound	1 b4179_mRNA_1 + 23 fmet_tRNA_met + 23 h2o + 23 rib_30_ini + 23 rib_50 --> 23 IF1_inact + 23 IF2-GDP + 23 IF3_inact + 23 h + 23 p + 1 rib_ini_b4179_23	irreversible	Translation	0.00E+00	1.00E+09	0	3.51E+01	3.51E+01	0	6.08E+01	60.77454	0	1.61E+00	1.608
tl_ini_b4179_47_rib	Translation initiation b4179 47 ribosome(s) bound	1 b4179_mRNA_1 + 47 fmet_tRNA_met + 47 h2o + 47 rib_30_ini + 47 rib_50 --> 47 IF1_inact + 47 IF2-GDP + 47 IF3_inact + 47 h + 47 p + 1 rib_ini_b4179_47	irreversible	Translation	0.00E+00	1.00E+09	0	3.51E+01	3.51E+01	0	5.95E+01	59.4638	0	1.61E+00	1.608

tl_ini_b4180_14_rib	Translation initiation b4180 14 ribosome(s) bound	1 b4180_mRNA_1 + 14 fmet_tRNA_met + 14 h2o + 14 rib_30_ini + 14 rib_50 --> 14 IF1_inact + 14 IF2-GDP + 14 IF3_inact + 14 h + 14 p + 1 rib_ini_b4180_14	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_ini_b4180_1_rib	Translation initiation b4180 1 ribosome(s) bound	1 b4180_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4180_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_ini_b4180_7_rib	Translation initiation b4180 7 ribosome(s) bound	1 b4180_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b4180_7	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_ini_b4200_1_rib	Translation initiation b4200 1 ribosome(s) bound	1 b4200_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4200_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.00E+02	1.00E+02	0	8.29E+01	82.88	0	6.06E+01	60.5605
tl_ini_b4200_3_rib	Translation initiation b4200 3 ribosome(s) bound	1 b4200_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b4200_3	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_ini_b4200_7_rib	Translation initiation b4200 7 ribosome(s) bound	1 b4200_mRNA_1 + 7 fmet_tRNA_met + 7 h2o + 7 rib_30_ini + 7 rib_50 --> 7 IF1_inact + 7 IF2-GDP + 7 IF3_inact + 7 h + 7 pi + 1 rib_ini_b4200_7	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_ini_b4201_1_rib	Translation initiation b4201 1 ribosome(s) bound	1 b4201_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4201_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089
tl_ini_b4201_3_rib	Translation initiation b4201 3 ribosome(s) bound	1 b4201_mRNA_1 + 3 fmet_tRNA_met + 3 h2o + 3 rib_30_ini + 3 rib_50 --> 3 IF1_inact + 3 IF2-GDP + 3 IF3_inact + 3 h + 3 pi + 1 rib_ini_b4201_3	irreversible	Translation	0.00E+00	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089
tl_ini_b4201_6_rib	Translation initiation b4201 6 ribosome(s) bound	1 b4201_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b4201_6	irreversible	Translation	0.00E+00	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089
tl_ini_b4202_1_rib	Translation initiation b4202 1 ribosome(s) bound	1 b4202_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4202_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_ini_b4202_2_rib	Translation initiation b4202 2 ribosome(s) bound	1 b4202_mRNA_1 + 2 fmet_tRNA_met + 2 h2o + 2 rib_30_ini + 2 rib_50 --> 2 IF1_inact + 2 IF2-GDP + 2 IF3_inact + 2 h + 2 pi + 1 rib_ini_b4202_2	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_ini_b4202_4_rib	Translation initiation b4202 4 ribosome(s) bound	1 b4202_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b4202_4	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_ini_b4203_1_rib	Translation initiation b4203 1 ribosome(s) bound	1 b4203_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4203_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.94E+01	8.94E+01	0	8.29E+01	82.88	0	1.01E+01	10.07886
tl_ini_b4203_4_rib	Translation initiation b4203 4 ribosome(s) bound	1 b4203_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b4203_4	irreversible	Translation	0.00E+00	1.00E+09	0	2.73E+01	2.73E+01	0	2.07E+01	20.72	0	1.66E+01	16.589
tl_ini_b4203_8_rib	Translation initiation b4203 8 ribosome(s) bound	1 b4203_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b4203_8	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_ini_b4258_1_rib	Translation initiation b4258 1 ribosome(s) bound	1 b4258_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4258_1	irreversible	Translation	0.00E+00	1.00E+09	0	4.37E+01	4.37E+01	0	7.60E+01	75.95142	0	2.16E+00	2.16
tl_ini_b4258_27_rib	Translation initiation b4258 27 ribosome(s) bound	1 b4258_mRNA_1 + 27 fmet_tRNA_met + 27 h2o + 27 rib_30_ini + 27 rib_50 --> 27 IF1_inact + 27 IF2-GDP + 27 IF3_inact + 27 h + 27 p + 1 rib_ini_b4258_27	irreversible	Translation	0.00E+00	1.00E+09	0	4.37E+01	4.37E+01	0	7.60E+01	75.95142	0	2.16E+00	2.16
tl_ini_b4258_55_rib	Translation initiation b4258 55 ribosome(s) bound	1 b4258_mRNA_1 + 55 fmet_tRNA_met + 55 h2o + 55 rib_30_ini + 55 rib_50 --> 55 IF1_inact + 55 IF2-GDP + 55 IF3_inact + 55 h + 55 p + 1 rib_ini_b4258_55	irreversible	Translation	0.00E+00	1.00E+09	0	3.67E+01	3.67E+01	0	3.74E+01	37.39572	0	2.16E+00	2.16
tl_ini_b4292_18_rib	Translation initiation b4292 18 ribosome(s) bound	1 b4292_mRNA_1 + 18 fmet_tRNA_met + 18 h2o + 18 rib_30_ini + 18 rib_50 --> 18 IF1_inact + 18 IF2-GDP + 18 IF3_inact + 18 h + 18 p + 1 rib_ini_b4292_18	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_ini_b4292_1_rib	Translation initiation b4292 1 ribosome(s) bound	1 b4292_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4292_1	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_ini_b4292_9_rib	Translation initiation b4292 9 ribosome(s) bound	1 b4292_mRNA_1 + 9 fmet_tRNA_met + 9 h2o + 9 rib_30_ini + 9 rib_50 --> 9 IF1_inact + 9 IF2-GDP + 9 IF3_inact + 9 h + 9 pi + 1 rib_ini_b4292_9	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_ini_b4293_10_rib	Translation initiation b4293 10 ribosome(s) bound	1 b4293_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b4293_10	irreversible	Translation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tl_ini_b4293_1_rib	Translation initiation b4293 1 ribosome(s) bound	1 b4293_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4293_1	irreversible	Translation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tl_ini_b4293_5_rib	Translation initiation b4293 5 ribosome(s) bound	1 b4293_mRNA_1 + 5 fmet_tRNA_met + 5 h2o + 5 rib_30_ini + 5 rib_50 --> 5 IF1_inact + 5 IF2-GDP + 5 IF3_inact + 5 h + 5 pi + 1 rib_ini_b4293_5	irreversible	Translation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tl_ini_b4371_10_rib	Translation initiation b4371 10 ribosome(s) bound	1 b4371_mRNA_1 + 10 fmet_tRNA_met + 10 h2o + 10 rib_30_ini + 10 rib_50 --> 10 IF1_inact + 10 IF2-GDP + 10 IF3_inact + 10 h + 10 p + 1 rib_ini_b4371_10	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_ini_b4371_1_rib	Translation initiation b4371 1 ribosome(s) bound	1 b4371_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4371_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_ini_b4371_20_rib	Translation initiation b4371 20 ribosome(s) bound	1 b4371_mRNA_1 + 20 fmet_tRNA_met + 20 h2o + 20 rib_30_ini + 20 rib_50 --> 20 IF1_inact + 20 IF2-GDP + 20 IF3_inact + 20 h + 20 p + 1 rib_ini_b4371_20	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_ini_b4372_1_rib	Translation initiation b4372 1 ribosome(s) bound	1 b4372_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4372_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429
tl_ini_b4372_4_rib	Translation initiation b4372 4 ribosome(s) bound	1 b4372_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b4372_4	irreversible	Translation	0.00E+00	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429
tl_ini_b4372_8_rib	Translation initiation b4372 8 ribosome(s) bound	1 b4372_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b4372_8	irreversible	Translation	0.00E+00	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429
tl_ini_b4373_1_rib	Translation initiation b4373 1 ribosome(s) bound	1 b4373_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4373_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_ini_b4373_4_rib	Translation initiation b4373 4 ribosome(s) bound	1 b4373_mRNA_1 + 4 fmet_tRNA_met + 4 h2o + 4 rib_30_ini + 4 rib_50 --> 4 IF1_inact + 4 IF2-GDP + 4 IF3_inact + 4 h + 4 pi + 1 rib_ini_b4373_4	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_ini_b4373_8_rib	Translation initiation b4373 8 ribosome(s) bound	1 b4373_mRNA_1 + 8 fmet_tRNA_met + 8 h2o + 8 rib_30_ini + 8 rib_50 --> 8 IF1_inact + 8 IF2-GDP + 8 IF3_inact + 8 h + 8 pi + 1 rib_ini_b4373_8	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_ini_b4374_13_rib	Translation initiation b4374 13 ribosome(s) bound	1 b4374_mRNA_1 + 13 fmet_tRNA_met + 13 h2o + 13 rib_30_ini + 13 rib_50 --> 13 IF1_inact + 13 IF2-GDP + 13 IF3_inact + 13 h + 13 p + 1 rib_ini_b4374_13	irreversible	Translation	0.00E+00	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929
tl_ini_b4374_1_rib	Translation initiation b4374 1 ribosome(s) bound	1 b4374_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4374_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929
tl_ini_b4374_6_rib	Translation initiation b4374 6 ribosome(s) bound	1 b4374_mRNA_1 + 6 fmet_tRNA_met + 6 h2o + 6 rib_30_ini + 6 rib_50 --> 6 IF1_inact + 6 IF2-GDP + 6 IF3_inact + 6 h + 6 pi + 1 rib_ini_b4374_6	irreversible	Translation	0.00E+00	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929
tl_ini_b4375_15_rib	Translation initiation b4375 15 ribosome(s) bound	1 b4375_mRNA_1 + 15 fmet_tRNA_met + 15 h2o + 15 rib_30_ini + 15 rib_50 --> 15 IF1_inact + 15 IF2-GDP + 15 IF3_inact + 15 h + 15 p + 1 rib_ini_b4375_15	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_ini_b4375_1_rib	Translation initiation b4375 1 ribosome(s) bound	1 b4375_mRNA_1 + 1 fmet_tRNA_met + 1 h2o + 1 rib_30_ini + 1 rib_50 --> 1 IF1_inact + 1 IF2-GDP + 1 IF3_inact + 1 h + 1 pi + 1 rib_ini_b4375_1	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948

tl_ini_b4375_31_rib	Translation initiation b4375 31 ribosome(s) bound	1 b4375_mRNA_1 + 31 fmet_tRNA_met + 31 h2o + 31 rib_30_ini + 31 rib_50 --> 31 IF1_inact + 31 IF2-GDP + 31 IF3_inact + 31 h + 31 p + 1 rib_ini_b4375_31	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_term_b0014_18_rib1	Translation termination 1 b0014 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b0014_18_cplx <==> 1 tl_term_b0014_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_term_b0014_18_rib2	Translation termination 2 b0014 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b0014_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b0014_aa + 1 b0014_mRNA_2 + 18 gdp + 54 h + 18 lys1_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_term_b0014_18_rib_RF2_1	Translation termination 1 b0014 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b0014_18_cplx <==> 1 tl_term_b0014_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_term_b0014_18_rib_RF2_2	Translation termination 2 b0014 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b0014_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b0014_aa + 1 b0014_mRNA_2 + 18 gdp + 54 h + 18 lys1_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_term_b0014_1_rib1	Translation termination 1 b0014 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0014_1_cplx <==> 1 tl_term_b0014_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_term_b0014_1_rib2	Translation termination 2 b0014 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0014_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0014_aa + 1 b0014_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_term_b0014_1_rib_RF2_1	Translation termination 1 b0014 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0014_1_cplx <==> 1 tl_term_b0014_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_term_b0014_1_rib_RF2_2	Translation termination 2 b0014 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0014_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0014_aa + 1 b0014_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_term_b0014_37_rib1	Translation termination 1 b0014 37 ribosome(s), (RF1_mono)	37 RF1_mono + 37 RF3_mono.GDP + 37 Rrf_mono + 1 rib_70_elo2_b0014_37_cplx <==> 1 tl_term_b0014_37_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_term_b0014_37_rib2	Translation termination 2 b0014 37 ribosome(s), (RF1_mono)	37 gtp + 74 h2o + 1 tl_term_b0014_37_rib_cplx --> 37 EF-G.GDP + 37 EF-Tu.GDP + 37 RF1_mono_inact + 37 RF3_mono.GDP_inact + 37 Rrf_mono_inact + 37 b0014_aa + 1 b0014_mRNA_2 + 37 gdp + 111 h + 37 lys1_tRNA + 111 pi + 37 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_term_b0014_37_rib_RF2_1	Translation termination 1 b0014 37 ribosome(s), RF2_mono	37 RF2_mono + 37 RF3_mono.GDP + 37 Rrf_mono + 1 rib_70_elo2_b0014_37_cplx <==> 1 tl_term_b0014_37_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_term_b0014_37_rib_RF2_2	Translation termination 2 b0014 37 ribosome(s), RF2	37 gtp + 74 h2o + 1 tl_term_b0014_37_rib_cplx2 --> 37 EF-G.GDP + 37 EF-Tu.GDP + 37 RF2_mono_inact + 37 RF3_mono.GDP_inact + 37 Rrf_mono_inact + 37 b0014_aa + 1 b0014_mRNA_2 + 37 gdp + 111 h + 37 lys1_tRNA + 111 pi + 37 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.93E+01	79.27185	0	6.86E+00	6.861
tl_term_b0015_11_rib1	Translation termination 1 b0015 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b0015_11_cplx <==> 1 tl_term_b0015_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_term_b0015_11_rib2	Translation termination 2 b0015 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b0015_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 arg1_tRNA + 11 b0015_aa + 1 b0015_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_term_b0015_11_rib_RF2_1	Translation termination 1 b0015 11 ribosome(s), RF2_mono	11 RF2_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b0015_11_cplx <==> 1 tl_term_b0015_11_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_term_b0015_11_rib_RF2_2	Translation termination 2 b0015 11 ribosome(s), RF2	11 gtp + 22 h2o + 1 tl_term_b0015_11_rib_cplx2 --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF2_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 arg1_tRNA + 11 b0015_aa + 1 b0015_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_term_b0015_1_rib1	Translation termination 1 b0015 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0015_1_cplx <==> 1 tl_term_b0015_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_term_b0015_1_rib2	Translation termination 2 b0015 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0015_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b0015_aa + 1 b0015_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_term_b0015_1_rib_RF2_1	Translation termination 1 b0015 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0015_1_cplx <==> 1 tl_term_b0015_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_term_b0015_1_rib_RF2_2	Translation termination 2 b0015 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0015_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b0015_aa + 1 b0015_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_term_b0015_22_rib1	Translation termination 1 b0015 22 ribosome(s), (RF1_mono)	22 RF1_mono + 22 RF3_mono.GDP + 22 Rrf_mono + 1 rib_70_elo2_b0015_22_cplx <==> 1 tl_term_b0015_22_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_term_b0015_22_rib2	Translation termination 2 b0015 22 ribosome(s), (RF1_mono)	22 gtp + 44 h2o + 1 tl_term_b0015_22_rib_cplx --> 22 EF-G.GDP + 22 EF-Tu.GDP + 22 RF1_mono_inact + 22 RF3_mono.GDP_inact + 22 Rrf_mono_inact + 22 arg1_tRNA + 22 b0015_aa + 1 b0015_mRNA_2 + 22 gdp + 66 h + 66 pi + 22 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_term_b0015_22_rib_RF2_1	Translation termination 1 b0015 22 ribosome(s), RF2_mono	22 RF2_mono + 22 RF3_mono.GDP + 22 Rrf_mono + 1 rib_70_elo2_b0015_22_cplx <==> 1 tl_term_b0015_22_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_term_b0015_22_rib_RF2_2	Translation termination 2 b0015 22 ribosome(s), RF2	22 gtp + 44 h2o + 1 tl_term_b0015_22_rib_cplx2 --> 22 EF-G.GDP + 22 EF-Tu.GDP + 22 RF2_mono_inact + 22 RF3_mono.GDP_inact + 22 Rrf_mono_inact + 22 arg1_tRNA + 22 b0015_aa + 1 b0015_mRNA_2 + 22 gdp + 66 h + 66 pi + 22 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.52E+01	4.52E+01	0	7.68E+01	76.81185	0	4.40E+00	4.401
tl_term_b0023_1_rib1	Translation termination 1 b0023 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0023_1_cplx <==> 1 tl_term_b0023_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b0023_1_rib2	Translation termination 2 b0023 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0023_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b0023_aa + 1 b0023_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b0023_1_rib_RF2_1	Translation termination 1 b0023 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0023_1_cplx <==> 1 tl_term_b0023_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b0023_1_rib_RF2_2	Translation termination 2 b0023 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0023_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b0023_aa + 1 b0023_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b0023_2_rib1	Translation termination 1 b0023 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b0023_2_cplx <==> 1 tl_term_b0023_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44

tl_term_b0023_2_rib2	Translation termination 2 b0023 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b0023_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 ala1_tRNA + 2 b0023_aa + 1 b0023_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b0023_2_rib_RF2_1	Translation termination 1 b0023 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b0023_2_cplx <==> 1 tl_term_b0023_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b0023_2_rib_RF2_2	Translation termination 2 b0023 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b0023_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 ala1_tRNA + 2 b0023_aa + 1 b0023_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b0023_5_rib1	Translation termination 1 b0023 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b0023_5_cplx <==> 1 tl_term_b0023_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b0023_5_rib2	Translation termination 2 b0023 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b0023_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 ala1_tRNA + 5 b0023_aa + 1 b0023_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b0023_5_rib_RF2_1	Translation termination 1 b0023 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b0023_5_cplx <==> 1 tl_term_b0023_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b0023_5_rib_RF2_2	Translation termination 2 b0023 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b0023_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 ala1_tRNA + 5 b0023_aa + 1 b0023_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b0025_18_rib1	Translation termination 1 b0025 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b0025_18_cplx <==> 1 tl_term_b0025_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_term_b0025_18_rib2	Translation termination 2 b0025 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b0025_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 ala1_tRNA + 18 b0025_aa + 1 b0025_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_term_b0025_18_rib_RF2_1	Translation termination 1 b0025 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b0025_18_cplx <==> 1 tl_term_b0025_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_term_b0025_18_rib_RF2_2	Translation termination 2 b0025 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b0025_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 ala1_tRNA + 18 b0025_aa + 1 b0025_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_term_b0025_1_rib1	Translation termination 1 b0025 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0025_1_cplx <==> 1 tl_term_b0025_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_term_b0025_1_rib2	Translation termination 2 b0025 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0025_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b0025_aa + 1 b0025_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_term_b0025_1_rib_RF2_1	Translation termination 1 b0025 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0025_1_cplx <==> 1 tl_term_b0025_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_term_b0025_1_rib_RF2_2	Translation termination 2 b0025 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0025_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b0025_aa + 1 b0025_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_term_b0025_9_rib1	Translation termination 1 b0025 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b0025_9_cplx <==> 1 tl_term_b0025_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_term_b0025_9_rib2	Translation termination 2 b0025 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b0025_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 ala1_tRNA + 9 b0025_aa + 1 b0025_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_term_b0025_9_rib_RF2_1	Translation termination 1 b0025 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b0025_9_cplx <==> 1 tl_term_b0025_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_term_b0025_9_rib_RF2_2	Translation termination 2 b0025 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b0025_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 ala1_tRNA + 9 b0025_aa + 1 b0025_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.86E+01	2.86E+01	0	4.50E+01	44.98865	0	7.24E+00	7.2445
tl_term_b0026_1_rib1	Translation termination 1 b0026 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0026_1_cplx <==> 1 tl_term_b0026_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.32E+01	2.32E+01	0	3.96E+01	39.62865	0	1.88E+00	1.8845
tl_term_b0026_1_rib2	Translation termination 2 b0026 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0026_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala2_tRNA + 1 b0026_aa + 1 b0026_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.32E+01	2.32E+01	0	3.96E+01	39.62865	0	1.88E+00	1.8845
tl_term_b0026_27_rib1	Translation termination 1 b0026 27 ribosome(s), (RF1_mono)	27 RF1_mono + 27 RF3_mono.GDP + 27 Rrf_mono + 1 rib_70_elo2_b0026_27_cplx <==> 1 tl_term_b0026_27_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.32E+01	2.32E+01	0	3.96E+01	39.62865	0	1.88E+00	1.8845
tl_term_b0026_27_rib2	Translation termination 2 b0026 27 ribosome(s), (RF1_mono)	27 gtp + 54 h2o + 1 tl_term_b0026_27_rib_cplx --> 27 EF-G.GDP + 27 EF-Tu.GDP + 27 RF1_mono_inact + 27 RF3_mono.GDP_inact + 27 Rrf_mono_inact + 27 ala2_tRNA + 27 b0026_aa + 1 b0026_mRNA_2 + 27 gdp + 81 h + 81 pi + 27 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.32E+01	2.32E+01	0	3.96E+01	39.62865	0	1.88E+00	1.8845
tl_term_b0026_55_rib1	Translation termination 1 b0026 55 ribosome(s), (RF1_mono)	55 RF1_mono + 55 RF3_mono.GDP + 55 Rrf_mono + 1 rib_70_elo2_b0026_55_cplx <==> 1 tl_term_b0026_55_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.32E+01	2.32E+01	0	3.88E+01	38.78764	0	1.88E+00	1.8845
tl_term_b0026_55_rib2	Translation termination 2 b0026 55 ribosome(s), (RF1_mono)	55 gtp + 110 h2o + 1 tl_term_b0026_55_rib_cplx --> 55 EF-G.GDP + 55 EF-Tu.GDP + 55 RF1_mono_inact + 55 RF3_mono.GDP_inact + 55 Rrf_mono_inact + 55 ala2_tRNA + 55 b0026_aa + 1 b0026_mRNA_2 + 55 gdp + 165 h + 165 pi + 55 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.32E+01	2.32E+01	0	3.88E+01	38.78764	0	1.88E+00	1.8845
tl_term_b0027_1_rib1	Translation termination 1 b0027 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0027_1_cplx <==> 1 tl_term_b0027_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_term_b0027_1_rib2	Translation termination 2 b0027 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0027_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0027_aa + 1 b0027_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_term_b0027_1_rib_RF2_1	Translation termination 1 b0027 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0027_1_cplx <==> 1 tl_term_b0027_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_term_b0027_1_rib_RF2_2	Translation termination 2 b0027 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0027_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0027_aa + 1 b0027_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_term_b0027_4_rib1	Translation termination 1 b0027 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b0027_4_cplx <==> 1 tl_term_b0027_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_term_b0027_4_rib2	Translation termination 2 b0027 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b0027_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b0027_aa + 1 b0027_mRNA_2 + 4 gdp + 4 gln2_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645

tl_term_b0027_4_rib_RF2_1	Translation termination 1 b0027 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b0027_4_cplx <==> 1 tl_term_b0027_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_term_b0027_4_rib_RF2_2	Translation termination 2 b0027 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b0027_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b0027_aa + 1 b0027_mRNA_2 + 4 gdp + 4 gln2_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_term_b0027_9_rib1	Translation termination 1 b0027 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b0027_9_cplx <==> 1 tl_term_b0027_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_term_b0027_9_rib2	Translation termination 2 b0027 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b0027_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b0027_aa + 1 b0027_mRNA_2 + 9 gdp + 9 gln2_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_term_b0027_9_rib_RF2_1	Translation termination 1 b0027 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b0027_9_cplx <==> 1 tl_term_b0027_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_term_b0027_9_rib_RF2_2	Translation termination 2 b0027 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b0027_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b0027_aa + 1 b0027_mRNA_2 + 9 gdp + 9 gln2_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.75E+01	47.50865	0	9.76E+00	9.7645
tl_term_b0028_1_rib1	Translation termination 1 b0028 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0028_1_cplx <==> 1 tl_term_b0028_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_term_b0028_1_rib2	Translation termination 2 b0028 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0028_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b0028_aa + 1 b0028_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_term_b0028_1_rib_RF2_1	Translation termination 1 b0028 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0028_1_cplx <==> 1 tl_term_b0028_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_term_b0028_1_rib_RF2_2	Translation termination 2 b0028 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0028_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b0028_aa + 1 b0028_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_term_b0028_4_rib1	Translation termination 1 b0028 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b0028_4_cplx <==> 1 tl_term_b0028_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_term_b0028_4_rib2	Translation termination 2 b0028 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b0028_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 ala1_tRNA + 4 b0028_aa + 1 b0028_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_term_b0028_4_rib_RF2_1	Translation termination 1 b0028 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b0028_4_cplx <==> 1 tl_term_b0028_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_term_b0028_4_rib_RF2_2	Translation termination 2 b0028 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b0028_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 ala1_tRNA + 4 b0028_aa + 1 b0028_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_term_b0028_8_rib1	Translation termination 1 b0028 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b0028_8_cplx <==> 1 tl_term_b0028_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_term_b0028_8_rib2	Translation termination 2 b0028 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b0028_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 ala1_tRNA + 8 b0028_aa + 1 b0028_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_term_b0028_8_rib_RF2_1	Translation termination 1 b0028 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b0028_8_cplx <==> 1 tl_term_b0028_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_term_b0028_8_rib_RF2_2	Translation termination 2 b0028 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b0028_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 ala1_tRNA + 8 b0028_aa + 1 b0028_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	4.66E+01	46.59865	0	8.85E+00	8.8545
tl_term_b0029_18_rib1	Translation termination 1 b0029 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b0029_18_cplx <==> 1 tl_term_b0029_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_term_b0029_18_rib2	Translation termination 2 b0029 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b0029_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 asp1_tRNA + 18 b0029_aa + 1 b0029_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_term_b0029_18_rib_RF2_1	Translation termination 1 b0029 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b0029_18_cplx <==> 1 tl_term_b0029_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_term_b0029_18_rib_RF2_2	Translation termination 2 b0029 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b0029_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 asp1_tRNA + 18 b0029_aa + 1 b0029_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_term_b0029_1_rib1	Translation termination 1 b0029 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0029_1_cplx <==> 1 tl_term_b0029_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_term_b0029_1_rib2	Translation termination 2 b0029 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0029_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b0029_aa + 1 b0029_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_term_b0029_1_rib_RF2_1	Translation termination 1 b0029 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0029_1_cplx <==> 1 tl_term_b0029_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_term_b0029_1_rib_RF2_2	Translation termination 2 b0029 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0029_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b0029_aa + 1 b0029_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_term_b0029_9_rib1	Translation termination 1 b0029 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b0029_9_cplx <==> 1 tl_term_b0029_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_term_b0029_9_rib2	Translation termination 2 b0029 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b0029_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 asp1_tRNA + 9 b0029_aa + 1 b0029_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_term_b0029_9_rib_RF2_1	Translation termination 1 b0029 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b0029_9_cplx <==> 1 tl_term_b0029_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_term_b0029_9_rib_RF2_2	Translation termination 2 b0029 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b0029_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 asp1_tRNA + 9 b0029_aa + 1 b0029_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+01	2.65E+01	0	4.29E+01	42.85865	0	5.11E+00	5.1145
tl_term_b0049_16_rib1	Translation termination 1 b0049 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b0049_16_cplx <==> 1 tl_term_b0049_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_term_b0049_16_rib2	Translation termination 2 b0049 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b0049_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b0049_aa + 1 b0049_mRNA_2 + 16 gdp + 48 h + 48 pi + 16 rib_70 + 16 ser2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498

tl_term_b0049_16_rib_RF2_1	Translation termination 1 b0049 16 ribosome(s), RF2_mono	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b0049_16_cplx <==> 1 tl_term_b0049_16_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_term_b0049_16_rib_RF2_2	Translation termination 2 b0049 16 ribosome(s), RF2	16 gtp + 32 h2o + 1 tl_term_b0049_16_rib_cplx2 --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b0049_aa + 1 b0049_mRNA_2 + 16 gdp + 48 h + 48 pi + 16 rib_70 + 16 ser2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_term_b0049_1_rib1	Translation termination 1 b0049 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0049_1_cplx <==> 1 tl_term_b0049_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_term_b0049_1_rib2	Translation termination 2 b0049 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0049_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0049_aa + 1 b0049_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 ser2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_term_b0049_1_rib_RF2_1	Translation termination 1 b0049 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0049_1_cplx <==> 1 tl_term_b0049_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_term_b0049_1_rib_RF2_2	Translation termination 2 b0049 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0049_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0049_aa + 1 b0049_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 ser2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_term_b0049_8_rib1	Translation termination 1 b0049 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b0049_8_cplx <==> 1 tl_term_b0049_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_term_b0049_8_rib2	Translation termination 2 b0049 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b0049_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b0049_aa + 1 b0049_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70 + 8 ser2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_term_b0049_8_rib_RF2_1	Translation termination 1 b0049 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b0049_8_cplx <==> 1 tl_term_b0049_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_term_b0049_8_rib_RF2_2	Translation termination 2 b0049 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b0049_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b0049_aa + 1 b0049_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70 + 8 ser2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.44E+01	6.44E+01	0	1.10E+02	109.5437	0	5.50E+00	5.498
tl_term_b0050_1_rib1	Translation termination 1 b0050 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0050_1_cplx <==> 1 tl_term_b0050_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_term_b0050_1_rib2	Translation termination 2 b0050 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0050_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0050_aa + 1 b0050_mRNA_2 + 1 gdp + 3 h + 1 hisR_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_term_b0050_1_rib_RF2_1	Translation termination 1 b0050 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0050_1_cplx <==> 1 tl_term_b0050_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_term_b0050_1_rib_RF2_2	Translation termination 2 b0050 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0050_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0050_aa + 1 b0050_mRNA_2 + 1 gdp + 3 h + 1 hisR_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_term_b0050_3_rib1	Translation termination 1 b0050 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b0050_3_cplx <==> 1 tl_term_b0050_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_term_b0050_3_rib2	Translation termination 2 b0050 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b0050_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b0050_aa + 1 b0050_mRNA_2 + 3 gdp + 9 h + 3 hisR_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_term_b0050_3_rib_RF2_1	Translation termination 1 b0050 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b0050_3_cplx <==> 1 tl_term_b0050_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_term_b0050_3_rib_RF2_2	Translation termination 2 b0050 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b0050_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b0050_aa + 1 b0050_mRNA_2 + 3 gdp + 9 h + 3 hisR_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_term_b0050_7_rib1	Translation termination 1 b0050 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b0050_7_cplx <==> 1 tl_term_b0050_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_term_b0050_7_rib2	Translation termination 2 b0050 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b0050_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b0050_aa + 1 b0050_mRNA_2 + 7 gdp + 21 h + 7 hisR_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_term_b0050_7_rib_RF2_1	Translation termination 1 b0050 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b0050_7_cplx <==> 1 tl_term_b0050_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_term_b0050_7_rib_RF2_2	Translation termination 2 b0050 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b0050_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b0050_aa + 1 b0050_mRNA_2 + 7 gdp + 21 h + 7 hisR_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.17E+01	7.17E+01	0	1.17E+02	116.9137	0	1.29E+01	12.868
tl_term_b0051_16_rib1	Translation termination 1 b0051 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b0051_16_cplx <==> 1 tl_term_b0051_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_term_b0051_16_rib2	Translation termination 2 b0051 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b0051_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b0051_aa + 1 b0051_mRNA_2 + 16 gdp + 48 h + 48 pi + 16 rib_70 + 16 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_term_b0051_16_rib_RF2_1	Translation termination 1 b0051 16 ribosome(s), RF2_mono	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b0051_16_cplx <==> 1 tl_term_b0051_16_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_term_b0051_16_rib_RF2_2	Translation termination 2 b0051 16 ribosome(s), RF2	16 gtp + 32 h2o + 1 tl_term_b0051_16_rib_cplx2 --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b0051_aa + 1 b0051_mRNA_2 + 16 gdp + 48 h + 48 pi + 16 rib_70 + 16 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_term_b0051_1_rib1	Translation termination 1 b0051 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0051_1_cplx <==> 1 tl_term_b0051_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_term_b0051_1_rib2	Translation termination 2 b0051 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0051_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0051_aa + 1 b0051_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_term_b0051_1_rib_RF2_1	Translation termination 1 b0051 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0051_1_cplx <==> 1 tl_term_b0051_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_term_b0051_1_rib_RF2_2	Translation termination 2 b0051 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0051_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0051_aa + 1 b0051_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_term_b0051_8_rib1	Translation termination 1 b0051 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b0051_8_cplx <==> 1 tl_term_b0051_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_term_b0051_8_rib2	Translation termination 2 b0051 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b0051_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b0051_aa + 1 b0051_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70 + 8 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948

tl_term_b0051_8_rib_RF2_1	Translation termination 1 b0051 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b0051_8_cplx <==> 1 tl_term_b0051_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_term_b0051_8_rib_RF2_2	Translation termination 2 b0051 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b0051_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b0051_aa + 1 b0051_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70 + 8 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	1.18E+02	118.2198	0	4.95E+00	4.948
tl_term_b0052_19_rib1	Translation termination 1 b0052 19 ribosome(s), (RF1_mono)	19 RF1_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b0052_19_cplx <==> 1 tl_term_b0052_19_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708
tl_term_b0052_19_rib2	Translation termination 2 b0052 19 ribosome(s), (RF1_mono)	19 gtp + 38 h2o + 1 tl_term_b0052_19_rib_cplx --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF1_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b0052_aa + 1 b0052_mRNA_2 + 19 gdp + 19 gln2_tRNA + 57 h + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708
tl_term_b0052_1_rib1	Translation termination 1 b0052 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0052_1_cplx <==> 1 tl_term_b0052_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708
tl_term_b0052_1_rib2	Translation termination 2 b0052 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0052_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0052_aa + 1 b0052_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708
tl_term_b0052_9_rib1	Translation termination 1 b0052 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b0052_9_cplx <==> 1 tl_term_b0052_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708
tl_term_b0052_9_rib2	Translation termination 2 b0052 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b0052_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b0052_aa + 1 b0052_mRNA_2 + 9 gdp + 9 gln2_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.88E+01	6.88E+01	0	1.18E+02	117.9798	0	4.71E+00	4.708
tl_term_b0053_12_rib1	Translation termination 1 b0053 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b0053_12_cplx <==> 1 tl_term_b0053_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_term_b0053_12_rib2	Translation termination 2 b0053 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b0053_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 asn1_tRNA + 12 b0053_aa + 1 b0053_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_term_b0053_12_rib_RF2_1	Translation termination 1 b0053 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b0053_12_cplx <==> 1 tl_term_b0053_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_term_b0053_12_rib_RF2_2	Translation termination 2 b0053 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b0053_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 asn1_tRNA + 12 b0053_aa + 1 b0053_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_term_b0053_1_rib1	Translation termination 1 b0053 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0053_1_cplx <==> 1 tl_term_b0053_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_term_b0053_1_rib2	Translation termination 2 b0053 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0053_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b0053_aa + 1 b0053_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_term_b0053_1_rib_RF2_1	Translation termination 1 b0053 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0053_1_cplx <==> 1 tl_term_b0053_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_term_b0053_1_rib_RF2_2	Translation termination 2 b0053 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0053_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b0053_aa + 1 b0053_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_term_b0053_25_rib1	Translation termination 1 b0053 25 ribosome(s), (RF1_mono)	25 RF1_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b0053_25_cplx <==> 1 tl_term_b0053_25_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_term_b0053_25_rib2	Translation termination 2 b0053 25 ribosome(s), (RF1_mono)	25 gtp + 50 h2o + 1 tl_term_b0053_25_rib_cplx --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF1_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 asn1_tRNA + 25 b0053_aa + 1 b0053_mRNA_2 + 25 gdp + 75 h + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_term_b0053_25_rib_RF2_1	Translation termination 1 b0053 25 ribosome(s), RF2_mono	25 RF2_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b0053_25_cplx <==> 1 tl_term_b0053_25_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_term_b0053_25_rib_RF2_2	Translation termination 2 b0053 25 ribosome(s), RF2	25 gtp + 50 h2o + 1 tl_term_b0053_25_rib_cplx2 --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF2_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 asn1_tRNA + 25 b0053_aa + 1 b0053_mRNA_2 + 25 gdp + 75 h + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.29E+01	52.87944	0	4.53E+00	4.528
tl_term_b0058_12_rib1	Translation termination 1 b0058 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b0058_12_cplx <==> 1 tl_term_b0058_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_term_b0058_12_rib2	Translation termination 2 b0058 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b0058_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b0058_aa + 1 b0058_mRNA_2 + 12 gdp + 36 h + 12 phe1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_term_b0058_12_rib_RF2_1	Translation termination 1 b0058 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b0058_12_cplx <==> 1 tl_term_b0058_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_term_b0058_12_rib_RF2_2	Translation termination 2 b0058 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b0058_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b0058_aa + 1 b0058_mRNA_2 + 12 gdp + 36 h + 12 phe1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_term_b0058_1_rib1	Translation termination 1 b0058 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0058_1_cplx <==> 1 tl_term_b0058_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_term_b0058_1_rib2	Translation termination 2 b0058 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0058_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0058_aa + 1 b0058_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_term_b0058_1_rib_RF2_1	Translation termination 1 b0058 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0058_1_cplx <==> 1 tl_term_b0058_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_term_b0058_1_rib_RF2_2	Translation termination 2 b0058 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0058_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0058_aa + 1 b0058_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_term_b0058_6_rib1	Translation termination 1 b0058 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b0058_6_cplx <==> 1 tl_term_b0058_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_term_b0058_6_rib2	Translation termination 2 b0058 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b0058_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b0058_aa + 1 b0058_mRNA_2 + 6 gdp + 18 h + 6 phe1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_term_b0058_6_rib_RF2_1	Translation termination 1 b0058 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b0058_6_cplx <==> 1 tl_term_b0058_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426

tl_term_b0058_6_rib_RF2_2	Translation termination 2 b0058 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b0058_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b0058_aa + 1 b0058_mRNA_2 + 6 gdp + 18 h + 6 phe1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.14E+01	4.14E+01	0	6.76E+01	67.60359	0	7.43E+00	7.426
tl_term_b0059_1_rib1	Translation termination 1 b0059 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0059_1_cplx <==> 1 tl_term_b0059_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.58E+01	3.58E+01	0	6.20E+01	62.00359	0	1.83E+00	1.826
tl_term_b0059_1_rib2	Translation termination 2 b0059 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0059_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0059_aa + 1 b0059_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	6.20E+01	62.00359	0	1.83E+00	1.826
tl_term_b0059_1_rib_RF2_1	Translation termination 1 b0059 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0059_1_cplx <==> 1 tl_term_b0059_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.58E+01	3.58E+01	0	6.20E+01	62.00359	0	1.83E+00	1.826
tl_term_b0059_1_rib_RF2_2	Translation termination 2 b0059 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0059_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0059_aa + 1 b0059_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	6.20E+01	62.00359	0	1.83E+00	1.826
tl_term_b0059_28_rib1	Translation termination 1 b0059 28 ribosome(s), (RF1_mono)	28 RF1_mono + 28 RF3_mono.GDP + 28 Rrf_mono + 1 rib_70_elo2_b0059_28_cplx <==> 1 tl_term_b0059_28_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.58E+01	3.58E+01	0	6.20E+01	62.00359	0	1.83E+00	1.826
tl_term_b0059_28_rib2	Translation termination 2 b0059 28 ribosome(s), (RF1_mono)	28 gtp + 56 h2o + 1 tl_term_b0059_28_rib_cplx --> 28 EF-G.GDP + 28 EF-Tu.GDP + 28 RF1_mono_inact + 28 RF3_mono.GDP_inact + 28 Rrf_mono_inact + 28 b0059_aa + 1 b0059_mRNA_2 + 28 gdp + 28 gln1_tRNA + 84 h + 84 pi + 28 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	6.20E+01	62.00359	0	1.83E+00	1.826
tl_term_b0059_28_rib_RF2_1	Translation termination 1 b0059 28 ribosome(s), RF2_mono	28 RF2_mono + 28 RF3_mono.GDP + 28 Rrf_mono + 1 rib_70_elo2_b0059_28_cplx <==> 1 tl_term_b0059_28_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.58E+01	3.58E+01	0	6.20E+01	62.00359	0	1.83E+00	1.826
tl_term_b0059_28_rib_RF2_2	Translation termination 2 b0059 28 ribosome(s), RF2	28 gtp + 56 h2o + 1 tl_term_b0059_28_rib_cplx2 --> 28 EF-G.GDP + 28 EF-Tu.GDP + 28 RF2_mono_inact + 28 RF3_mono.GDP_inact + 28 Rrf_mono_inact + 28 b0059_aa + 1 b0059_mRNA_2 + 28 gdp + 28 gln1_tRNA + 84 h + 84 pi + 28 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	6.20E+01	62.00359	0	1.83E+00	1.826
tl_term_b0059_56_rib1	Translation termination 1 b0059 56 ribosome(s), (RF1_mono)	56 RF1_mono + 56 RF3_mono.GDP + 56 Rrf_mono + 1 rib_70_elo2_b0059_56_cplx <==> 1 tl_term_b0059_56_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.58E+01	3.58E+01	0	4.28E+01	42.78851	0	1.83E+00	1.826
tl_term_b0059_56_rib2	Translation termination 2 b0059 56 ribosome(s), (RF1_mono)	56 gtp + 112 h2o + 1 tl_term_b0059_56_rib_cplx --> 56 EF-G.GDP + 56 EF-Tu.GDP + 56 RF1_mono_inact + 56 RF3_mono.GDP_inact + 56 Rrf_mono_inact + 56 b0059_aa + 1 b0059_mRNA_2 + 56 gdp + 56 gln1_tRNA + 168 h + 168 pi + 56 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	4.28E+01	42.78851	0	1.83E+00	1.826
tl_term_b0059_56_rib_RF2_1	Translation termination 1 b0059 56 ribosome(s), RF2_mono	56 RF2_mono + 56 RF3_mono.GDP + 56 Rrf_mono + 1 rib_70_elo2_b0059_56_cplx <==> 1 tl_term_b0059_56_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.58E+01	3.58E+01	0	4.28E+01	42.78851	0	1.83E+00	1.826
tl_term_b0059_56_rib_RF2_2	Translation termination 2 b0059 56 ribosome(s), RF2	56 gtp + 112 h2o + 1 tl_term_b0059_56_rib_cplx2 --> 56 EF-G.GDP 56 EF-Tu.GDP + 56 RF2_mono_inact + 56 RF3_mono.GDP_inact + 56 Rrf_mono_inact + 56 b0059_aa + 1 b0059_mRNA_2 + 56 gdp + 56 gln1_tRNA + 168 h + 168 pi + 56 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.58E+01	3.58E+01	0	4.28E+01	42.78851	0	1.83E+00	1.826
tl_term_b0144_18_rib1	Translation termination 1 b0144 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b0144_18_cplx <==> 1 tl_term_b0144_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353
tl_term_b0144_18_rib2	Translation termination 2 b0144 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b0144_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b0144_aa + 1 b0144_mRNA_2 + 18 cysT_tRNA + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353
tl_term_b0144_1_rib1	Translation termination 1 b0144 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0144_1_cplx <==> 1 tl_term_b0144_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353
tl_term_b0144_1_rib2	Translation termination 2 b0144 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0144_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0144_aa + 1 b0144_mRNA_2 + 1 cysT_tRNA + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353
tl_term_b0144_9_rib1	Translation termination 1 b0144 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b0144_9_cplx <==> 1 tl_term_b0144_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353
tl_term_b0144_9_rib2	Translation termination 2 b0144 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b0144_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b0144_aa + 1 b0144_mRNA_2 + 9 cysT_tRNA + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.28E+02	1.28E+02	0	2.23E+02	222.8318	0	5.35E+00	5.353
tl_term_b0166_16_rib1	Translation termination 1 b0166 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b0166_16_cplx <==> 1 tl_term_b0166_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_term_b0166_16_rib2	Translation termination 2 b0166 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b0166_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 asp1_tRNA + 16 b0166_aa + 1 b0166_mRNA_2 + 16 gdp + 48 h + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_term_b0166_16_rib_RF2_1	Translation termination 1 b0166 16 ribosome(s), RF2_mono	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b0166_16_cplx <==> 1 tl_term_b0166_16_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_term_b0166_16_rib_RF2_2	Translation termination 2 b0166 16 ribosome(s), RF2	16 gtp + 32 h2o + 1 tl_term_b0166_16_rib_cplx2 --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 asp1_tRNA + 16 b0166_aa + 1 b0166_mRNA_2 + 16 gdp + 48 h + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_term_b0166_1_rib1	Translation termination 1 b0166 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0166_1_cplx <==> 1 tl_term_b0166_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_term_b0166_1_rib2	Translation termination 2 b0166 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0166_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b0166_aa + 1 b0166_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_term_b0166_1_rib_RF2_1	Translation termination 1 b0166 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0166_1_cplx <==> 1 tl_term_b0166_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_term_b0166_1_rib_RF2_2	Translation termination 2 b0166 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0166_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b0166_aa + 1 b0166_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_term_b0166_8_rib1	Translation termination 1 b0166 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b0166_8_cplx <==> 1 tl_term_b0166_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_term_b0166_8_rib2	Translation termination 2 b0166 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b0166_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 asp1_tRNA + 8 b0166_aa + 1 b0166_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_term_b0166_8_rib_RF2_1	Translation termination 1 b0166 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b0166_8_cplx <==> 1 tl_term_b0166_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997

tl_term_b0166_8_rib_RF2_2	Translation termination 2 b0166 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b0166_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 asp1_tRNA + 8 b0166_aa + 1 b0166_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.33E+01	3.33E+01	0	5.44E+01	54.3931	0	6.00E+00	5.997
tl_term_b0167_1_rib1	Translation termination 1 b0167 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0167_1_cplx <==> 1 tl_term_b0167_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.95E+01	2.95E+01	0	5.06E+01	50.5931	0	2.20E+00	2.197
tl_term_b0167_1_rib2	Translation termination 2 b0167 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0167_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0167_aa + 1 b0167_mRNA_2 + 1 gdp + 1 glyU_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.95E+01	2.95E+01	0	5.06E+01	50.5931	0	2.20E+00	2.197
tl_term_b0167_26_rib1	Translation termination 1 b0167 26 ribosome(s), (RF1_mono)	26 RF1_mono + 26 RF3_mono.GDP + 26 Rrf_mono + 1 rib_70_elo2_b0167_26_cplx <==> 1 tl_term_b0167_26_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.95E+01	2.95E+01	0	5.06E+01	50.5931	0	2.20E+00	2.197
tl_term_b0167_26_rib2	Translation termination 2 b0167 26 ribosome(s), (RF1_mono)	26 gtp + 52 h2o + 1 tl_term_b0167_26_rib_cplx --> 26 EF-G.GDP + 26 EF-Tu.GDP + 26 RF1_mono_inact + 26 RF3_mono.GDP_inact + 26 Rrf_mono_inact + 26 b0167_aa + 1 b0167_mRNA_2 + 26 gdp + 26 glyU_tRNA + 78 h + 78 pi + 26 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.95E+01	2.95E+01	0	5.06E+01	50.5931	0	2.20E+00	2.197
tl_term_b0167_52_rib1	Translation termination 1 b0167 52 ribosome(s), (RF1_mono)	52 RF1_mono + 52 RF3_mono.GDP + 52 Rrf_mono + 1 rib_70_elo2_b0167_52_cplx <==> 1 tl_term_b0167_52_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.95E+01	2.95E+01	0	3.83E+01	38.28969	0	2.20E+00	2.197
tl_term_b0167_52_rib2	Translation termination 2 b0167 52 ribosome(s), (RF1_mono)	52 gtp + 104 h2o + 1 tl_term_b0167_52_rib_cplx --> 52 EF-G.GDP + 52 EF-Tu.GDP + 52 RF1_mono_inact + 52 RF3_mono.GDP_inact + 52 Rrf_mono_inact + 52 b0167_aa + 1 b0167_mRNA_2 + 52 gdp + 52 glyU_tRNA + 156 h + 156 pi + 52 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.95E+01	2.95E+01	0	3.83E+01	38.28969	0	2.20E+00	2.197
tl_term_b0168_15_rib1	Translation termination 1 b0168 15 ribosome(s), (RF1_mono)	15 RF1_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b0168_15_cplx <==> 1 tl_term_b0168_15_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_term_b0168_15_rib2	Translation termination 2 b0168 15 ribosome(s), (RF1_mono)	15 gtp + 30 h2o + 1 tl_term_b0168_15_rib_cplx --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF1_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b0168_aa + 1 b0168_mRNA_2 + 15 gdp + 15 glu1_tRNA + 45 h + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_term_b0168_15_rib_RF2_1	Translation termination 1 b0168 15 ribosome(s), RF2_mono	15 RF2_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b0168_15_cplx <==> 1 tl_term_b0168_15_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_term_b0168_15_rib_RF2_2	Translation termination 2 b0168 15 ribosome(s), RF2	15 gtp + 30 h2o + 1 tl_term_b0168_15_rib_cplx2 --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF2_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b0168_aa + 1 b0168_mRNA_2 + 15 gdp + 15 glu1_tRNA + 45 h + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_term_b0168_1_rib1	Translation termination 1 b0168 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0168_1_cplx <==> 1 tl_term_b0168_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_term_b0168_1_rib2	Translation termination 2 b0168 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0168_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0168_aa + 1 b0168_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_term_b0168_1_rib_RF2_1	Translation termination 1 b0168 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0168_1_cplx <==> 1 tl_term_b0168_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_term_b0168_1_rib_RF2_2	Translation termination 2 b0168 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0168_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0168_aa + 1 b0168_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_term_b0168_7_rib1	Translation termination 1 b0168 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b0168_7_cplx <==> 1 tl_term_b0168_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_term_b0168_7_rib2	Translation termination 2 b0168 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b0168_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b0168_aa + 1 b0168_mRNA_2 + 7 gdp + 7 glu1_tRNA + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_term_b0168_7_rib_RF2_1	Translation termination 1 b0168 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b0168_7_cplx <==> 1 tl_term_b0168_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_term_b0168_7_rib_RF2_2	Translation termination 2 b0168 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b0168_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b0168_aa + 1 b0168_mRNA_2 + 7 gdp + 7 glu1_tRNA + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.3131	0	6.92E+00	6.917
tl_term_b0169_14_rib1	Translation termination 1 b0169 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b0169_14_cplx <==> 1 tl_term_b0169_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.04E+00	8.04E+00	0	5.92E+00	5.92	0	5.92E+00	5.92
tl_term_b0169_14_rib2	Translation termination 2 b0169 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b0169_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b0169_aa + 1 b0169_mRNA_2 + 14 gdp + 14 glu1_tRNA + 42 h + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+00	8.04E+00	0	5.92E+00	5.92	0	5.92E+00	5.92
tl_term_b0169_14_rib_RF2_1	Translation termination 1 b0169 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b0169_14_cplx <==> 1 tl_term_b0169_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.04E+00	8.04E+00	0	5.92E+00	5.92	0	5.92E+00	5.92
tl_term_b0169_14_rib_RF2_2	Translation termination 2 b0169 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b0169_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b0169_aa + 1 b0169_mRNA_2 + 14 gdp + 14 glu1_tRNA + 42 h + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+00	8.04E+00	0	5.92E+00	5.92	0	5.92E+00	5.92
tl_term_b0169_1_rib1	Translation termination 1 b0169 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0169_1_cplx <==> 1 tl_term_b0169_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.76E+01	8.76E+01	0	8.29E+01	82.88	0	1.83E+01	18.284
tl_term_b0169_1_rib2	Translation termination 2 b0169 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0169_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0169_aa + 1 b0169_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.76E+01	8.76E+01	0	8.29E+01	82.88	0	1.83E+01	18.284
tl_term_b0169_1_rib_RF2_1	Translation termination 1 b0169 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0169_1_cplx <==> 1 tl_term_b0169_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.76E+01	8.76E+01	0	8.29E+01	82.88	0	1.83E+01	18.284
tl_term_b0169_1_rib_RF2_2	Translation termination 2 b0169 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0169_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0169_aa + 1 b0169_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.76E+01	8.76E+01	0	8.29E+01	82.88	0	1.83E+01	18.284
tl_term_b0169_7_rib1	Translation termination 1 b0169 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b0169_7_cplx <==> 1 tl_term_b0169_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b0169_7_rib2	Translation termination 2 b0169 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b0169_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b0169_aa + 1 b0169_mRNA_2 + 7 gdp + 7 glu1_tRNA + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b0169_7_rib_RF2_1	Translation termination 1 b0169 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b0169_7_cplx <==> 1 tl_term_b0169_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b0169_7_rib_RF2_2	Translation termination 2 b0169 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b0169_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b0169_aa + 1 b0169_mRNA_2 + 7 gdp + 7 glu1_tRNA + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84

tl_term_b0170_16_rib1	Translation termination 1 b0170 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b0170_16_cplx <==> 1 tl_term_b0170_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_term_b0170_16_rib2	Translation termination 2 b0170 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b0170_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b0170_aa + 1 b0170_mRNA_2 + 16 gdp + 48 h + 48 pi + 16 rib_70 + 16 ser2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_term_b0170_16_rib_RF2_1	Translation termination 1 b0170 16 ribosome(s), RF2_mono	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b0170_16_cplx <==> 1 tl_term_b0170_16_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_term_b0170_16_rib_RF2_2	Translation termination 2 b0170 16 ribosome(s), RF2	16 gtp + 32 h2o + 1 tl_term_b0170_16_rib_cplx2 --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b0170_aa + 1 b0170_mRNA_2 + 16 gdp + 48 h + 48 pi + 16 rib_70 + 16 ser2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_term_b0170_1_rib1	Translation termination 1 b0170 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0170_1_cplx <==> 1 tl_term_b0170_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_term_b0170_1_rib2	Translation termination 2 b0170 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0170_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0170_aa + 1 b0170_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 ser2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_term_b0170_1_rib_RF2_1	Translation termination 1 b0170 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0170_1_cplx <==> 1 tl_term_b0170_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_term_b0170_1_rib_RF2_2	Translation termination 2 b0170 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0170_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0170_aa + 1 b0170_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 ser2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_term_b0170_8_rib1	Translation termination 1 b0170 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b0170_8_cplx <==> 1 tl_term_b0170_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_term_b0170_8_rib2	Translation termination 2 b0170 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b0170_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b0170_aa + 1 b0170_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70 + 8 ser2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_term_b0170_8_rib_RF2_1	Translation termination 1 b0170 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b0170_8_cplx <==> 1 tl_term_b0170_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_term_b0170_8_rib_RF2_2	Translation termination 2 b0170 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b0170_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b0170_aa + 1 b0170_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70 + 8 ser2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.05E+01	9.05E+01	0	9.64E+01	96.44127	0	1.60E+01	16.018
tl_term_b0172_10_rib1	Translation termination 1 b0172 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b0172_10_cplx <==> 1 tl_term_b0172_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599
tl_term_b0172_10_rib2	Translation termination 2 b0172 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b0172_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b0172_aa + 1 b0172_mRNA_2 + 10 gdp + 30 h + 10 phe1_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599
tl_term_b0172_1_rib1	Translation termination 1 b0172 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0172_1_cplx <==> 1 tl_term_b0172_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599
tl_term_b0172_1_rib2	Translation termination 2 b0172 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0172_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0172_aa + 1 b0172_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599
tl_term_b0172_5_rib1	Translation termination 1 b0172 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b0172_5_cplx <==> 1 tl_term_b0172_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599
tl_term_b0172_5_rib2	Translation termination 2 b0172 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b0172_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b0172_aa + 1 b0172_mRNA_2 + 5 gdp + 15 h + 5 phe1_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.65E+02	2.65E+02	0	4.53E+02	452.8892	0	1.96E+01	19.599
tl_term_b0188_12_rib1	Translation termination 1 b0188 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b0188_12_cplx <==> 1 tl_term_b0188_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.84E+01	9.84E+01	0	1.71E+02	170.9685	0	3.84E+00	3.836
tl_term_b0188_12_rib2	Translation termination 2 b0188 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b0188_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b0188_aa + 1 b0188_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70 + 12 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.71E+02	170.9685	0	3.84E+00	3.836
tl_term_b0188_12_rib_RF2_1	Translation termination 1 b0188 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b0188_12_cplx <==> 1 tl_term_b0188_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.84E+01	9.84E+01	0	1.71E+02	170.9685	0	3.84E+00	3.836
tl_term_b0188_12_rib_RF2_2	Translation termination 2 b0188 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b0188_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b0188_aa + 1 b0188_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70 + 12 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.71E+02	170.9685	0	3.84E+00	3.836
tl_term_b0188_1_rib1	Translation termination 1 b0188 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0188_1_cplx <==> 1 tl_term_b0188_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.84E+01	9.84E+01	0	1.71E+02	170.9685	0	3.84E+00	3.836
tl_term_b0188_1_rib2	Translation termination 2 b0188 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0188_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0188_aa + 1 b0188_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.71E+02	170.9685	0	3.84E+00	3.836
tl_term_b0188_1_rib_RF2_1	Translation termination 1 b0188 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0188_1_cplx <==> 1 tl_term_b0188_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.84E+01	9.84E+01	0	1.71E+02	170.9685	0	3.84E+00	3.836
tl_term_b0188_1_rib_RF2_2	Translation termination 2 b0188 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0188_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0188_aa + 1 b0188_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.71E+02	170.9685	0	3.84E+00	3.836
tl_term_b0188_25_rib1	Translation termination 1 b0188 25 ribosome(s), (RF1_mono)	25 RF1_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b0188_25_cplx <==> 1 tl_term_b0188_25_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.84E+01	9.84E+01	0	1.32E+02	131.6329	0	3.84E+00	3.836
tl_term_b0188_25_rib2	Translation termination 2 b0188 25 ribosome(s), (RF1_mono)	25 gtp + 50 h2o + 1 tl_term_b0188_25_rib_cplx --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF1_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 b0188_aa + 1 b0188_mRNA_2 + 25 gdp + 75 h + 75 pi + 25 rib_70 + 25 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.32E+02	131.6329	0	3.84E+00	3.836
tl_term_b0188_25_rib_RF2_1	Translation termination 1 b0188 25 ribosome(s), RF2_mono	25 RF2_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b0188_25_cplx <==> 1 tl_term_b0188_25_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.84E+01	9.84E+01	0	1.32E+02	131.6329	0	3.84E+00	3.836
tl_term_b0188_25_rib_RF2_2	Translation termination 2 b0188 25 ribosome(s), RF2	25 gtp + 50 h2o + 1 tl_term_b0188_25_rib_cplx2 --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF2_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 b0188_aa + 1 b0188_mRNA_2 + 25 gdp + 75 h + 75 pi + 25 rib_70 + 25 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.84E+01	9.84E+01	0	1.32E+02	131.6329	0	3.84E+00	3.836
tl_term_b0194_16_rib1	Translation termination 1 b0194 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b0194_16_cplx <==> 1 tl_term_b0194_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.54E+01	7.54E+01	0	1.31E+02	130.5277	0	3.47E+00	3.467

tl_term_b0194_16_rib2	Translation termination 2 b0194 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b0194_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b0194_aa + 1 b0194_mRNA_2 + 16 gdp + 16 gly1_tRNA + 48 h + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.54E+01	7.54E+01	0	1.31E+02	130.5277	0	3.47E+00	3.467
tl_term_b0194_1_rib1	Translation termination 1 b0194 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0194_1_cplx <==> 1 tl_term_b0194_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.54E+01	7.54E+01	0	1.31E+02	130.5277	0	3.47E+00	3.467
tl_term_b0194_1_rib2	Translation termination 2 b0194 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0194_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0194_aa + 1 b0194_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.54E+01	7.54E+01	0	1.31E+02	130.5277	0	3.47E+00	3.467
tl_term_b0194_33_rib1	Translation termination 1 b0194 33 ribosome(s), (RF1_mono)	33 RF1_mono + 33 RF3_mono.GDP + 33 Rrf_mono + 1 rib_70_elo2_b0194_33_cplx <==> 1 tl_term_b0194_33_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.54E+01	7.54E+01	0	1.24E+02	124.4591	0	3.47E+00	3.467
tl_term_b0194_33_rib2	Translation termination 2 b0194 33 ribosome(s), (RF1_mono)	33 gtp + 66 h2o + 1 tl_term_b0194_33_rib_cplx --> 33 EF-G.GDP + 33 EF-Tu.GDP + 33 RF1_mono_inact + 33 RF3_mono.GDP_inact + 33 Rrf_mono_inact + 33 b0194_aa + 1 b0194_mRNA_2 + 33 gdp + 33 gly1_tRNA + 99 h + 99 pi + 33 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.54E+01	7.54E+01	0	1.24E+02	124.4591	0	3.47E+00	3.467
tl_term_b0405_10_rib1	Translation termination 1 b0405 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b0405_10_cplx <==> 1 tl_term_b0405_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_term_b0405_10_rib2	Translation termination 2 b0405 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b0405_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b0405_aa + 1 b0405_mRNA_2 + 10 gdp + 10 glu1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_term_b0405_10_rib_RF2_1	Translation termination 1 b0405 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b0405_10_cplx <==> 1 tl_term_b0405_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_term_b0405_10_rib_RF2_2	Translation termination 2 b0405 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b0405_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b0405_aa + 1 b0405_mRNA_2 + 10 gdp + 10 glu1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_term_b0405_1_rib1	Translation termination 1 b0405 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0405_1_cplx <==> 1 tl_term_b0405_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_term_b0405_1_rib2	Translation termination 2 b0405 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0405_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0405_aa + 1 b0405_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_term_b0405_1_rib_RF2_1	Translation termination 1 b0405 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0405_1_cplx <==> 1 tl_term_b0405_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_term_b0405_1_rib_RF2_2	Translation termination 2 b0405 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0405_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0405_aa + 1 b0405_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_term_b0405_20_rib1	Translation termination 1 b0405 20 ribosome(s), (RF1_mono)	20 RF1_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b0405_20_cplx <==> 1 tl_term_b0405_20_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_term_b0405_20_rib2	Translation termination 2 b0405 20 ribosome(s), (RF1_mono)	20 gtp + 40 h2o + 1 tl_term_b0405_20_rib_cplx --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF1_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 b0405_aa + 1 b0405_mRNA_2 + 20 gdp + 20 glu1_tRNA + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_term_b0405_20_rib_RF2_1	Translation termination 1 b0405 20 ribosome(s), RF2_mono	20 RF2_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b0405_20_cplx <==> 1 tl_term_b0405_20_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_term_b0405_20_rib_RF2_2	Translation termination 2 b0405 20 ribosome(s), RF2	20 gtp + 40 h2o + 1 tl_term_b0405_20_rib_cplx2 --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF2_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 b0405_aa + 1 b0405_mRNA_2 + 20 gdp + 20 glu1_tRNA + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.15E+02	1.15E+02	0	2.01E+02	200.9631	0	3.17E+00	3.1739
tl_term_b0406_11_rib1	Translation termination 1 b0406 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b0406_11_cplx <==> 1 tl_term_b0406_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_term_b0406_11_rib2	Translation termination 2 b0406 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b0406_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 asp1_tRNA + 11 b0406_aa + 1 b0406_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_term_b0406_11_rib_RF2_1	Translation termination 1 b0406 11 ribosome(s), RF2_mono	11 RF2_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b0406_11_cplx <==> 1 tl_term_b0406_11_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_term_b0406_11_rib_RF2_2	Translation termination 2 b0406 11 ribosome(s), RF2	11 gtp + 22 h2o + 1 tl_term_b0406_11_rib_cplx2 --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF2_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 asp1_tRNA + 11 b0406_aa + 1 b0406_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_term_b0406_1_rib1	Translation termination 1 b0406 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0406_1_cplx <==> 1 tl_term_b0406_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_term_b0406_1_rib2	Translation termination 2 b0406 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0406_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b0406_aa + 1 b0406_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_term_b0406_1_rib_RF2_1	Translation termination 1 b0406 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0406_1_cplx <==> 1 tl_term_b0406_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_term_b0406_1_rib_RF2_2	Translation termination 2 b0406 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0406_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b0406_aa + 1 b0406_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_term_b0406_22_rib1	Translation termination 1 b0406 22 ribosome(s), (RF1_mono)	22 RF1_mono + 22 RF3_mono.GDP + 22 Rrf_mono + 1 rib_70_elo2_b0406_22_cplx <==> 1 tl_term_b0406_22_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_term_b0406_22_rib2	Translation termination 2 b0406 22 ribosome(s), (RF1_mono)	22 gtp + 44 h2o + 1 tl_term_b0406_22_rib_cplx --> 22 EF-G.GDP + 22 EF-Tu.GDP + 22 RF1_mono_inact + 22 RF3_mono.GDP_inact + 22 Rrf_mono_inact + 22 asp1_tRNA + 22 b0406_aa + 1 b0406_mRNA_2 + 22 gdp + 66 h + 66 pi + 22 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_term_b0406_22_rib_RF2_1	Translation termination 1 b0406 22 ribosome(s), RF2_mono	22 RF2_mono + 22 RF3_mono.GDP + 22 Rrf_mono + 1 rib_70_elo2_b0406_22_cplx <==> 1 tl_term_b0406_22_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_term_b0406_22_rib_RF2_2	Translation termination 2 b0406 22 ribosome(s), RF2	22 gtp + 44 h2o + 1 tl_term_b0406_22_rib_cplx2 --> 22 EF-G.GDP + 22 EF-Tu.GDP + 22 RF2_mono_inact + 22 RF3_mono.GDP_inact + 22 Rrf_mono_inact + 22 asp1_tRNA + 22 b0406_aa + 1 b0406_mRNA_2 + 22 gdp + 66 h + 66 pi + 22 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.66E+02	165.5261	0	4.18E+00	4.176
tl_term_b0407_1_rib1	Translation termination 1 b0407 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0407_1_cplx <==> 1 tl_term_b0407_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996

tl_term_b0407_1_rib2	Translation termination 2 b0407 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0407_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0407_aa + 1 b0407_mRNA_2 + 1 gdp + 3 h + 1 leu1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_term_b0407_1_rib_RF2_1	Translation termination 1 b0407 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0407_1_cplx <==> 1 tl_term_b0407_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_term_b0407_1_rib_RF2_2	Translation termination 2 b0407 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0407_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0407_aa + 1 b0407_mRNA_2 + 1 gdp + 3 h + 1 leu1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_term_b0407_3_rib1	Translation termination 1 b0407 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b0407_3_cplx <==> 1 tl_term_b0407_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_term_b0407_3_rib2	Translation termination 2 b0407 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b0407_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b0407_aa + 1 b0407_mRNA_2 + 3 gdp + 9 h + 3 leu1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_term_b0407_3_rib_RF2_1	Translation termination 1 b0407 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b0407_3_cplx <==> 1 tl_term_b0407_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_term_b0407_3_rib_RF2_2	Translation termination 2 b0407 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b0407_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b0407_aa + 1 b0407_mRNA_2 + 3 gdp + 9 h + 3 leu1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_term_b0407_6_rib1	Translation termination 1 b0407 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b0407_6_cplx <==> 1 tl_term_b0407_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_term_b0407_6_rib2	Translation termination 2 b0407 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b0407_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b0407_aa + 1 b0407_mRNA_2 + 6 gdp + 18 h + 6 leu1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_term_b0407_6_rib_RF2_1	Translation termination 1 b0407 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b0407_6_cplx <==> 1 tl_term_b0407_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_term_b0407_6_rib_RF2_2	Translation termination 2 b0407 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b0407_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b0407_aa + 1 b0407_mRNA_2 + 6 gdp + 18 h + 6 leu1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.79E+02	179.3461	0	1.80E+01	17.996
tl_term_b0413_1_rib1	Translation termination 1 b0413 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0413_1_cplx <==> 1 tl_term_b0413_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_term_b0413_1_rib2	Translation termination 2 b0413 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0413_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b0413_aa + 1 b0413_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_term_b0413_1_rib_RF2_1	Translation termination 1 b0413 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0413_1_cplx <==> 1 tl_term_b0413_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_term_b0413_1_rib_RF2_2	Translation termination 2 b0413 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0413_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b0413_aa + 1 b0413_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_term_b0413_4_rib1	Translation termination 1 b0413 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b0413_4_cplx <==> 1 tl_term_b0413_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_term_b0413_4_rib2	Translation termination 2 b0413 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b0413_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 asp1_tRNA + 4 b0413_aa + 1 b0413_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_term_b0413_4_rib_RF2_1	Translation termination 1 b0413 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b0413_4_cplx <==> 1 tl_term_b0413_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_term_b0413_4_rib_RF2_2	Translation termination 2 b0413 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b0413_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 asp1_tRNA + 4 b0413_aa + 1 b0413_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_term_b0413_8_rib1	Translation termination 1 b0413 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b0413_8_cplx <==> 1 tl_term_b0413_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_term_b0413_8_rib2	Translation termination 2 b0413 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b0413_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 asp1_tRNA + 8 b0413_aa + 1 b0413_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_term_b0413_8_rib_RF2_1	Translation termination 1 b0413 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b0413_8_cplx <==> 1 tl_term_b0413_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_term_b0413_8_rib_RF2_2	Translation termination 2 b0413 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b0413_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 asp1_tRNA + 8 b0413_aa + 1 b0413_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.77E+01	5.77E+01	0	9.57E+01	95.68595	0	8.23E+00	8.2313
tl_term_b0414_10_rib1	Translation termination 1 b0414 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b0414_10_cplx <==> 1 tl_term_b0414_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113
tl_term_b0414_10_rib2	Translation termination 2 b0414 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b0414_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 ala1_tRNA + 10 b0414_aa + 1 b0414_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113
tl_term_b0414_1_rib1	Translation termination 1 b0414 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0414_1_cplx <==> 1 tl_term_b0414_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113
tl_term_b0414_1_rib2	Translation termination 2 b0414 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0414_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b0414_aa + 1 b0414_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113
tl_term_b0414_21_rib1	Translation termination 1 b0414 21 ribosome(s), (RF1_mono)	21 RF1_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b0414_21_cplx <==> 1 tl_term_b0414_21_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113
tl_term_b0414_21_rib2	Translation termination 2 b0414 21 ribosome(s), (RF1_mono)	21 gtp + 42 h2o + 1 tl_term_b0414_21_rib_cplx --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF1_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 ala1_tRNA + 21 b0414_aa + 1 b0414_mRNA_2 + 21 gdp + 63 h + 63 pi + 21 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	9.19E+01	91.86595	0	4.41E+00	4.4113
tl_term_b0415_1_rib1	Translation termination 1 b0415 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0415_1_cplx <==> 1 tl_term_b0415_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913
tl_term_b0415_1_rib2	Translation termination 2 b0415 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0415_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala2_tRNA + 1 b0415_aa + 1 b0415_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913
tl_term_b0415_4_rib1	Translation termination 1 b0415 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b0415_4_cplx <==> 1 tl_term_b0415_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913

tl_term_b0415_4_rib2	Translation termination 2 b0415 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b0415_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 ala2_tRNA + 4 b0415_aa + 1 b0415_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913
tl_term_b0415_9_rib1	Translation termination 1 b0415 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b0415_9_cplx <==> 1 tl_term_b0415_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913
tl_term_b0415_9_rib2	Translation termination 2 b0415 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b0415_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 ala2_tRNA + 9 b0415_aa + 1 b0415_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.10E+01	6.10E+01	0	9.89E+01	98.94595	0	1.15E+01	11.4913
tl_term_b0416_1_rib1	Translation termination 1 b0416 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0416_1_cplx <==> 1 tl_term_b0416_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913
tl_term_b0416_1_rib2	Translation termination 2 b0416 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0416_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0416_aa + 1 b0416_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913
tl_term_b0416_4_rib1	Translation termination 1 b0416 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b0416_4_cplx <==> 1 tl_term_b0416_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913
tl_term_b0416_4_rib2	Translation termination 2 b0416 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b0416_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b0416_aa + 1 b0416_mRNA_2 + 4 gdp + 12 h + 4 lys1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913
tl_term_b0416_8_rib1	Translation termination 1 b0416 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b0416_8_cplx <==> 1 tl_term_b0416_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913
tl_term_b0416_8_rib2	Translation termination 2 b0416 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b0416_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b0416_aa + 1 b0416_mRNA_2 + 8 gdp + 24 h + 8 lys1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.23E+01	6.23E+01	0	1.00E+02	100.246	0	1.28E+01	12.7913
tl_term_b0423_14_rib1	Translation termination 1 b0423 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b0423_14_cplx <==> 1 tl_term_b0423_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_term_b0423_14_rib2	Translation termination 2 b0423 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b0423_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b0423_aa + 1 b0423_mRNA_2 + 14 gdp + 42 h + 42 pi + 14 pro1_tRNA + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_term_b0423_14_rib_RF2_1	Translation termination 1 b0423 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b0423_14_cplx <==> 1 tl_term_b0423_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_term_b0423_14_rib_RF2_2	Translation termination 2 b0423 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b0423_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b0423_aa + 1 b0423_mRNA_2 + 14 gdp + 42 h + 42 pi + 14 pro1_tRNA + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_term_b0423_1_rib1	Translation termination 1 b0423 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0423_1_cplx <==> 1 tl_term_b0423_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_term_b0423_1_rib2	Translation termination 2 b0423 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0423_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0423_aa + 1 b0423_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 pro1_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_term_b0423_1_rib_RF2_1	Translation termination 1 b0423 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0423_1_cplx <==> 1 tl_term_b0423_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_term_b0423_1_rib_RF2_2	Translation termination 2 b0423 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0423_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0423_aa + 1 b0423_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 pro1_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_term_b0423_28_rib1	Translation termination 1 b0423 28 ribosome(s), (RF1_mono)	28 RF1_mono + 28 RF3_mono.GDP + 28 Rrf_mono + 1 rib_70_elo2_b0423_28_cplx <==> 1 tl_term_b0423_28_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_term_b0423_28_rib2	Translation termination 2 b0423 28 ribosome(s), (RF1_mono)	28 gtp + 56 h2o + 1 tl_term_b0423_28_rib_cplx --> 28 EF-G.GDP + 28 EF-Tu.GDP + 28 RF1_mono_inact + 28 RF3_mono.GDP_inact + 28 Rrf_mono_inact + 28 b0423_aa + 1 b0423_mRNA_2 + 28 gdp + 84 h + 84 pi + 28 pro1_tRNA + 28 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_term_b0423_28_rib_RF2_1	Translation termination 1 b0423 28 ribosome(s), RF2_mono	28 RF2_mono + 28 RF3_mono.GDP + 28 Rrf_mono + 1 rib_70_elo2_b0423_28_cplx <==> 1 tl_term_b0423_28_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_term_b0423_28_rib_RF2_2	Translation termination 2 b0423 28 ribosome(s), RF2	28 gtp + 56 h2o + 1 tl_term_b0423_28_rib_cplx2 --> 28 EF-G.GDP + 28 EF-Tu.GDP + 28 RF2_mono_inact + 28 RF3_mono.GDP_inact + 28 Rrf_mono_inact + 28 b0423_aa + 1 b0423_mRNA_2 + 28 gdp + 84 h + 84 pi + 28 pro1_tRNA + 28 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.25E+01	9.25E+01	0	1.61E+02	160.7749	0	3.48E+00	3.476
tl_term_b0436_12_rib1	Translation termination 1 b0436 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b0436_12_cplx <==> 1 tl_term_b0436_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.28E+00	9.28E+00	0	6.91E+00	6.906667	0	2.87E+00	2.868462
tl_term_b0436_12_rib2	Translation termination 2 b0436 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b0436_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 ala1_tRNA + 12 b0436_aa + 1 b0436_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.28E+00	9.28E+00	0	6.91E+00	6.906667	0	2.87E+00	2.868462
tl_term_b0436_12_rib_RF2_1	Translation termination 1 b0436 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b0436_12_cplx <==> 1 tl_term_b0436_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.28E+00	9.28E+00	0	6.91E+00	6.906667	0	2.87E+00	2.868462
tl_term_b0436_12_rib_RF2_2	Translation termination 2 b0436 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b0436_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 ala1_tRNA + 12 b0436_aa + 1 b0436_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.28E+00	9.28E+00	0	6.91E+00	6.906667	0	2.87E+00	2.868462
tl_term_b0436_1_rib1	Translation termination 1 b0436 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0436_1_cplx <==> 1 tl_term_b0436_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.00E+01	9.00E+01	0	8.29E+01	82.88	0	1.55E+00	1.55375
tl_term_b0436_1_rib2	Translation termination 2 b0436 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0436_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b0436_aa + 1 b0436_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.00E+01	9.00E+01	0	8.29E+01	82.88	0	1.55E+00	1.55375
tl_term_b0436_1_rib_RF2_1	Translation termination 1 b0436 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0436_1_cplx <==> 1 tl_term_b0436_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.00E+01	9.00E+01	0	8.29E+01	82.88	0	1.55E+00	1.55375
tl_term_b0436_1_rib_RF2_2	Translation termination 2 b0436 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0436_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b0436_aa + 1 b0436_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.00E+01	9.00E+01	0	8.29E+01	82.88	0	1.55E+00	1.55375
tl_term_b0436_25_rib1	Translation termination 1 b0436 25 ribosome(s), (RF1_mono)	25 RF1_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b0436_25_cplx <==> 1 tl_term_b0436_25_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.50E+00	4.50E+00	0	3.32E+00	3.3152	0	3.32E+00	3.3152

tl_term_b0436_25_rib2	Translation termination 2 b0436 25 ribosome(s), (RF1_mono)	25 gtp + 50 h2o + 1 tl_term_b0436_25_rib_cplx --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF1_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 ala1_tRNA + 25 b0436_aa + 1 b0436_mRNA_2 + 25 gdp + 75 h + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.50E+00	4.50E+00	0	3.32E+00	3.3152	0	3.32E+00	3.3152
tl_term_b0436_25_rib_RF2_1	Translation termination 1 b0436 25 ribosome(s), RF2_mono	25 RF2_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b0436_25_cplx <==> 1 tl_term_b0436_25_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.50E+00	4.50E+00	0	3.32E+00	3.3152	0	3.32E+00	3.3152
tl_term_b0436_25_rib_RF2_2	Translation termination 2 b0436 25 ribosome(s), RF2	25 gtp + 50 h2o + 1 tl_term_b0436_25_rib_cplx2 --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF2_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 ala1_tRNA + 25 b0436_aa + 1 b0436_mRNA_2 + 25 gdp + 75 h + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.50E+00	4.50E+00	0	3.32E+00	3.3152	0	3.32E+00	3.3152
tl_term_b0503_10_rib1	Translation termination 1 b0503 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b0503_10_cplx <==> 1 tl_term_b0503_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_term_b0503_10_rib2	Translation termination 2 b0503 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b0503_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 argX_tRNA + 10 b0503_aa + 1 b0503_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_term_b0503_10_rib_RF2_1	Translation termination 1 b0503 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b0503_10_cplx <==> 1 tl_term_b0503_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_term_b0503_10_rib_RF2_2	Translation termination 2 b0503 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b0503_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 argX_tRNA + 10 b0503_aa + 1 b0503_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_term_b0503_1_rib1	Translation termination 1 b0503 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0503_1_cplx <==> 1 tl_term_b0503_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_term_b0503_1_rib2	Translation termination 2 b0503 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0503_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 argX_tRNA + 1 b0503_aa + 1 b0503_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_term_b0503_1_rib_RF2_1	Translation termination 1 b0503 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0503_1_cplx <==> 1 tl_term_b0503_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_term_b0503_1_rib_RF2_2	Translation termination 2 b0503 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0503_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 argX_tRNA + 1 b0503_aa + 1 b0503_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_term_b0503_21_rib1	Translation termination 1 b0503 21 ribosome(s), (RF1_mono)	21 RF1_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b0503_21_cplx <==> 1 tl_term_b0503_21_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_term_b0503_21_rib2	Translation termination 2 b0503 21 ribosome(s), (RF1_mono)	21 gtp + 42 h2o + 1 tl_term_b0503_21_rib_cplx --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF1_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 argX_tRNA + 21 b0503_aa + 1 b0503_mRNA_2 + 21 gdp + 63 h + 63 pi + 21 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_term_b0503_21_rib_RF2_1	Translation termination 1 b0503 21 ribosome(s), RF2_mono	21 RF2_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b0503_21_cplx <==> 1 tl_term_b0503_21_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_term_b0503_21_rib_RF2_2	Translation termination 2 b0503 21 ribosome(s), RF2	21 gtp + 42 h2o + 1 tl_term_b0503_21_rib_cplx2 --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF2_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 argX_tRNA + 21 b0503_aa + 1 b0503_mRNA_2 + 21 gdp + 63 h + 63 pi + 21 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.11E+02	210.8787	0	4.50E+00	4.496
tl_term_b0526_13_rib1	Translation termination 1 b0526 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b0526_13_cplx <==> 1 tl_term_b0526_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_term_b0526_13_rib2	Translation termination 2 b0526 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b0526_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b0526_aa + 1 b0526_mRNA_2 + 13 gdp + 39 h + 13 lys1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_term_b0526_13_rib_RF2_1	Translation termination 1 b0526 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b0526_13_cplx <==> 1 tl_term_b0526_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_term_b0526_13_rib_RF2_2	Translation termination 2 b0526 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b0526_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b0526_aa + 1 b0526_mRNA_2 + 13 gdp + 39 h + 13 lys1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_term_b0526_1_rib1	Translation termination 1 b0526 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0526_1_cplx <==> 1 tl_term_b0526_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_term_b0526_1_rib2	Translation termination 2 b0526 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0526_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0526_aa + 1 b0526_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_term_b0526_1_rib_RF2_1	Translation termination 1 b0526 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0526_1_cplx <==> 1 tl_term_b0526_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_term_b0526_1_rib_RF2_2	Translation termination 2 b0526 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0526_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0526_aa + 1 b0526_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_term_b0526_27_rib1	Translation termination 1 b0526 27 ribosome(s), (RF1_mono)	27 RF1_mono + 27 RF3_mono.GDP + 27 Rrf_mono + 1 rib_70_elo2_b0526_27_cplx <==> 1 tl_term_b0526_27_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_term_b0526_27_rib2	Translation termination 2 b0526 27 ribosome(s), (RF1_mono)	27 gtp + 54 h2o + 1 tl_term_b0526_27_rib_cplx --> 27 EF-G.GDP + 27 EF-Tu.GDP + 27 RF1_mono_inact + 27 RF3_mono.GDP_inact + 27 Rrf_mono_inact + 27 b0526_aa + 1 b0526_mRNA_2 + 27 gdp + 81 h + 27 lys1_tRNA + 81 pi + 27 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_term_b0526_27_rib_RF2_1	Translation termination 1 b0526 27 ribosome(s), RF2_mono	27 RF2_mono + 27 RF3_mono.GDP + 27 Rrf_mono + 1 rib_70_elo2_b0526_27_cplx <==> 1 tl_term_b0526_27_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_term_b0526_27_rib_RF2_2	Translation termination 2 b0526 27 ribosome(s), RF2	27 gtp + 54 h2o + 1 tl_term_b0526_27_rib_cplx2 --> 27 EF-G.GDP + 27 EF-Tu.GDP + 27 RF2_mono_inact + 27 RF3_mono.GDP_inact + 27 Rrf_mono_inact + 27 b0526_aa + 1 b0526_mRNA_2 + 27 gdp + 81 h + 27 lys1_tRNA + 81 pi + 27 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.50E+01	9.50E+01	0	1.65E+02	165.2503	0	3.52E+00	3.516
tl_term_b0638_11_rib1	Translation termination 1 b0638 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b0638_11_cplx <==> 1 tl_term_b0638_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656
tl_term_b0638_11_rib2	Translation termination 2 b0638 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b0638_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 ala1_tRNA + 11 b0638_aa + 1 b0638_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656

tl_term_b0638_1_rib1	Translation termination 1 b0638 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0638_1_cplx <==> 1 tl_term_b0638_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656
tl_term_b0638_1_rib2	Translation termination 2 b0638 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0638_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b0638_aa + 1 b0638_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656
tl_term_b0638_5_rib1	Translation termination 1 b0638 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b0638_5_cplx <==> 1 tl_term_b0638_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656
tl_term_b0638_5_rib2	Translation termination 2 b0638 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b0638_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 ala1_tRNA + 5 b0638_aa + 1 b0638_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.84E+01	2.84E+01	0	4.59E+01	45.89653	0	5.66E+00	5.656
tl_term_b0639_12_rib1	Translation termination 1 b0639 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b0639_12_cplx <==> 1 tl_term_b0639_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276
tl_term_b0639_12_rib2	Translation termination 2 b0639 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b0639_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 arg1_tRNA + 12 b0639_aa + 1 b0639_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276
tl_term_b0639_1_rib1	Translation termination 1 b0639 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0639_1_cplx <==> 1 tl_term_b0639_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276
tl_term_b0639_1_rib2	Translation termination 2 b0639 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0639_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b0639_aa + 1 b0639_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276
tl_term_b0639_6_rib1	Translation termination 1 b0639 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b0639_6_cplx <==> 1 tl_term_b0639_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276
tl_term_b0639_6_rib2	Translation termination 2 b0639 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b0639_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 arg1_tRNA + 6 b0639_aa + 1 b0639_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.90E+01	2.90E+01	0	4.65E+01	46.51653	0	6.28E+00	6.276
tl_term_b0640_10_rib1	Translation termination 1 b0640 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b0640_10_cplx <==> 1 tl_term_b0640_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226
tl_term_b0640_10_rib2	Translation termination 2 b0640 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b0640_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b0640_aa + 1 b0640_mRNA_2 + 10 gdp + 10 gly1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226
tl_term_b0640_1_rib1	Translation termination 1 b0640 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0640_1_cplx <==> 1 tl_term_b0640_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226
tl_term_b0640_1_rib2	Translation termination 2 b0640 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0640_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0640_aa + 1 b0640_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226
tl_term_b0640_20_rib1	Translation termination 1 b0640 20 ribosome(s), (RF1_mono)	20 RF1_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b0640_20_cplx <==> 1 tl_term_b0640_20_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226
tl_term_b0640_20_rib2	Translation termination 2 b0640 20 ribosome(s), (RF1_mono)	20 gtp + 40 h2o + 1 tl_term_b0640_20_rib_cplx --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF1_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 b0640_aa + 1 b0640_mRNA_2 + 20 gdp + 20 gly1_tRNA + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.45E+01	44.46653	0	4.23E+00	4.226
tl_term_b0641_11_rib1	Translation termination 1 b0641 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b0641_11_cplx <==> 1 tl_term_b0641_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356
tl_term_b0641_11_rib2	Translation termination 2 b0641 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b0641_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 asn1_tRNA + 11 b0641_aa + 1 b0641_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356
tl_term_b0641_1_rib1	Translation termination 1 b0641 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0641_1_cplx <==> 1 tl_term_b0641_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356
tl_term_b0641_1_rib2	Translation termination 2 b0641 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0641_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b0641_aa + 1 b0641_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356
tl_term_b0641_5_rib1	Translation termination 1 b0641 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b0641_5_cplx <==> 1 tl_term_b0641_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356
tl_term_b0641_5_rib2	Translation termination 2 b0641 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b0641_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 asn1_tRNA + 5 b0641_aa + 1 b0641_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.11E+01	3.11E+01	0	4.86E+01	48.59653	0	8.36E+00	8.356
tl_term_b0642_1_rib1	Translation termination 1 b0642 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0642_1_cplx <==> 1 tl_term_b0642_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_term_b0642_1_rib2	Translation termination 2 b0642 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0642_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0642_aa + 1 b0642_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_term_b0642_1_rib_RF2_1	Translation termination 1 b0642 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0642_1_cplx <==> 1 tl_term_b0642_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_term_b0642_1_rib_RF2_2	Translation termination 2 b0642 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0642_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0642_aa + 1 b0642_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_term_b0642_25_rib1	Translation termination 1 b0642 25 ribosome(s), (RF1_mono)	25 RF1_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b0642_25_cplx <==> 1 tl_term_b0642_25_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_term_b0642_25_rib2	Translation termination 2 b0642 25 ribosome(s), (RF1_mono)	25 gtp + 50 h2o + 1 tl_term_b0642_25_rib_cplx --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF1_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 b0642_aa + 1 b0642_mRNA_2 + 25 gdp + 25 gly1_tRNA + 75 h + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_term_b0642_25_rib_RF2_1	Translation termination 1 b0642 25 ribosome(s), RF2_mono	25 RF2_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b0642_25_cplx <==> 1 tl_term_b0642_25_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_term_b0642_25_rib_RF2_2	Translation termination 2 b0642 25 ribosome(s), RF2	25 gtp + 50 h2o + 1 tl_term_b0642_25_rib_cplx2 --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF2_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 b0642_aa + 1 b0642_mRNA_2 + 25 gdp + 25 gly1_tRNA + 75 h + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_term_b0642_50_rib1	Translation termination 1 b0642 50 ribosome(s), (RF1_mono)	50 RF1_mono + 50 RF3_mono.GDP + 50 Rrf_mono + 1 rib_70_elo2_b0642_50_cplx <==> 1 tl_term_b0642_50_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316

tl_term_b0642_50_rib2	Translation termination 2 b0642 50 ribosome(s), (RF1_mono)	50 gtp + 100 h2o + 1 tl_term_b0642_50_rib_cplx --> 50 EF-G.GDP + 50 EF-Tu.GDP + 50 RF1_mono_inact + 50 RF3_mono.GDP_inact + 50 Rrf_mono_inact + 50 b0642_aa + 1 b0642_mRNA_2 + 50 gdp + 50 gly1_tRNA + 150 h + 150 pi + 50 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_term_b0642_50_rib_RF2_1	Translation termination 1 b0642 50 ribosome(s), RF2_mono	50 RF2_mono + 50 RF3_mono.GDP + 50 Rrf_mono + 1 rib_70_elo2_b0642_50_cplx <==> 1 tl_term_b0642_50_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_term_b0642_50_rib_RF2_2	Translation termination 2 b0642 50 ribosome(s), RF2	50 gtp + 100 h2o + 1 tl_term_b0642_50_rib_cplx2 --> 50 EF-G.GDP + 50 EF-Tu.GDP + 50 RF2_mono_inact + 50 RF3_mono.GDP_inact + 50 Rrf_mono_inact + 50 b0642_aa + 1 b0642_mRNA_2 + 50 gdp + 50 gly1_tRNA + 150 h + 150 pi + 50 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.26E+01	42.55653	0	2.32E+00	2.316
tl_term_b0661_13_rib1	Translation termination 1 b0661 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b0661_13_cplx <==> 1 tl_term_b0661_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_term_b0661_13_rib2	Translation termination 2 b0661 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b0661_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b0661_aa + 1 b0661_mRNA_2 + 13 gdp + 39 h + 39 pi + 13 pro1_tRNA + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_term_b0661_13_rib_RF2_1	Translation termination 1 b0661 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b0661_13_cplx <==> 1 tl_term_b0661_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_term_b0661_13_rib_RF2_2	Translation termination 2 b0661 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b0661_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b0661_aa + 1 b0661_mRNA_2 + 13 gdp + 39 h + 39 pi + 13 pro1_tRNA + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_term_b0661_1_rib1	Translation termination 1 b0661 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0661_1_cplx <==> 1 tl_term_b0661_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_term_b0661_1_rib2	Translation termination 2 b0661 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0661_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0661_aa + 1 b0661_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 pro1_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_term_b0661_1_rib_RF2_1	Translation termination 1 b0661 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0661_1_cplx <==> 1 tl_term_b0661_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_term_b0661_1_rib_RF2_2	Translation termination 2 b0661 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0661_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0661_aa + 1 b0661_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 pro1_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_term_b0661_27_rib1	Translation termination 1 b0661 27 ribosome(s), (RF1_mono)	27 RF1_mono + 27 RF3_mono.GDP + 27 Rrf_mono + 1 rib_70_elo2_b0661_27_cplx <==> 1 tl_term_b0661_27_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_term_b0661_27_rib2	Translation termination 2 b0661 27 ribosome(s), (RF1_mono)	27 gtp + 54 h2o + 1 tl_term_b0661_27_rib_cplx --> 27 EF-G.GDP + 27 EF-Tu.GDP + 27 RF1_mono_inact + 27 RF3_mono.GDP_inact + 27 Rrf_mono_inact + 27 b0661_aa + 1 b0661_mRNA_2 + 27 gdp + 81 h + 81 pi + 27 pro1_tRNA + 27 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_term_b0661_27_rib_RF2_1	Translation termination 1 b0661 27 ribosome(s), RF2_mono	27 RF2_mono + 27 RF3_mono.GDP + 27 Rrf_mono + 1 rib_70_elo2_b0661_27_cplx <==> 1 tl_term_b0661_27_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_term_b0661_27_rib_RF2_2	Translation termination 2 b0661 27 ribosome(s), RF2	27 gtp + 54 h2o + 1 tl_term_b0661_27_rib_cplx2 --> 27 EF-G.GDP + 27 EF-Tu.GDP + 27 RF2_mono_inact + 27 RF3_mono.GDP_inact + 27 Rrf_mono_inact + 27 b0661_aa + 1 b0661_mRNA_2 + 27 gdp + 81 h + 81 pi + 27 pro1_tRNA + 27 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.87E+01	8.87E+01	0	1.54E+02	154.0876	0	3.53E+00	3.532
tl_term_b0680_16_rib1	Translation termination 1 b0680 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b0680_16_cplx <==> 1 tl_term_b0680_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.14E+01	8.14E+01	0	1.39E+02	139.1751	0	6.30E+00	6.304
tl_term_b0680_16_rib2	Translation termination 2 b0680 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b0680_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b0680_aa + 1 b0680_mRNA_2 + 16 gdp + 16 glu1_tRNA + 48 h + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.39E+02	139.1751	0	6.30E+00	6.304
tl_term_b0680_16_rib_RF2_1	Translation termination 1 b0680 16 ribosome(s), RF2_mono	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b0680_16_cplx <==> 1 tl_term_b0680_16_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.14E+01	8.14E+01	0	1.39E+02	139.1751	0	6.30E+00	6.304
tl_term_b0680_16_rib_RF2_2	Translation termination 2 b0680 16 ribosome(s), RF2	16 gtp + 32 h2o + 1 tl_term_b0680_16_rib_cplx2 --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b0680_aa + 1 b0680_mRNA_2 + 16 gdp + 16 glu1_tRNA + 48 h + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.39E+02	139.1751	0	6.30E+00	6.304
tl_term_b0680_1_rib1	Translation termination 1 b0680 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0680_1_cplx <==> 1 tl_term_b0680_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.14E+01	8.14E+01	0	1.39E+02	139.1751	0	6.30E+00	6.304
tl_term_b0680_1_rib2	Translation termination 2 b0680 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0680_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0680_aa + 1 b0680_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.39E+02	139.1751	0	6.30E+00	6.304
tl_term_b0680_1_rib_RF2_1	Translation termination 1 b0680 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0680_1_cplx <==> 1 tl_term_b0680_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.14E+01	8.14E+01	0	1.39E+02	139.1751	0	6.30E+00	6.304
tl_term_b0680_1_rib_RF2_2	Translation termination 2 b0680 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0680_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0680_aa + 1 b0680_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.39E+02	139.1751	0	6.30E+00	6.304
tl_term_b0680_32_rib1	Translation termination 1 b0680 32 ribosome(s), (RF1_mono)	32 RF1_mono + 32 RF3_mono.GDP + 32 Rrf_mono + 1 rib_70_elo2_b0680_32_cplx <==> 1 tl_term_b0680_32_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.14E+01	8.14E+01	0	1.34E+02	133.9288	0	6.30E+00	6.304
tl_term_b0680_32_rib2	Translation termination 2 b0680 32 ribosome(s), (RF1_mono)	32 gtp + 64 h2o + 1 tl_term_b0680_32_rib_cplx --> 32 EF-G.GDP + 32 EF-Tu.GDP + 32 RF1_mono_inact + 32 RF3_mono.GDP_inact + 32 Rrf_mono_inact + 32 b0680_aa + 1 b0680_mRNA_2 + 32 gdp + 32 glu1_tRNA + 96 h + 96 pi + 32 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.34E+02	133.9288	0	6.30E+00	6.304
tl_term_b0680_32_rib_RF2_1	Translation termination 1 b0680 32 ribosome(s), RF2_mono	32 RF2_mono + 32 RF3_mono.GDP + 32 Rrf_mono + 1 rib_70_elo2_b0680_32_cplx <==> 1 tl_term_b0680_32_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.14E+01	8.14E+01	0	1.34E+02	133.9288	0	6.30E+00	6.304
tl_term_b0680_32_rib_RF2_2	Translation termination 2 b0680 32 ribosome(s), RF2	32 gtp + 64 h2o + 1 tl_term_b0680_32_rib_cplx2 --> 32 EF-G.GDP + 32 EF-Tu.GDP + 32 RF2_mono_inact + 32 RF3_mono.GDP_inact + 32 Rrf_mono_inact + 32 b0680_aa + 1 b0680_mRNA_2 + 32 gdp + 32 glu1_tRNA + 96 h + 96 pi + 32 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.34E+02	133.9288	0	6.30E+00	6.304
tl_term_b0850_1_rib1	Translation termination 1 b0850 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0850_1_cplx <==> 1 tl_term_b0850_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907
tl_term_b0850_1_rib2	Translation termination 2 b0850 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0850_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0850_aa + 1 b0850_mRNA_2 + 1 gdp + 3 h + 1 hisR_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907
tl_term_b0850_2_rib1	Translation termination 1 b0850 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b0850_2_cplx <==> 1 tl_term_b0850_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907

tl_term_b0850_2_rib2	Translation termination 2 b0850 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b0850_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b0850_aa + 1 b0850_mRNA_2 + 2 gdp + 6 h + 2 hisR_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907
tl_term_b0850_5_rib1	Translation termination 1 b0850 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b0850_5_cplx <==> 1 tl_term_b0850_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907
tl_term_b0850_5_rib2	Translation termination 2 b0850 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b0850_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b0850_aa + 1 b0850_mRNA_2 + 5 gdp + 15 h + 5 hisR_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.91E+01	6.91E+01	0	1.09E+02	109.2773	0	1.69E+01	16.907
tl_term_b0851_14_rib1	Translation termination 1 b0851 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b0851_14_cplx <==> 1 tl_term_b0851_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_term_b0851_14_rib2	Translation termination 2 b0851 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b0851_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 arg1_tRNA + 14 b0851_aa + 1 b0851_mRNA_2 + 14 gdp + 42 h + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_term_b0851_14_rib_RF2_1	Translation termination 1 b0851 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b0851_14_cplx <==> 1 tl_term_b0851_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_term_b0851_14_rib_RF2_2	Translation termination 2 b0851 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b0851_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 arg1_tRNA + 14 b0851_aa + 1 b0851_mRNA_2 + 14 gdp + 42 h + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_term_b0851_1_rib1	Translation termination 1 b0851 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0851_1_cplx <==> 1 tl_term_b0851_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_term_b0851_1_rib2	Translation termination 2 b0851 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0851_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b0851_aa + 1 b0851_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_term_b0851_1_rib_RF2_1	Translation termination 1 b0851 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0851_1_cplx <==> 1 tl_term_b0851_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_term_b0851_1_rib_RF2_2	Translation termination 2 b0851 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0851_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b0851_aa + 1 b0851_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_term_b0851_7_rib1	Translation termination 1 b0851 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b0851_7_cplx <==> 1 tl_term_b0851_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_term_b0851_7_rib2	Translation termination 2 b0851 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b0851_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 arg1_tRNA + 7 b0851_aa + 1 b0851_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_term_b0851_7_rib_RF2_1	Translation termination 1 b0851 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b0851_7_cplx <==> 1 tl_term_b0851_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_term_b0851_7_rib_RF2_2	Translation termination 2 b0851 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b0851_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 arg1_tRNA + 7 b0851_aa + 1 b0851_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	1.02E+02	101.9073	0	9.54E+00	9.537
tl_term_b0852_17_rib1	Translation termination 1 b0852 17 ribosome(s), (RF2_mono)	17 RF2_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b0852_17_cplx <==> 1 tl_term_b0852_17_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867
tl_term_b0852_17_rib2	Translation termination 2 b0852 17 ribosome(s), (RF2_mono)	17 gtp + 34 h2o + 1 tl_term_b0852_17_rib_cplx --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF2_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 b0852_aa + 1 b0852_mRNA_2 + 17 gdp + 17 gly1_tRNA + 51 h + 51 pi + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867
tl_term_b0852_1_rib1	Translation termination 1 b0852 1 ribosome(s), (RF2_mono)	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0852_1_cplx <==> 1 tl_term_b0852_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867
tl_term_b0852_1_rib2	Translation termination 2 b0852 1 ribosome(s), (RF2_mono)	1 gtp + 2 h2o + 1 tl_term_b0852_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0852_aa + 1 b0852_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867
tl_term_b0852_8_rib1	Translation termination 1 b0852 8 ribosome(s), (RF2_mono)	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b0852_8_cplx <==> 1 tl_term_b0852_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867
tl_term_b0852_8_rib2	Translation termination 2 b0852 8 ribosome(s), (RF2_mono)	8 gtp + 16 h2o + 1 tl_term_b0852_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b0852_aa + 1 b0852_mRNA_2 + 8 gdp + 8 gly1_tRNA + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.64E+01	9.64E+01	0	1.67E+02	166.6703	0	4.87E+00	4.867
tl_term_b0853_1_rib1	Translation termination 1 b0853 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0853_1_cplx <==> 1 tl_term_b0853_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107
tl_term_b0853_1_rib2	Translation termination 2 b0853 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0853_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0853_aa + 1 b0853_mRNA_2 + 1 gdp + 3 h + 1 hisR_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107
tl_term_b0853_4_rib1	Translation termination 1 b0853 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b0853_4_cplx <==> 1 tl_term_b0853_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107
tl_term_b0853_4_rib2	Translation termination 2 b0853 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b0853_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b0853_aa + 1 b0853_mRNA_2 + 4 gdp + 12 h + 4 hisR_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107
tl_term_b0853_9_rib1	Translation termination 1 b0853 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b0853_9_cplx <==> 1 tl_term_b0853_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107
tl_term_b0853_9_rib2	Translation termination 2 b0853 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b0853_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b0853_aa + 1 b0853_mRNA_2 + 9 gdp + 27 h + 9 hisR_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	1.78E+02	177.9103	0	1.61E+01	16.107
tl_term_b0858_1_rib1	Translation termination 1 b0858 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0858_1_cplx <==> 1 tl_term_b0858_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_term_b0858_1_rib2	Translation termination 2 b0858 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0858_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0858_aa + 1 b0858_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_term_b0858_1_rib_RF2_1	Translation termination 1 b0858 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0858_1_cplx <==> 1 tl_term_b0858_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_term_b0858_1_rib_RF2_2	Translation termination 2 b0858 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0858_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0858_aa + 1 b0858_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_term_b0858_4_rib1	Translation termination 1 b0858 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b0858_4_cplx <==> 1 tl_term_b0858_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894

tl_term_b0858_4_rib2	Translation termination 2 b0858 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b0858_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b0858_aa + 1 b0858_mRNA_2 + 4 gdp + 4 gln2_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_term_b0858_4_rib_RF2_1	Translation termination 1 b0858 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b0858_4_cplx <==> 1 tl_term_b0858_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_term_b0858_4_rib_RF2_2	Translation termination 2 b0858 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b0858_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b0858_aa + 1 b0858_mRNA_2 + 4 gdp + 4 gln2_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_term_b0858_9_rib1	Translation termination 1 b0858 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b0858_9_cplx <==> 1 tl_term_b0858_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_term_b0858_9_rib2	Translation termination 2 b0858 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b0858_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b0858_aa + 1 b0858_mRNA_2 + 9 gdp + 9 gln2_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_term_b0858_9_rib_RF2_1	Translation termination 1 b0858 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b0858_9_cplx <==> 1 tl_term_b0858_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_term_b0858_9_rib_RF2_2	Translation termination 2 b0858 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b0858_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b0858_aa + 1 b0858_mRNA_2 + 9 gdp + 9 gln2_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.56E+01	8.56E+01	0	1.44E+02	143.7083	0	9.89E+00	9.894
tl_term_b0859_11_rib1	Translation termination 1 b0859 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b0859_11_cplx <==> 1 tl_term_b0859_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_term_b0859_11_rib2	Translation termination 2 b0859 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b0859_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b0859_aa + 1 b0859_mRNA_2 + 11 gdp + 11 gln2_tRNA + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_term_b0859_11_rib_RF2_1	Translation termination 1 b0859 11 ribosome(s), RF2_mono	11 RF2_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b0859_11_cplx <==> 1 tl_term_b0859_11_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_term_b0859_11_rib_RF2_2	Translation termination 2 b0859 11 ribosome(s), RF2	11 gtp + 22 h2o + 1 tl_term_b0859_11_rib_cplx2 --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF2_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b0859_aa + 1 b0859_mRNA_2 + 11 gdp + 11 gln2_tRNA + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_term_b0859_1_rib1	Translation termination 1 b0859 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0859_1_cplx <==> 1 tl_term_b0859_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_term_b0859_1_rib2	Translation termination 2 b0859 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0859_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0859_aa + 1 b0859_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_term_b0859_1_rib_RF2_1	Translation termination 1 b0859 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0859_1_cplx <==> 1 tl_term_b0859_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_term_b0859_1_rib_RF2_2	Translation termination 2 b0859 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0859_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0859_aa + 1 b0859_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_term_b0859_22_rib1	Translation termination 1 b0859 22 ribosome(s), (RF1_mono)	22 RF1_mono + 22 RF3_mono.GDP + 22 Rrf_mono + 1 rib_70_elo2_b0859_22_cplx <==> 1 tl_term_b0859_22_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_term_b0859_22_rib2	Translation termination 2 b0859 22 ribosome(s), (RF1_mono)	22 gtp + 44 h2o + 1 tl_term_b0859_22_rib_cplx --> 22 EF-G.GDP + 22 EF-Tu.GDP + 22 RF1_mono_inact + 22 RF3_mono.GDP_inact + 22 Rrf_mono_inact + 22 b0859_aa + 1 b0859_mRNA_2 + 22 gdp + 22 gln2_tRNA + 66 h + 66 pi + 22 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_term_b0859_22_rib_RF2_1	Translation termination 1 b0859 22 ribosome(s), RF2_mono	22 RF2_mono + 22 RF3_mono.GDP + 22 Rrf_mono + 1 rib_70_elo2_b0859_22_cplx <==> 1 tl_term_b0859_22_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_term_b0859_22_rib_RF2_2	Translation termination 2 b0859 22 ribosome(s), RF2	22 gtp + 44 h2o + 1 tl_term_b0859_22_rib_cplx2 --> 22 EF-G.GDP + 22 EF-Tu.GDP + 22 RF2_mono_inact + 22 RF3_mono.GDP_inact + 22 Rrf_mono_inact + 22 b0859_aa + 1 b0859_mRNA_2 + 22 gdp + 22 gln2_tRNA + 66 h + 66 pi + 22 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	1.37E+02	137.1483	0	3.33E+00	3.334
tl_term_b0884_1_rib1	Translation termination 1 b0884 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0884_1_cplx <==> 1 tl_term_b0884_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381
tl_term_b0884_1_rib2	Translation termination 2 b0884 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0884_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b0884_aa + 1 b0884_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381
tl_term_b0884_2_rib1	Translation termination 1 b0884 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b0884_2_cplx <==> 1 tl_term_b0884_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381
tl_term_b0884_2_rib2	Translation termination 2 b0884 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b0884_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 arg1_tRNA + 2 b0884_aa + 1 b0884_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381
tl_term_b0884_4_rib1	Translation termination 1 b0884 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b0884_4_cplx <==> 1 tl_term_b0884_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381
tl_term_b0884_4_rib2	Translation termination 2 b0884 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b0884_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 arg1_tRNA + 4 b0884_aa + 1 b0884_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.58E+03	1584.655	0	5.66E+02	566.381
tl_term_b0893_12_rib1	Translation termination 1 b0893 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b0893_12_cplx <==> 1 tl_term_b0893_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_term_b0893_12_rib2	Translation termination 2 b0893 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b0893_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b0893_aa + 1 b0893_mRNA_2 + 12 gdp + 12 gly1_tRNA + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_term_b0893_12_rib_RF2_1	Translation termination 1 b0893 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b0893_12_cplx <==> 1 tl_term_b0893_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_term_b0893_12_rib_RF2_2	Translation termination 2 b0893 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b0893_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b0893_aa + 1 b0893_mRNA_2 + 12 gdp + 12 gly1_tRNA + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_term_b0893_1_rib1	Translation termination 1 b0893 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0893_1_cplx <==> 1 tl_term_b0893_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_term_b0893_1_rib2	Translation termination 2 b0893 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0893_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0893_aa + 1 b0893_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419

tl_term_b0893_1_rib_RF2_1	Translation termination 1 b0893 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0893_1_cplx <==> 1 tl_term_b0893_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_term_b0893_1_rib_RF2_2	Translation termination 2 b0893 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0893_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0893_aa + 1 b0893_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_term_b0893_25_rib1	Translation termination 1 b0893 25 ribosome(s), (RF1_mono)	25 RF1_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b0893_25_cplx <==> 1 tl_term_b0893_25_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_term_b0893_25_rib2	Translation termination 2 b0893 25 ribosome(s), (RF1_mono)	25 gtp + 50 h2o + 1 tl_term_b0893_25_rib_cplx --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF1_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 b0893_aa + 1 b0893_mRNA_2 + 25 gdp + 25 gly1_tRNA + 75 h + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_term_b0893_25_rib_RF2_1	Translation termination 1 b0893 25 ribosome(s), RF2_mono	25 RF2_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b0893_25_cplx <==> 1 tl_term_b0893_25_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_term_b0893_25_rib_RF2_2	Translation termination 2 b0893 25 ribosome(s), RF2	25 gtp + 50 h2o + 1 tl_term_b0893_25_rib_cplx2 --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF2_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 b0893_aa + 1 b0893_mRNA_2 + 25 gdp + 25 gly1_tRNA + 75 h + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.84E+02	183.7762	0	8.42E+00	8.419
tl_term_b0910_13_rib1	Translation termination 1 b0910 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b0910_13_cplx <==> 1 tl_term_b0910_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_term_b0910_13_rib2	Translation termination 2 b0910 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b0910_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 ala1_tRNA + 13 b0910_aa + 1 b0910_mRNA_2 + 13 gdp + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_term_b0910_13_rib_RF2_1	Translation termination 1 b0910 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b0910_13_cplx <==> 1 tl_term_b0910_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_term_b0910_13_rib_RF2_2	Translation termination 2 b0910 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b0910_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 ala1_tRNA + 13 b0910_aa + 1 b0910_mRNA_2 + 13 gdp + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_term_b0910_1_rib1	Translation termination 1 b0910 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0910_1_cplx <==> 1 tl_term_b0910_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_term_b0910_1_rib2	Translation termination 2 b0910 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0910_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b0910_aa + 1 b0910_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_term_b0910_1_rib_RF2_1	Translation termination 1 b0910 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0910_1_cplx <==> 1 tl_term_b0910_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_term_b0910_1_rib_RF2_2	Translation termination 2 b0910 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0910_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b0910_aa + 1 b0910_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_term_b0910_6_rib1	Translation termination 1 b0910 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b0910_6_cplx <==> 1 tl_term_b0910_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_term_b0910_6_rib2	Translation termination 2 b0910 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b0910_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 ala1_tRNA + 6 b0910_aa + 1 b0910_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_term_b0910_6_rib_RF2_1	Translation termination 1 b0910 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b0910_6_cplx <==> 1 tl_term_b0910_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_term_b0910_6_rib_RF2_2	Translation termination 2 b0910 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b0910_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 ala1_tRNA + 6 b0910_aa + 1 b0910_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	8.37E+01	83.67709	0	1.06E+01	10.644
tl_term_b0911_16_rib1	Translation termination 1 b0911 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b0911_16_cplx <==> 1 tl_term_b0911_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.04E+00	7.04E+00	0	5.18E+00	5.18	0	5.18E+00	5.18
tl_term_b0911_16_rib2	Translation termination 2 b0911 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b0911_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b0911_aa + 1 b0911_mRNA_2 + 16 gdp + 16 glu1_tRNA + 48 h + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+00	7.04E+00	0	5.18E+00	5.18	0	5.18E+00	5.18
tl_term_b0911_16_rib_RF2_1	Translation termination 1 b0911 16 ribosome(s), RF2_mono	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b0911_16_cplx <==> 1 tl_term_b0911_16_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.04E+00	7.04E+00	0	5.18E+00	5.18	0	5.18E+00	5.18
tl_term_b0911_16_rib_RF2_2	Translation termination 2 b0911 16 ribosome(s), RF2	16 gtp + 32 h2o + 1 tl_term_b0911_16_rib_cplx2 --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b0911_aa + 1 b0911_mRNA_2 + 16 gdp + 16 glu1_tRNA + 48 h + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+00	7.04E+00	0	5.18E+00	5.18	0	5.18E+00	5.18
tl_term_b0911_1_rib1	Translation termination 1 b0911 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0911_1_cplx <==> 1 tl_term_b0911_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.50E+01	7.50E+01	0	8.08E+01	80.77419	0	1.12E+01	11.248
tl_term_b0911_1_rib2	Translation termination 2 b0911 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0911_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0911_aa + 1 b0911_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.50E+01	7.50E+01	0	8.08E+01	80.77419	0	1.12E+01	11.248
tl_term_b0911_1_rib_RF2_1	Translation termination 1 b0911 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0911_1_cplx <==> 1 tl_term_b0911_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.50E+01	7.50E+01	0	8.08E+01	80.77419	0	1.12E+01	11.248
tl_term_b0911_1_rib_RF2_2	Translation termination 2 b0911 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0911_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0911_aa + 1 b0911_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.50E+01	7.50E+01	0	8.08E+01	80.77419	0	1.12E+01	11.248
tl_term_b0911_32_rib1	Translation termination 1 b0911 32 ribosome(s), (RF1_mono)	32 RF1_mono + 32 RF3_mono.GDP + 32 Rrf_mono + 1 rib_70_elo2_b0911_32_cplx <==> 1 tl_term_b0911_32_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.52E+00	3.52E+00	0	2.59E+00	2.59	0	2.59E+00	2.59
tl_term_b0911_32_rib2	Translation termination 2 b0911 32 ribosome(s), (RF1_mono)	32 gtp + 64 h2o + 1 tl_term_b0911_32_rib_cplx --> 32 EF-G.GDP + 32 EF-Tu.GDP + 32 RF1_mono_inact + 32 RF3_mono.GDP_inact + 32 Rrf_mono_inact + 32 b0911_aa + 1 b0911_mRNA_2 + 32 gdp + 32 glu1_tRNA + 96 h + 96 pi + 32 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.52E+00	3.52E+00	0	2.59E+00	2.59	0	2.59E+00	2.59
tl_term_b0911_32_rib_RF2_1	Translation termination 1 b0911 32 ribosome(s), RF2_mono	32 RF2_mono + 32 RF3_mono.GDP + 32 Rrf_mono + 1 rib_70_elo2_b0911_32_cplx <==> 1 tl_term_b0911_32_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.52E+00	3.52E+00	0	2.59E+00	2.59	0	2.59E+00	2.59
tl_term_b0911_32_rib_RF2_2	Translation termination 2 b0911 32 ribosome(s), RF2	32 gtp + 64 h2o + 1 tl_term_b0911_32_rib_cplx2 --> 32 EF-G.GDP + 32 EF-Tu.GDP + 32 RF2_mono_inact + 32 RF3_mono.GDP_inact + 32 Rrf_mono_inact + 32 b0911_aa + 1 b0911_mRNA_2 + 32 gdp + 32 glu1_tRNA + 96 h + 96 pi + 32 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.52E+00	3.52E+00	0	2.59E+00	2.59	0	2.59E+00	2.59

tl_term_b0912_1_rib1	Translation termination 1 b0912 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0912_1_cplx <==> 1 tl_term_b0912_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_term_b0912_1_rib2	Translation termination 2 b0912 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0912_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0912_aa + 1 b0912_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_term_b0912_1_rib_RF2_1	Translation termination 1 b0912 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0912_1_cplx <==> 1 tl_term_b0912_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_term_b0912_1_rib_RF2_2	Translation termination 2 b0912 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0912_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0912_aa + 1 b0912_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_term_b0912_2_rib1	Translation termination 1 b0912 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b0912_2_cplx <==> 1 tl_term_b0912_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_term_b0912_2_rib2	Translation termination 2 b0912 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b0912_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b0912_aa + 1 b0912_mRNA_2 + 2 gdp + 2 gly1_tRNA + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_term_b0912_2_rib_RF2_1	Translation termination 1 b0912 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b0912_2_cplx <==> 1 tl_term_b0912_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_term_b0912_2_rib_RF2_2	Translation termination 2 b0912 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b0912_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b0912_aa + 1 b0912_mRNA_2 + 2 gdp + 2 gly1_tRNA + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_term_b0912_5_rib1	Translation termination 1 b0912 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b0912_5_cplx <==> 1 tl_term_b0912_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_term_b0912_5_rib2	Translation termination 2 b0912 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b0912_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b0912_aa + 1 b0912_mRNA_2 + 5 gdp + 5 gly1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_term_b0912_5_rib_RF2_1	Translation termination 1 b0912 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b0912_5_cplx <==> 1 tl_term_b0912_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_term_b0912_5_rib_RF2_2	Translation termination 2 b0912 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b0912_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b0912_aa + 1 b0912_mRNA_2 + 5 gdp + 5 gly1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	1.23E+02	122.7777	0	4.61E+01	46.073
tl_term_b0930_13_rib1	Translation termination 1 b0930 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b0930_13_cplx <==> 1 tl_term_b0930_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_term_b0930_13_rib2	Translation termination 2 b0930 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b0930_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b0930_aa + 1 b0930_mRNA_2 + 13 gdp + 39 h + 13 phe1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_term_b0930_13_rib_RF2_1	Translation termination 1 b0930 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b0930_13_cplx <==> 1 tl_term_b0930_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_term_b0930_13_rib_RF2_2	Translation termination 2 b0930 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b0930_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b0930_aa + 1 b0930_mRNA_2 + 13 gdp + 39 h + 13 phe1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_term_b0930_1_rib1	Translation termination 1 b0930 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0930_1_cplx <==> 1 tl_term_b0930_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_term_b0930_1_rib2	Translation termination 2 b0930 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0930_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0930_aa + 1 b0930_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_term_b0930_1_rib_RF2_1	Translation termination 1 b0930 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0930_1_cplx <==> 1 tl_term_b0930_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_term_b0930_1_rib_RF2_2	Translation termination 2 b0930 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0930_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0930_aa + 1 b0930_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_term_b0930_27_rib1	Translation termination 1 b0930 27 ribosome(s), (RF1_mono)	27 RF1_mono + 27 RF3_mono.GDP + 27 Rrf_mono + 1 rib_70_elo2_b0930_27_cplx <==> 1 tl_term_b0930_27_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_term_b0930_27_rib2	Translation termination 2 b0930 27 ribosome(s), (RF1_mono)	27 gtp + 54 h2o + 1 tl_term_b0930_27_rib_cplx --> 27 EF-G.GDP + 27 EF-Tu.GDP + 27 RF1_mono_inact + 27 RF3_mono.GDP_inact + 27 Rrf_mono_inact + 27 b0930_aa + 1 b0930_mRNA_2 + 27 gdp + 81 h + 27 phe1_tRNA + 81 pi + 27 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_term_b0930_27_rib_RF2_1	Translation termination 1 b0930 27 ribosome(s), RF2_mono	27 RF2_mono + 27 RF3_mono.GDP + 27 Rrf_mono + 1 rib_70_elo2_b0930_27_cplx <==> 1 tl_term_b0930_27_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_term_b0930_27_rib_RF2_2	Translation termination 2 b0930 27 ribosome(s), RF2	27 gtp + 54 h2o + 1 tl_term_b0930_27_rib_cplx2 --> 27 EF-G.GDP + 27 EF-Tu.GDP + 27 RF2_mono_inact + 27 RF3_mono.GDP_inact + 27 Rrf_mono_inact + 27 b0930_aa + 1 b0930_mRNA_2 + 27 gdp + 81 h + 27 phe1_tRNA + 81 pi + 27 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.58E+01	9.58E+01	0	1.65E+02	165.4256	0	5.43E+00	5.434
tl_term_b0969_1_rib1	Translation termination 1 b0969 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0969_1_cplx <==> 1 tl_term_b0969_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_term_b0969_1_rib2	Translation termination 2 b0969 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b0969_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0969_aa + 1 b0969_mRNA_2 + 1 gdp + 3 h + 1 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_term_b0969_1_rib_RF2_1	Translation termination 1 b0969 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b0969_1_cplx <==> 1 tl_term_b0969_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_term_b0969_1_rib_RF2_2	Translation termination 2 b0969 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b0969_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b0969_aa + 1 b0969_mRNA_2 + 1 gdp + 3 h + 1 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_term_b0969_3_rib1	Translation termination 1 b0969 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b0969_3_cplx <==> 1 tl_term_b0969_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_term_b0969_3_rib2	Translation termination 2 b0969 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b0969_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b0969_aa + 1 b0969_mRNA_2 + 3 gdp + 9 h + 3 ile1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_term_b0969_3_rib_RF2_1	Translation termination 1 b0969 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b0969_3_cplx <==> 1 tl_term_b0969_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954

tl_term_b0969_3_rib_RF2_2	Translation termination 2 b0969 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b0969_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b0969_aa + 1 b0969_mRNA_2 + 3 gdp + 9 h + 3 ile1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_term_b0969_6_rib1	Translation termination 1 b0969 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b0969_6_cplx <==> 1 tl_term_b0969_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_term_b0969_6_rib2	Translation termination 2 b0969 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b0969_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b0969_aa + 1 b0969_mRNA_2 + 6 gdp + 18 h + 6 ile1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_term_b0969_6_rib_RF2_1	Translation termination 1 b0969 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b0969_6_cplx <==> 1 tl_term_b0969_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_term_b0969_6_rib_RF2_2	Translation termination 2 b0969 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b0969_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b0969_aa + 1 b0969_mRNA_2 + 6 gdp + 18 h + 6 ile1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.12E+02	5.12E+02	0	8.94E+02	893.7312	0	1.30E+01	12.954
tl_term_b1066_11_rib1	Translation termination 1 b1066 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b1066_11_cplx <==> 1 tl_term_b1066_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_term_b1066_11_rib2	Translation termination 2 b1066 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b1066_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 arg1_tRNA + 11 b1066_aa + 1 b1066_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_term_b1066_11_rib_RF2_1	Translation termination 1 b1066 11 ribosome(s), RF2_mono	11 RF2_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b1066_11_cplx <==> 1 tl_term_b1066_11_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_term_b1066_11_rib_RF2_2	Translation termination 2 b1066 11 ribosome(s), RF2	11 gtp + 22 h2o + 1 tl_term_b1066_11_rib_cplx2 --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF2_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 arg1_tRNA + 11 b1066_aa + 1 b1066_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_term_b1066_1_rib1	Translation termination 1 b1066 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1066_1_cplx <==> 1 tl_term_b1066_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_term_b1066_1_rib2	Translation termination 2 b1066 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1066_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b1066_aa + 1 b1066_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_term_b1066_1_rib_RF2_1	Translation termination 1 b1066 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1066_1_cplx <==> 1 tl_term_b1066_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_term_b1066_1_rib_RF2_2	Translation termination 2 b1066 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1066_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b1066_aa + 1 b1066_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_term_b1066_5_rib1	Translation termination 1 b1066 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b1066_5_cplx <==> 1 tl_term_b1066_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_term_b1066_5_rib2	Translation termination 2 b1066 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b1066_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 arg1_tRNA + 5 b1066_aa + 1 b1066_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_term_b1066_5_rib_RF2_1	Translation termination 1 b1066 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b1066_5_cplx <==> 1 tl_term_b1066_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_term_b1066_5_rib_RF2_2	Translation termination 2 b1066 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b1066_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 arg1_tRNA + 5 b1066_aa + 1 b1066_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	4.16E+02	416.2114	0	1.38E+01	13.811
tl_term_b1084_1_rib1	Translation termination 1 b1084 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1084_1_cplx <==> 1 tl_term_b1084_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.77E+01	3.77E+01	0	6.52E+01	65.23211	0	1.86E+00	1.859
tl_term_b1084_1_rib2	Translation termination 2 b1084 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1084_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1084_aa + 1 b1084_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.52E+01	65.23211	0	1.86E+00	1.859
tl_term_b1084_1_rib_RF2_1	Translation termination 1 b1084 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1084_1_cplx <==> 1 tl_term_b1084_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.77E+01	3.77E+01	0	6.52E+01	65.23211	0	1.86E+00	1.859
tl_term_b1084_1_rib_RF2_2	Translation termination 2 b1084 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1084_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1084_aa + 1 b1084_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.52E+01	65.23211	0	1.86E+00	1.859
tl_term_b1084_31_rib1	Translation termination 1 b1084 31 ribosome(s), (RF1_mono)	31 RF1_mono + 31 RF3_mono.GDP + 31 Rrf_mono + 1 rib_70_elo2_b1084_31_cplx <==> 1 tl_term_b1084_31_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.77E+01	3.77E+01	0	4.89E+01	48.91891	0	1.86E+00	1.859
tl_term_b1084_31_rib2	Translation termination 2 b1084 31 ribosome(s), (RF1_mono)	31 gtp + 62 h2o + 1 tl_term_b1084_31_rib_cplx --> 31 EF-G.GDP + 31 EF-Tu.GDP + 31 RF1_mono_inact + 31 RF3_mono.GDP_inact + 31 Rrf_mono_inact + 31 b1084_aa + 1 b1084_mRNA_2 + 31 gdp + 31 glu1_tRNA + 93 h + 93 pi + 31 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	4.89E+01	48.91891	0	1.86E+00	1.859
tl_term_b1084_31_rib_RF2_1	Translation termination 1 b1084 31 ribosome(s), RF2_mono	31 RF2_mono + 31 RF3_mono.GDP + 31 Rrf_mono + 1 rib_70_elo2_b1084_31_cplx <==> 1 tl_term_b1084_31_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.77E+01	3.77E+01	0	4.89E+01	48.91891	0	1.86E+00	1.859
tl_term_b1084_31_rib_RF2_2	Translation termination 2 b1084 31 ribosome(s), RF2	31 gtp + 62 h2o + 1 tl_term_b1084_31_rib_cplx2 --> 31 EF-G.GDP + 31 EF-Tu.GDP + 31 RF2_mono_inact + 31 RF3_mono.GDP_inact + 31 Rrf_mono_inact + 31 b1084_aa + 1 b1084_mRNA_2 + 31 gdp + 31 glu1_tRNA + 93 h + 93 pi + 31 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	4.89E+01	48.91891	0	1.86E+00	1.859
tl_term_b1084_62_rib1	Translation termination 1 b1084 62 ribosome(s), (RF1_mono)	62 RF1_mono + 62 RF3_mono.GDP + 62 Rrf_mono + 1 rib_70_elo2_b1084_62_cplx <==> 1 tl_term_b1084_62_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	2.45E+01	24.45946	0	1.86E+00	1.859
tl_term_b1084_62_rib2	Translation termination 2 b1084 62 ribosome(s), (RF1_mono)	62 gtp + 124 h2o + 1 tl_term_b1084_62_rib_cplx --> 62 EF-G.GDP + 62 EF-Tu.GDP + 62 RF1_mono_inact + 62 RF3_mono.GDP_inact + 62 Rrf_mono_inact + 62 b1084_aa + 1 b1084_mRNA_2 + 62 gdp + 62 glu1_tRNA + 186 h + 186 pi + 62 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	2.45E+01	24.45946	0	1.86E+00	1.859
tl_term_b1084_62_rib_RF2_1	Translation termination 1 b1084 62 ribosome(s), RF2_mono	62 RF2_mono + 62 RF3_mono.GDP + 62 Rrf_mono + 1 rib_70_elo2_b1084_62_cplx <==> 1 tl_term_b1084_62_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	2.45E+01	24.45946	0	1.86E+00	1.859
tl_term_b1084_62_rib_RF2_2	Translation termination 2 b1084 62 ribosome(s), RF2	62 gtp + 124 h2o + 1 tl_term_b1084_62_rib_cplx2 --> 62 EF-G.GDP 62 EF-Tu.GDP + 62 RF2_mono_inact + 62 RF3_mono.GDP_inact + 62 Rrf_mono_inact + 62 b1084_aa + 1 b1084_mRNA_2 + 62 gdp + 62 glu1_tRNA + 186 h + 186 pi + 62 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	2.45E+01	24.45946	0	1.86E+00	1.859
tl_term_b1086_18_rib1	Translation termination 1 b1086 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b1086_18_cplx <==> 1 tl_term_b1086_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597

tl_term_b1086_18_rib2	Translation termination 2 b1086 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b1086_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 arg1_tRNA + 18 b1086_aa + 1 b1086_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_term_b1086_18_rib_RF2_1	Translation termination 1 b1086 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b1086_18_cplx <==> 1 tl_term_b1086_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_term_b1086_18_rib_RF2_2	Translation termination 2 b1086 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b1086_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 arg1_tRNA + 18 b1086_aa + 1 b1086_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_term_b1086_1_rib1	Translation termination 1 b1086 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1086_1_cplx <==> 1 tl_term_b1086_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_term_b1086_1_rib2	Translation termination 2 b1086 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1086_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b1086_aa + 1 b1086_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_term_b1086_1_rib_RF2_1	Translation termination 1 b1086 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1086_1_cplx <==> 1 tl_term_b1086_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_term_b1086_1_rib_RF2_2	Translation termination 2 b1086 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1086_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b1086_aa + 1 b1086_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_term_b1086_9_rib1	Translation termination 1 b1086 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b1086_9_cplx <==> 1 tl_term_b1086_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_term_b1086_9_rib2	Translation termination 2 b1086 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b1086_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 arg1_tRNA + 9 b1086_aa + 1 b1086_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_term_b1086_9_rib_RF2_1	Translation termination 1 b1086 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b1086_9_cplx <==> 1 tl_term_b1086_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_term_b1086_9_rib_RF2_2	Translation termination 2 b1086 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b1086_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 arg1_tRNA + 9 b1086_aa + 1 b1086_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+02	1.55E+02	0	2.70E+02	270.3315	0	4.60E+00	4.597
tl_term_b1088_10_rib1	Translation termination 1 b1088 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b1088_10_cplx <==> 1 tl_term_b1088_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_term_b1088_10_rib2	Translation termination 2 b1088 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b1088_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b1088_aa + 1 b1088_mRNA_2 + 10 gdp + 30 h + 10 lys1_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_term_b1088_10_rib_RF2_1	Translation termination 1 b1088 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b1088_10_cplx <==> 1 tl_term_b1088_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_term_b1088_10_rib_RF2_2	Translation termination 2 b1088 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b1088_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b1088_aa + 1 b1088_mRNA_2 + 10 gdp + 30 h + 10 lys1_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_term_b1088_1_rib1	Translation termination 1 b1088 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1088_1_cplx <==> 1 tl_term_b1088_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_term_b1088_1_rib2	Translation termination 2 b1088 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1088_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1088_aa + 1 b1088_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_term_b1088_1_rib_RF2_1	Translation termination 1 b1088 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1088_1_cplx <==> 1 tl_term_b1088_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_term_b1088_1_rib_RF2_2	Translation termination 2 b1088 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1088_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1088_aa + 1 b1088_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_term_b1088_5_rib1	Translation termination 1 b1088 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b1088_5_cplx <==> 1 tl_term_b1088_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_term_b1088_5_rib2	Translation termination 2 b1088 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b1088_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b1088_aa + 1 b1088_mRNA_2 + 5 gdp + 15 h + 5 lys1_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_term_b1088_5_rib_RF2_1	Translation termination 1 b1088 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b1088_5_cplx <==> 1 tl_term_b1088_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_term_b1088_5_rib_RF2_2	Translation termination 2 b1088 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b1088_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b1088_aa + 1 b1088_mRNA_2 + 5 gdp + 15 h + 5 lys1_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	1.16E+02	116.28	0	3.39E+01	33.855
tl_term_b1089_1_rib1	Translation termination 1 b1089 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1089_1_cplx <==> 1 tl_term_b1089_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b1089_1_rib2	Translation termination 2 b1089 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1089_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1089_aa + 1 b1089_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b1089_1_rib_RF2_1	Translation termination 1 b1089 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1089_1_cplx <==> 1 tl_term_b1089_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b1089_1_rib_RF2_2	Translation termination 2 b1089 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1089_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1089_aa + 1 b1089_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b1089_3_rib1	Translation termination 1 b1089 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b1089_3_cplx <==> 1 tl_term_b1089_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b1089_3_rib2	Translation termination 2 b1089 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b1089_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b1089_aa + 1 b1089_mRNA_2 + 3 gdp + 9 h + 3 lys1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b1089_3_rib_RF2_1	Translation termination 1 b1089 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b1089_3_cplx <==> 1 tl_term_b1089_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b1089_3_rib_RF2_2	Translation termination 2 b1089 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b1089_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b1089_aa + 1 b1089_mRNA_2 + 3 gdp + 9 h + 3 lys1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667

tl_term_b1090_10_rib1	Translation termination 1 b1090 10 ribosome(s), (RF2_mono)	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b1090_10_cplx <==> 1 tl_term_b1090_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187
tl_term_b1090_10_rib2	Translation termination 2 b1090 10 ribosome(s), (RF2_mono)	10 gtp + 20 h2o + 1 tl_term_b1090_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 argX_tRNA + 10 b1090_aa + 1 b1090_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187
tl_term_b1090_1_rib1	Translation termination 1 b1090 1 ribosome(s), (RF2_mono)	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1090_1_cplx <==> 1 tl_term_b1090_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187
tl_term_b1090_1_rib2	Translation termination 2 b1090 1 ribosome(s), (RF2_mono)	1 gtp + 2 h2o + 1 tl_term_b1090_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 argX_tRNA + 1 b1090_aa + 1 b1090_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187
tl_term_b1090_20_rib1	Translation termination 1 b1090 20 ribosome(s), (RF2_mono)	20 RF2_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b1090_20_cplx <==> 1 tl_term_b1090_20_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187
tl_term_b1090_20_rib2	Translation termination 2 b1090 20 ribosome(s), (RF2_mono)	20 gtp + 40 h2o + 1 tl_term_b1090_20_rib_cplx --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF2_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 argX_tRNA + 20 b1090_aa + 1 b1090_mRNA_2 + 20 gdp + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.77E+01	3.77E+01	0	6.27E+01	62.68685	0	5.19E+00	5.187
tl_term_b1091_18_rib1	Translation termination 1 b1091 18 ribosome(s), (RF2_mono)	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b1091_18_cplx <==> 1 tl_term_b1091_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677
tl_term_b1091_18_rib2	Translation termination 2 b1091 18 ribosome(s), (RF2_mono)	18 gtp + 36 h2o + 1 tl_term_b1091_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b1091_aa + 1 b1091_mRNA_2 + 18 gdp + 54 h + 18 phe1_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677
tl_term_b1091_1_rib1	Translation termination 1 b1091 1 ribosome(s), (RF2_mono)	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1091_1_cplx <==> 1 tl_term_b1091_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677
tl_term_b1091_1_rib2	Translation termination 2 b1091 1 ribosome(s), (RF2_mono)	1 gtp + 2 h2o + 1 tl_term_b1091_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1091_aa + 1 b1091_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677
tl_term_b1091_9_rib1	Translation termination 1 b1091 9 ribosome(s), (RF2_mono)	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b1091_9_cplx <==> 1 tl_term_b1091_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677
tl_term_b1091_9_rib2	Translation termination 2 b1091 9 ribosome(s), (RF2_mono)	9 gtp + 18 h2o + 1 tl_term_b1091_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b1091_aa + 1 b1091_mRNA_2 + 9 gdp + 27 h + 9 phe1_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.92E+01	3.92E+01	0	6.42E+01	64.17685	0	6.68E+00	6.677
tl_term_b1092_18_rib1	Translation termination 1 b1092 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b1092_18_cplx <==> 1 tl_term_b1092_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_term_b1092_18_rib2	Translation termination 2 b1092 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b1092_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b1092_aa + 1 b1092_mRNA_2 + 18 gdp + 54 h + 18 leuU_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_term_b1092_18_rib_RF2_1	Translation termination 1 b1092 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b1092_18_cplx <==> 1 tl_term_b1092_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_term_b1092_18_rib_RF2_2	Translation termination 2 b1092 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b1092_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b1092_aa + 1 b1092_mRNA_2 + 18 gdp + 54 h + 18 leuU_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_term_b1092_1_rib1	Translation termination 1 b1092 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1092_1_cplx <==> 1 tl_term_b1092_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_term_b1092_1_rib2	Translation termination 2 b1092 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1092_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1092_aa + 1 b1092_mRNA_2 + 1 gdp + 3 h + 1 leuU_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_term_b1092_1_rib_RF2_1	Translation termination 1 b1092 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1092_1_cplx <==> 1 tl_term_b1092_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_term_b1092_1_rib_RF2_2	Translation termination 2 b1092 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1092_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1092_aa + 1 b1092_mRNA_2 + 1 gdp + 3 h + 1 leuU_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_term_b1092_9_rib1	Translation termination 1 b1092 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b1092_9_cplx <==> 1 tl_term_b1092_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_term_b1092_9_rib2	Translation termination 2 b1092 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b1092_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b1092_aa + 1 b1092_mRNA_2 + 9 gdp + 27 h + 9 leuU_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_term_b1092_9_rib_RF2_1	Translation termination 1 b1092 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b1092_9_cplx <==> 1 tl_term_b1092_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_term_b1092_9_rib_RF2_2	Translation termination 2 b1092 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b1092_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b1092_aa + 1 b1092_mRNA_2 + 9 gdp + 27 h + 9 leuU_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.33E+01	4.33E+01	0	6.83E+01	68.30685	0	1.08E+01	10.807
tl_term_b1093_14_rib1	Translation termination 1 b1093 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b1093_14_cplx <==> 1 tl_term_b1093_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107
tl_term_b1093_14_rib2	Translation termination 2 b1093 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b1093_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b1093_aa + 1 b1093_mRNA_2 + 14 gdp + 42 h + 42 pi + 14 rib_70 + 14 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107
tl_term_b1093_1_rib1	Translation termination 1 b1093 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1093_1_cplx <==> 1 tl_term_b1093_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107
tl_term_b1093_1_rib2	Translation termination 2 b1093 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1093_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1093_aa + 1 b1093_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107
tl_term_b1093_7_rib1	Translation termination 1 b1093 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b1093_7_cplx <==> 1 tl_term_b1093_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107
tl_term_b1093_7_rib2	Translation termination 2 b1093 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b1093_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b1093_aa + 1 b1093_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70 + 7 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.76E+01	4.76E+01	0	7.26E+01	72.60685	0	1.51E+01	15.107
tl_term_b1114_1_rib1	Translation termination 1 b1114 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1114_1_cplx <==> 1 tl_term_b1114_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.63E+01	3.63E+01	0	6.33E+01	63.27289	0	1.18E+00	1.182

tl_term_b1114_1_rib2	Translation termination 2 b1114 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1114_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b1114_aa + 1 b1114_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.63E+01	3.63E+01	0	6.33E+01	63.27289	0	1.18E+00	1.182
tl_term_b1114_1_rib_RF2_1	Translation termination 1 b1114 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1114_1_cplx <==> 1 tl_term_b1114_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.63E+01	3.63E+01	0	6.33E+01	63.27289	0	1.18E+00	1.182
tl_term_b1114_1_rib_RF2_2	Translation termination 2 b1114 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1114_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b1114_aa + 1 b1114_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.63E+01	3.63E+01	0	6.33E+01	63.27289	0	1.18E+00	1.182
tl_term_b1114_33_rib1	Translation termination 1 b1114 33 ribosome(s), (RF1_mono)	33 RF1_mono + 33 RF3_mono.GDP + 33 Rrf_mono + 1 rib_70_elo2_b1114_33_cplx <==> 1 tl_term_b1114_33_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.63E+01	3.63E+01	0	6.33E+01	63.27289	0	1.18E+00	1.182
tl_term_b1114_33_rib2	Translation termination 2 b1114 33 ribosome(s), (RF1_mono)	33 gtp + 66 h2o + 1 tl_term_b1114_33_rib_cplx --> 33 EF-G.GDP + 33 EF-Tu.GDP + 33 RF1_mono_inact + 33 RF3_mono.GDP_inact + 33 Rrf_mono_inact + 33 ala1_tRNA + 33 b1114_aa + 1 b1114_mRNA_2 + 33 gdp + 99 h + 99 pi + 33 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.63E+01	3.63E+01	0	6.33E+01	63.27289	0	1.18E+00	1.182
tl_term_b1114_33_rib_RF2_1	Translation termination 1 b1114 33 ribosome(s), RF2_mono	33 RF2_mono + 33 RF3_mono.GDP + 33 Rrf_mono + 1 rib_70_elo2_b1114_33_cplx <==> 1 tl_term_b1114_33_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.63E+01	3.63E+01	0	6.33E+01	63.27289	0	1.18E+00	1.182
tl_term_b1114_33_rib_RF2_2	Translation termination 2 b1114 33 ribosome(s), RF2	33 gtp + 66 h2o + 1 tl_term_b1114_33_rib_cplx2 --> 33 EF-G.GDP + 33 EF-Tu.GDP + 33 RF2_mono_inact + 33 RF3_mono.GDP_inact + 33 Rrf_mono_inact + 33 ala1_tRNA + 33 b1114_aa + 1 b1114_mRNA_2 + 33 gdp + 99 h + 99 pi + 33 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.63E+01	3.63E+01	0	6.33E+01	63.27289	0	1.18E+00	1.182
tl_term_b1114_67_rib1	Translation termination 1 b1114 67 ribosome(s), (RF1_mono)	67 RF1_mono + 67 RF3_mono.GDP + 67 Rrf_mono + 1 rib_70_elo2_b1114_67_cplx <==> 1 tl_term_b1114_67_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.91E+01	2.91E+01	0	3.16E+01	31.6391	0	1.18E+00	1.182
tl_term_b1114_67_rib2	Translation termination 2 b1114 67 ribosome(s), (RF1_mono)	67 gtp + 134 h2o + 1 tl_term_b1114_67_rib_cplx --> 67 EF-G.GDP + 67 EF-Tu.GDP + 67 RF1_mono_inact + 67 RF3_mono.GDP_inact + 67 Rrf_mono_inact + 67 ala1_tRNA + 67 b1114_aa + 1 b1114_mRNA_2 + 67 gdp + 201 h + 201 pi + 67 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.91E+01	2.91E+01	0	3.16E+01	31.6391	0	1.18E+00	1.182
tl_term_b1114_67_rib_RF2_1	Translation termination 1 b1114 67 ribosome(s), RF2_mono	67 RF2_mono + 67 RF3_mono.GDP + 67 Rrf_mono + 1 rib_70_elo2_b1114_67_cplx <==> 1 tl_term_b1114_67_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.91E+01	2.91E+01	0	3.16E+01	31.6391	0	1.18E+00	1.182
tl_term_b1114_67_rib_RF2_2	Translation termination 2 b1114 67 ribosome(s), RF2	67 gtp + 134 h2o + 1 tl_term_b1114_67_rib_cplx2 --> 67 EF-G.GDP 67 EF-Tu.GDP + 67 RF2_mono_inact + 67 RF3_mono.GDP_inact + 67 Rrf_mono_inact + 67 ala1_tRNA + 67 b1114_aa + 1 b1114_mRNA_2 + 67 gdp + 201 h + 201 pi + 67 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.91E+01	2.91E+01	0	3.16E+01	31.6391	0	1.18E+00	1.182
tl_term_b1133_10_rib1	Translation termination 1 b1133 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b1133_10_cplx <==> 1 tl_term_b1133_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027
tl_term_b1133_10_rib2	Translation termination 2 b1133 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b1133_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b1133_aa + 1 b1133_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70 + 10 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027
tl_term_b1133_1_rib1	Translation termination 1 b1133 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1133_1_cplx <==> 1 tl_term_b1133_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027
tl_term_b1133_1_rib2	Translation termination 2 b1133 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1133_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1133_aa + 1 b1133_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027
tl_term_b1133_21_rib1	Translation termination 1 b1133 21 ribosome(s), (RF1_mono)	21 RF1_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b1133_21_cplx <==> 1 tl_term_b1133_21_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027
tl_term_b1133_21_rib2	Translation termination 2 b1133 21 ribosome(s), (RF1_mono)	21 gtp + 42 h2o + 1 tl_term_b1133_21_rib_cplx --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF1_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 b1133_aa + 1 b1133_mRNA_2 + 21 gdp + 63 h + 63 pi + 21 rib_70 + 21 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.18E+02	1.18E+02	0	2.04E+02	204.0412	0	5.03E+00	5.027
tl_term_b1134_1_rib1	Translation termination 1 b1134 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1134_1_cplx <==> 1 tl_term_b1134_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_term_b1134_1_rib2	Translation termination 2 b1134 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1134_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1134_aa + 1 b1134_mRNA_2 + 1 gdp + 3 h + 3 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_term_b1134_1_rib_RF2_1	Translation termination 1 b1134 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1134_1_cplx <==> 1 tl_term_b1134_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_term_b1134_1_rib_RF2_2	Translation termination 2 b1134 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1134_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1134_aa + 1 b1134_mRNA_2 + 1 gdp + 3 h + 3 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_term_b1134_4_rib1	Translation termination 1 b1134 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b1134_4_cplx <==> 1 tl_term_b1134_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_term_b1134_4_rib2	Translation termination 2 b1134 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b1134_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b1134_aa + 1 b1134_mRNA_2 + 4 gdp + 12 h + 4 ile1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_term_b1134_4_rib_RF2_1	Translation termination 1 b1134 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b1134_4_cplx <==> 1 tl_term_b1134_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_term_b1134_4_rib_RF2_2	Translation termination 2 b1134 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b1134_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b1134_aa + 1 b1134_mRNA_2 + 4 gdp + 12 h + 4 ile1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_term_b1134_9_rib1	Translation termination 1 b1134 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b1134_9_cplx <==> 1 tl_term_b1134_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_term_b1134_9_rib2	Translation termination 2 b1134 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b1134_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b1134_aa + 1 b1134_mRNA_2 + 9 gdp + 27 h + 9 ile1_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_term_b1134_9_rib_RF2_1	Translation termination 1 b1134 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b1134_9_cplx <==> 1 tl_term_b1134_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_term_b1134_9_rib_RF2_2	Translation termination 2 b1134 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b1134_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b1134_aa + 1 b1134_mRNA_2 + 9 gdp + 27 h + 9 ile1_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.24E+02	1.24E+02	0	2.10E+02	210.3276	0	1.05E+01	10.528
tl_term_b1135_12_rib1	Translation termination 1 b1135 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b1135_12_cplx <==> 1 tl_term_b1135_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008

tl_term_b1135_12_rib2	Translation termination 2 b1135 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b1135_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 asp1_tRNA + 12 b1135_aa + 1 b1135_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_term_b1135_12_rib_RF2_1	Translation termination 1 b1135 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b1135_12_cplx <==> 1 tl_term_b1135_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_term_b1135_12_rib_RF2_2	Translation termination 2 b1135 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b1135_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 asp1_tRNA + 12 b1135_aa + 1 b1135_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_term_b1135_1_rib1	Translation termination 1 b1135 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1135_1_cplx <==> 1 tl_term_b1135_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_term_b1135_1_rib2	Translation termination 2 b1135 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1135_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b1135_aa + 1 b1135_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_term_b1135_1_rib_RF2_1	Translation termination 1 b1135 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1135_1_cplx <==> 1 tl_term_b1135_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_term_b1135_1_rib_RF2_2	Translation termination 2 b1135 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1135_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b1135_aa + 1 b1135_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_term_b1135_6_rib1	Translation termination 1 b1135 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b1135_6_cplx <==> 1 tl_term_b1135_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_term_b1135_6_rib2	Translation termination 2 b1135 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b1135_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 asp1_tRNA + 6 b1135_aa + 1 b1135_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_term_b1135_6_rib_RF2_1	Translation termination 1 b1135 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b1135_6_cplx <==> 1 tl_term_b1135_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_term_b1135_6_rib_RF2_2	Translation termination 2 b1135 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b1135_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 asp1_tRNA + 6 b1135_aa + 1 b1135_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.07E+02	206.8076	0	7.01E+00	7.008
tl_term_b1211_10_rib1	Translation termination 1 b1211 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b1211_10_cplx <==> 1 tl_term_b1211_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_term_b1211_10_rib2	Translation termination 2 b1211 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b1211_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b1211_aa + 1 b1211_mRNA_2 + 10 gdp + 10 glu1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_term_b1211_10_rib_RF2_1	Translation termination 1 b1211 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b1211_10_cplx <==> 1 tl_term_b1211_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_term_b1211_10_rib_RF2_2	Translation termination 2 b1211 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b1211_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b1211_aa + 1 b1211_mRNA_2 + 10 gdp + 10 glu1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_term_b1211_1_rib1	Translation termination 1 b1211 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1211_1_cplx <==> 1 tl_term_b1211_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_term_b1211_1_rib2	Translation termination 2 b1211 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1211_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1211_aa + 1 b1211_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_term_b1211_1_rib_RF2_1	Translation termination 1 b1211 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1211_1_cplx <==> 1 tl_term_b1211_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_term_b1211_1_rib_RF2_2	Translation termination 2 b1211 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1211_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1211_aa + 1 b1211_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_term_b1211_21_rib1	Translation termination 1 b1211 21 ribosome(s), (RF1_mono)	21 RF1_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b1211_21_cplx <==> 1 tl_term_b1211_21_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_term_b1211_21_rib2	Translation termination 2 b1211 21 ribosome(s), (RF1_mono)	21 gtp + 42 h2o + 1 tl_term_b1211_21_rib_cplx --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF1_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 b1211_aa + 1 b1211_mRNA_2 + 21 gdp + 21 glu1_tRNA + 63 h + 63 pi + 21 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_term_b1211_21_rib_RF2_1	Translation termination 1 b1211 21 ribosome(s), RF2_mono	21 RF2_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b1211_21_cplx <==> 1 tl_term_b1211_21_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_term_b1211_21_rib_RF2_2	Translation termination 2 b1211 21 ribosome(s), RF2	21 gtp + 42 h2o + 1 tl_term_b1211_21_rib_cplx2 --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF2_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 b1211_aa + 1 b1211_mRNA_2 + 21 gdp + 21 glu1_tRNA + 63 h + 63 pi + 21 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.09E+02	208.6739	0	4.71E+00	4.708
tl_term_b1212_16_rib1	Translation termination 1 b1212 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b1212_16_cplx <==> 1 tl_term_b1212_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927
tl_term_b1212_16_rib2	Translation termination 2 b1212 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b1212_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b1212_aa + 1 b1212_mRNA_2 + 16 gdp + 16 gln2_tRNA + 48 h + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927
tl_term_b1212_1_rib1	Translation termination 1 b1212 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1212_1_cplx <==> 1 tl_term_b1212_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927
tl_term_b1212_1_rib2	Translation termination 2 b1212 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1212_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1212_aa + 1 b1212_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927
tl_term_b1212_8_rib1	Translation termination 1 b1212 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b1212_8_cplx <==> 1 tl_term_b1212_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927
tl_term_b1212_8_rib2	Translation termination 2 b1212 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b1212_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b1212_aa + 1 b1212_mRNA_2 + 8 gdp + 8 gln2_tRNA + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.52E+02	1.52E+02	0	2.63E+02	263.1611	0	5.93E+00	5.927
tl_term_b1229_1_rib1	Translation termination 1 b1229 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1229_1_cplx <==> 1 tl_term_b1229_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.59E+02	2.59E+02	0	4.21E+02	421.3748	0	4.82E+01	48.207

tl_term_b1229_1_rib2	Translation termination 2 b1229 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1229_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b1229_aa + 1 b1229_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.59E+02	2.59E+02	0	4.21E+02	421.3748	0	4.82E+01	48.207
tl_term_b1269_17_rib1	Translation termination 1 b1269 17 ribosome(s), (RF1_mono)	17 RF1_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b1269_17_cplx <==> 1 tl_term_b1269_17_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_term_b1269_17_rib2	Translation termination 2 b1269 17 ribosome(s), (RF1_mono)	17 gtp + 34 h2o + 1 tl_term_b1269_17_rib_cplx --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF1_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 b1269_aa + 1 b1269_mRNA_2 + 17 gdp + 17 gly1_tRNA + 51 h + 51 pi + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_term_b1269_17_rib_RF2_1	Translation termination 1 b1269 17 ribosome(s), RF2_mono	17 RF2_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b1269_17_cplx <==> 1 tl_term_b1269_17_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_term_b1269_17_rib_RF2_2	Translation termination 2 b1269 17 ribosome(s), RF2	17 gtp + 34 h2o + 1 tl_term_b1269_17_rib_cplx2 --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF2_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 b1269_aa + 1 b1269_mRNA_2 + 17 gdp + 17 gly1_tRNA + 51 h + 51 pi + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_term_b1269_1_rib1	Translation termination 1 b1269 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1269_1_cplx <==> 1 tl_term_b1269_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_term_b1269_1_rib2	Translation termination 2 b1269 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1269_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1269_aa + 1 b1269_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_term_b1269_1_rib_RF2_1	Translation termination 1 b1269 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1269_1_cplx <==> 1 tl_term_b1269_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_term_b1269_1_rib_RF2_2	Translation termination 2 b1269 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1269_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1269_aa + 1 b1269_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_term_b1269_8_rib1	Translation termination 1 b1269 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b1269_8_cplx <==> 1 tl_term_b1269_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_term_b1269_8_rib2	Translation termination 2 b1269 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b1269_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b1269_aa + 1 b1269_mRNA_2 + 8 gdp + 8 gly1_tRNA + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_term_b1269_8_rib_RF2_1	Translation termination 1 b1269 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b1269_8_cplx <==> 1 tl_term_b1269_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_term_b1269_8_rib_RF2_2	Translation termination 2 b1269 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b1269_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b1269_aa + 1 b1269_mRNA_2 + 8 gdp + 8 gly1_tRNA + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+02	1.61E+02	0	2.80E+02	280.4724	0	5.70E+00	5.695
tl_term_b1286_18_rib1	Translation termination 1 b1286 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b1286_18_cplx <==> 1 tl_term_b1286_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.42E+01	6.42E+01	0	1.11E+02	111.1142	0	3.39E+00	3.39
tl_term_b1286_18_rib2	Translation termination 2 b1286 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b1286_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 ala1_tRNA + 18 b1286_aa + 1 b1286_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.11E+02	111.1142	0	3.39E+00	3.39
tl_term_b1286_18_rib_RF2_1	Translation termination 1 b1286 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b1286_18_cplx <==> 1 tl_term_b1286_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.42E+01	6.42E+01	0	1.11E+02	111.1142	0	3.39E+00	3.39
tl_term_b1286_18_rib_RF2_2	Translation termination 2 b1286 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b1286_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 ala1_tRNA + 18 b1286_aa + 1 b1286_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.11E+02	111.1142	0	3.39E+00	3.39
tl_term_b1286_1_rib1	Translation termination 1 b1286 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1286_1_cplx <==> 1 tl_term_b1286_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.42E+01	6.42E+01	0	1.11E+02	111.1142	0	3.39E+00	3.39
tl_term_b1286_1_rib2	Translation termination 2 b1286 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1286_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b1286_aa + 1 b1286_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.11E+02	111.1142	0	3.39E+00	3.39
tl_term_b1286_1_rib_RF2_1	Translation termination 1 b1286 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1286_1_cplx <==> 1 tl_term_b1286_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.42E+01	6.42E+01	0	1.11E+02	111.1142	0	3.39E+00	3.39
tl_term_b1286_1_rib_RF2_2	Translation termination 2 b1286 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1286_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b1286_aa + 1 b1286_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.11E+02	111.1142	0	3.39E+00	3.39
tl_term_b1286_37_rib1	Translation termination 1 b1286 37 ribosome(s), (RF1_mono)	37 RF1_mono + 37 RF3_mono.GDP + 37 Rrf_mono + 1 rib_70_elo2_b1286_37_cplx <==> 1 tl_term_b1286_37_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.42E+01	6.42E+01	0	1.02E+02	102.4653	0	3.39E+00	3.39
tl_term_b1286_37_rib2	Translation termination 2 b1286 37 ribosome(s), (RF1_mono)	37 gtp + 74 h2o + 1 tl_term_b1286_37_rib_cplx --> 37 EF-G.GDP + 37 EF-Tu.GDP + 37 RF1_mono_inact + 37 RF3_mono.GDP_inact + 37 Rrf_mono_inact + 37 ala1_tRNA + 37 b1286_aa + 1 b1286_mRNA_2 + 37 gdp + 111 h + 111 pi + 37 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.02E+02	102.4653	0	3.39E+00	3.39
tl_term_b1286_37_rib_RF2_1	Translation termination 1 b1286 37 ribosome(s), RF2_mono	37 RF2_mono + 37 RF3_mono.GDP + 37 Rrf_mono + 1 rib_70_elo2_b1286_37_cplx <==> 1 tl_term_b1286_37_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.42E+01	6.42E+01	0	1.02E+02	102.4653	0	3.39E+00	3.39
tl_term_b1286_37_rib_RF2_2	Translation termination 2 b1286 37 ribosome(s), RF2	37 gtp + 74 h2o + 1 tl_term_b1286_37_rib_cplx2 --> 37 EF-G.GDP + 37 EF-Tu.GDP + 37 RF2_mono_inact + 37 RF3_mono.GDP_inact + 37 Rrf_mono_inact + 37 ala1_tRNA + 37 b1286_aa + 1 b1286_mRNA_2 + 37 gdp + 111 h + 111 pi + 37 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.42E+01	6.42E+01	0	1.02E+02	102.4653	0	3.39E+00	3.39
tl_term_b1344_18_rib1	Translation termination 1 b1344 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b1344_18_cplx <==> 1 tl_term_b1344_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_term_b1344_18_rib2	Translation termination 2 b1344 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b1344_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b1344_aa + 1 b1344_mRNA_2 + 18 gdp + 54 h + 18 lys1_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_term_b1344_18_rib_RF2_1	Translation termination 1 b1344 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b1344_18_cplx <==> 1 tl_term_b1344_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_term_b1344_18_rib_RF2_2	Translation termination 2 b1344 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b1344_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b1344_aa + 1 b1344_mRNA_2 + 18 gdp + 54 h + 18 lys1_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_term_b1344_1_rib1	Translation termination 1 b1344 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1344_1_cplx <==> 1 tl_term_b1344_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289

tl_term_b1344_1_rib2	Translation termination 2 b1344 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1344_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1344_aa + 1 b1344_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_term_b1344_1_rib_RF2_1	Translation termination 1 b1344 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1344_1_cplx <==> 1 tl_term_b1344_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_term_b1344_1_rib_RF2_2	Translation termination 2 b1344 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1344_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1344_aa + 1 b1344_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_term_b1344_9_rib1	Translation termination 1 b1344 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b1344_9_cplx <==> 1 tl_term_b1344_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_term_b1344_9_rib2	Translation termination 2 b1344 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b1344_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b1344_aa + 1 b1344_mRNA_2 + 9 gdp + 27 h + 9 lys1_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_term_b1344_9_rib_RF2_1	Translation termination 1 b1344 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b1344_9_cplx <==> 1 tl_term_b1344_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_term_b1344_9_rib_RF2_2	Translation termination 2 b1344 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b1344_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b1344_aa + 1 b1344_mRNA_2 + 9 gdp + 27 h + 9 lys1_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	274.8588	0	5.29E+00	5.289
tl_term_b1427_10_rib1	Translation termination 1 b1427 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b1427_10_cplx <==> 1 tl_term_b1427_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_term_b1427_10_rib2	Translation termination 2 b1427 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b1427_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b1427_aa + 1 b1427_mRNA_2 + 10 gdp + 10 gln2_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_term_b1427_10_rib_RF2_1	Translation termination 1 b1427 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b1427_10_cplx <==> 1 tl_term_b1427_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_term_b1427_10_rib_RF2_2	Translation termination 2 b1427 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b1427_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b1427_aa + 1 b1427_mRNA_2 + 10 gdp + 10 gln2_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_term_b1427_1_rib1	Translation termination 1 b1427 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1427_1_cplx <==> 1 tl_term_b1427_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_term_b1427_1_rib2	Translation termination 2 b1427 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1427_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1427_aa + 1 b1427_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_term_b1427_1_rib_RF2_1	Translation termination 1 b1427 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1427_1_cplx <==> 1 tl_term_b1427_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_term_b1427_1_rib_RF2_2	Translation termination 2 b1427 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1427_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1427_aa + 1 b1427_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_term_b1427_5_rib1	Translation termination 1 b1427 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b1427_5_cplx <==> 1 tl_term_b1427_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_term_b1427_5_rib2	Translation termination 2 b1427 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b1427_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b1427_aa + 1 b1427_mRNA_2 + 5 gdp + 5 gln2_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_term_b1427_5_rib_RF2_1	Translation termination 1 b1427 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b1427_5_cplx <==> 1 tl_term_b1427_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_term_b1427_5_rib_RF2_2	Translation termination 2 b1427 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b1427_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b1427_aa + 1 b1427_mRNA_2 + 5 gdp + 5 gln2_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.05E+02	505.4124	0	8.98E+00	8.975
tl_term_b1480_1_rib1	Translation termination 1 b1480 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1480_1_cplx <==> 1 tl_term_b1480_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b1480_1_rib2	Translation termination 2 b1480 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1480_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1480_aa + 1 b1480_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b1480_1_rib_RF2_1	Translation termination 1 b1480 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1480_1_cplx <==> 1 tl_term_b1480_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b1480_1_rib_RF2_2	Translation termination 2 b1480 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1480_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1480_aa + 1 b1480_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b1480_2_rib1	Translation termination 1 b1480 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b1480_2_cplx <==> 1 tl_term_b1480_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b1480_2_rib2	Translation termination 2 b1480 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b1480_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b1480_aa + 1 b1480_mRNA_2 + 2 gdp + 6 h + 2 lys1_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b1480_2_rib_RF2_1	Translation termination 1 b1480 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b1480_2_cplx <==> 1 tl_term_b1480_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b1480_2_rib_RF2_2	Translation termination 2 b1480 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b1480_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b1480_aa + 1 b1480_mRNA_2 + 2 gdp + 6 h + 2 lys1_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b1481_1_rib1	Translation termination 1 b1481 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1481_1_cplx <==> 1 tl_term_b1481_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_term_b1481_1_rib2	Translation termination 2 b1481 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1481_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1481_aa + 1 b1481_mRNA_2 + 1 gdp + 3 h + 1 leuU_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_term_b1481_1_rib_RF2_1	Translation termination 1 b1481 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1481_1_cplx <==> 1 tl_term_b1481_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_term_b1481_1_rib_RF2_2	Translation termination 2 b1481 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1481_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1481_aa + 1 b1481_mRNA_2 + 1 gdp + 3 h + 1 leuU_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_term_b1481_2_rib1	Translation termination 1 b1481 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b1481_2_cplx <==> 1 tl_term_b1481_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489

tl_term_b1481_2_rib2	Translation termination 2 b1481 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b1481_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b1481_aa + 1 b1481_mRNA_2 + 2 gdp + 6 h + 2 leuU_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_term_b1481_2_rib_RF2_1	Translation termination 1 b1481 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b1481_2_cplx <==> 1 tl_term_b1481_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_term_b1481_2_rib_RF2_2	Translation termination 2 b1481 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b1481_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b1481_aa + 1 b1481_mRNA_2 + 2 gdp + 6 h + 2 leuU_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_term_b1481_4_rib1	Translation termination 1 b1481 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b1481_4_cplx <==> 1 tl_term_b1481_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_term_b1481_4_rib2	Translation termination 2 b1481 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b1481_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b1481_aa + 1 b1481_mRNA_2 + 4 gdp + 12 h + 4 leuU_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_term_b1481_4_rib_RF2_1	Translation termination 1 b1481 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b1481_4_cplx <==> 1 tl_term_b1481_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_term_b1481_4_rib_RF2_2	Translation termination 2 b1481 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b1481_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b1481_aa + 1 b1481_mRNA_2 + 4 gdp + 12 h + 4 leuU_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.26E+02	1.26E+02	0	1.05E+02	105.18	0	2.25E+01	22.489
tl_term_b1636_16_rib1	Translation termination 1 b1636 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b1636_16_cplx <==> 1 tl_term_b1636_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744
tl_term_b1636_16_rib2	Translation termination 2 b1636 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b1636_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b1636_aa + 1 b1636_mRNA_2 + 16 gdp + 48 h + 16 leuU_tRNA + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744
tl_term_b1636_1_rib1	Translation termination 1 b1636 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1636_1_cplx <==> 1 tl_term_b1636_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744
tl_term_b1636_1_rib2	Translation termination 2 b1636 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1636_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1636_aa + 1 b1636_mRNA_2 + 1 gdp + 3 h + 1 leuU_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744
tl_term_b1636_8_rib1	Translation termination 1 b1636 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b1636_8_cplx <==> 1 tl_term_b1636_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744
tl_term_b1636_8_rib2	Translation termination 2 b1636 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b1636_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b1636_aa + 1 b1636_mRNA_2 + 8 gdp + 24 h + 8 leuU_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.13E+02	113.1146	0	5.74E+00	5.744
tl_term_b1637_12_rib1	Translation termination 1 b1637 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b1637_12_cplx <==> 1 tl_term_b1637_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_term_b1637_12_rib2	Translation termination 2 b1637 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b1637_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b1637_aa + 1 b1637_mRNA_2 + 12 gdp + 36 h + 12 lys1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_term_b1637_12_rib_RF2_1	Translation termination 1 b1637 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b1637_12_cplx <==> 1 tl_term_b1637_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_term_b1637_12_rib_RF2_2	Translation termination 2 b1637 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b1637_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b1637_aa + 1 b1637_mRNA_2 + 12 gdp + 36 h + 12 lys1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_term_b1637_1_rib1	Translation termination 1 b1637 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1637_1_cplx <==> 1 tl_term_b1637_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_term_b1637_1_rib2	Translation termination 2 b1637 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1637_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1637_aa + 1 b1637_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_term_b1637_1_rib_RF2_1	Translation termination 1 b1637 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1637_1_cplx <==> 1 tl_term_b1637_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_term_b1637_1_rib_RF2_2	Translation termination 2 b1637 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1637_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1637_aa + 1 b1637_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_term_b1637_24_rib1	Translation termination 1 b1637 24 ribosome(s), (RF1_mono)	24 RF1_mono + 24 RF3_mono.GDP + 24 Rrf_mono + 1 rib_70_elo2_b1637_24_cplx <==> 1 tl_term_b1637_24_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_term_b1637_24_rib2	Translation termination 2 b1637 24 ribosome(s), (RF1_mono)	24 gtp + 48 h2o + 1 tl_term_b1637_24_rib_cplx --> 24 EF-G.GDP + 24 EF-Tu.GDP + 24 RF1_mono_inact + 24 RF3_mono.GDP_inact + 24 Rrf_mono_inact + 24 b1637_aa + 1 b1637_mRNA_2 + 24 gdp + 72 h + 24 lys1_tRNA + 72 pi + 24 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_term_b1637_24_rib_RF2_1	Translation termination 1 b1637 24 ribosome(s), RF2_mono	24 RF2_mono + 24 RF3_mono.GDP + 24 Rrf_mono + 1 rib_70_elo2_b1637_24_cplx <==> 1 tl_term_b1637_24_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_term_b1637_24_rib_RF2_2	Translation termination 2 b1637 24 ribosome(s), RF2	24 gtp + 48 h2o + 1 tl_term_b1637_24_rib_cplx2 --> 24 EF-G.GDP + 24 EF-Tu.GDP + 24 RF2_mono_inact + 24 RF3_mono.GDP_inact + 24 Rrf_mono_inact + 24 b1637_aa + 1 b1637_mRNA_2 + 24 gdp + 72 h + 24 lys1_tRNA + 72 pi + 24 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.47E+01	6.47E+01	0	1.11E+02	111.3346	0	3.96E+00	3.964
tl_term_b1638_12_rib1	Translation termination 1 b1638 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b1638_12_cplx <==> 1 tl_term_b1638_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094
tl_term_b1638_12_rib2	Translation termination 2 b1638 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b1638_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b1638_aa + 1 b1638_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 proL_tRNA + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094
tl_term_b1638_1_rib1	Translation termination 1 b1638 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1638_1_cplx <==> 1 tl_term_b1638_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094
tl_term_b1638_1_rib2	Translation termination 2 b1638 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1638_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1638_aa + 1 b1638_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 proL_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094
tl_term_b1638_6_rib1	Translation termination 1 b1638 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b1638_6_cplx <==> 1 tl_term_b1638_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094
tl_term_b1638_6_rib2	Translation termination 2 b1638 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b1638_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b1638_aa + 1 b1638_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 proL_tRNA + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	8.47E+01	84.73245	0	6.09E+00	6.094

tl_term_b1652_12_rib1	Translation termination 1 b1652 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b1652_12_cplx <==> 1 tl_term_b1652_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_term_b1652_12_rib2	Translation termination 2 b1652 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b1652_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b1652_aa + 1 b1652_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70 + 12 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_term_b1652_12_rib_RF2_1	Translation termination 1 b1652 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b1652_12_cplx <==> 1 tl_term_b1652_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_term_b1652_12_rib_RF2_2	Translation termination 2 b1652 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b1652_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b1652_aa + 1 b1652_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70 + 12 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_term_b1652_1_rib1	Translation termination 1 b1652 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1652_1_cplx <==> 1 tl_term_b1652_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_term_b1652_1_rib2	Translation termination 2 b1652 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1652_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1652_aa + 1 b1652_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_term_b1652_1_rib_RF2_1	Translation termination 1 b1652 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1652_1_cplx <==> 1 tl_term_b1652_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_term_b1652_1_rib_RF2_2	Translation termination 2 b1652 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1652_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1652_aa + 1 b1652_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_term_b1652_6_rib1	Translation termination 1 b1652 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b1652_6_cplx <==> 1 tl_term_b1652_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_term_b1652_6_rib2	Translation termination 2 b1652 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b1652_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b1652_aa + 1 b1652_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70 + 6 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_term_b1652_6_rib_RF2_1	Translation termination 1 b1652 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b1652_6_cplx <==> 1 tl_term_b1652_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_term_b1652_6_rib_RF2_2	Translation termination 2 b1652 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b1652_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b1652_aa + 1 b1652_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70 + 6 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	4.52E+01	45.23407	0	7.54E+00	7.541
tl_term_b1653_1_rib1	Translation termination 1 b1653 1 ribosome(s), (RF2_mono)	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1653_1_cplx <==> 1 tl_term_b1653_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	3.89E+01	38.89407	0	1.20E+00	1.201
tl_term_b1653_1_rib2	Translation termination 2 b1653 1 ribosome(s), (RF2_mono)	1 gtp + 2 h2o + 1 tl_term_b1653_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1653_aa + 1 b1653_mRNA_2 + 1 gdp + 1 glyT_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.89E+01	38.89407	0	1.20E+00	1.201
tl_term_b1653_45_rib1	Translation termination 1 b1653 45 ribosome(s), (RF2_mono)	45 RF2_mono + 45 RF3_mono.GDP + 45 Rrf_mono + 1 rib_70_elo2_b1653_45_cplx <==> 1 tl_term_b1653_45_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	3.39E+01	33.88332	0	1.20E+00	1.201
tl_term_b1653_45_rib2	Translation termination 2 b1653 45 ribosome(s), (RF2_mono)	45 gtp + 90 h2o + 1 tl_term_b1653_45_rib_cplx --> 45 EF-G.GDP + 45 EF-Tu.GDP + 45 RF2_mono_inact + 45 RF3_mono.GDP_inact + 45 Rrf_mono_inact + 45 b1653_aa + 1 b1653_mRNA_2 + 45 gdp + 45 glyT_tRNA + 135 h + 135 pi + 45 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.39E+01	33.88332	0	1.20E+00	1.201
tl_term_b1653_90_rib1	Translation termination 1 b1653 90 ribosome(s), (RF2_mono)	90 RF2_mono + 90 RF3_mono.GDP + 90 Rrf_mono + 1 rib_70_elo2_b1653_90_cplx <==> 1 tl_term_b1653_90_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.57E+01	1.57E+01	0	1.70E+01	16.95446	0	1.20E+00	1.201
tl_term_b1653_90_rib2	Translation termination 2 b1653 90 ribosome(s), (RF2_mono)	90 gtp + 180 h2o + 1 tl_term_b1653_90_rib_cplx --> 90 EF-G.GDP + 90 EF-Tu.GDP + 90 RF2_mono_inact + 90 RF3_mono.GDP_inact + 90 Rrf_mono_inact + 90 b1653_aa + 1 b1653_mRNA_2 + 90 gdp + 90 glyT_tRNA + 270 h + 270 pi + 90 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	1.70E+01	16.95446	0	1.20E+00	1.201
tl_term_b1712_1_rib1	Translation termination 1 b1712 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1712_1_cplx <==> 1 tl_term_b1712_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_term_b1712_1_rib2	Translation termination 2 b1712 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1712_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1712_aa + 1 b1712_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_term_b1712_1_rib_RF2_1	Translation termination 1 b1712 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1712_1_cplx <==> 1 tl_term_b1712_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_term_b1712_1_rib_RF2_2	Translation termination 2 b1712 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1712_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1712_aa + 1 b1712_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_term_b1712_2_rib1	Translation termination 1 b1712 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b1712_2_cplx <==> 1 tl_term_b1712_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_term_b1712_2_rib2	Translation termination 2 b1712 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b1712_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b1712_aa + 1 b1712_mRNA_2 + 2 gdp + 2 glu1_tRNA + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_term_b1712_2_rib_RF2_1	Translation termination 1 b1712 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b1712_2_cplx <==> 1 tl_term_b1712_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_term_b1712_2_rib_RF2_2	Translation termination 2 b1712 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b1712_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b1712_aa + 1 b1712_mRNA_2 + 2 gdp + 2 glu1_tRNA + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_term_b1712_5_rib1	Translation termination 1 b1712 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b1712_5_cplx <==> 1 tl_term_b1712_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_term_b1712_5_rib2	Translation termination 2 b1712 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b1712_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b1712_aa + 1 b1712_mRNA_2 + 5 gdp + 5 glu1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_term_b1712_5_rib_RF2_1	Translation termination 1 b1712 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b1712_5_cplx <==> 1 tl_term_b1712_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_term_b1712_5_rib_RF2_2	Translation termination 2 b1712 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b1712_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b1712_aa + 1 b1712_mRNA_2 + 5 gdp + 5 glu1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.65E+01	5.65E+01	0	8.10E+01	81.04924	0	2.46E+01	24.5988
tl_term_b1713_1_rib1	Translation termination 1 b1713 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1713_1_cplx <==> 1 tl_term_b1713_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.43E+01	3.43E+01	0	5.88E+01	58.77924	0	2.33E+00	2.3288

tl_term_b1713_1_rib2	Translation termination 2 b1713 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1713_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b1713_aa + 1 b1713_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.43E+01	3.43E+01	0	5.88E+01	58.77924	0	2.33E+00	2.3288
tl_term_b1713_23_rib1	Translation termination 1 b1713 23 ribosome(s), (RF1_mono)	23 RF1_mono + 23 RF3_mono.GDP + 23 Rrf_mono + 1 rib_70_elo2_b1713_23_cplx <==> 1 tl_term_b1713_23_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.16E+01	3.16E+01	0	5.17E+01	51.68256	0	2.33E+00	2.3288
tl_term_b1713_23_rib2	Translation termination 2 b1713 23 ribosome(s), (RF1_mono)	23 gtp + 46 h2o + 1 tl_term_b1713_23_rib_cplx --> 23 EF-G.GDP + 23 EF-Tu.GDP + 23 RF1_mono_inact + 23 RF3_mono.GDP_inact + 23 Rrf_mono_inact + 23 asp1_tRNA + 23 b1713_aa + 1 b1713_mRNA_2 + 23 gdp + 69 h + 69 pi + 23 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.16E+01	3.16E+01	0	5.17E+01	51.68256	0	2.33E+00	2.3288
tl_term_b1713_46_rib1	Translation termination 1 b1713 46 ribosome(s), (RF1_mono)	46 RF1_mono + 46 RF3_mono.GDP + 46 Rrf_mono + 1 rib_70_elo2_b1713_46_cplx <==> 1 tl_term_b1713_46_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.55E+01	1.55E+01	0	2.53E+01	25.26703	0	2.33E+00	2.3288
tl_term_b1713_46_rib2	Translation termination 2 b1713 46 ribosome(s), (RF1_mono)	46 gtp + 92 h2o + 1 tl_term_b1713_46_rib_cplx --> 46 EF-G.GDP + 46 EF-Tu.GDP + 46 RF1_mono_inact + 46 RF3_mono.GDP_inact + 46 Rrf_mono_inact + 46 asp1_tRNA + 46 b1713_aa + 1 b1713_mRNA_2 + 46 gdp + 138 h + 138 pi + 46 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.55E+01	1.55E+01	0	2.53E+01	25.26703	0	2.33E+00	2.3288
tl_term_b1714_19_rib1	Translation termination 1 b1714 19 ribosome(s), (RF1_mono)	19 RF1_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b1714_19_cplx <==> 1 tl_term_b1714_19_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	5.64E+00	5.638148
tl_term_b1714_19_rib2	Translation termination 2 b1714 19 ribosome(s), (RF1_mono)	19 gtp + 38 h2o + 1 tl_term_b1714_19_rib_cplx --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF1_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b1714_aa + 1 b1714_mRNA_2 + 19 gdp + 57 h + 19 lys1_tRNA + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	5.64E+00	5.638148
tl_term_b1714_19_rib_RF2_1	Translation termination 1 b1714 19 ribosome(s), RF2_mono	19 RF2_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b1714_19_cplx <==> 1 tl_term_b1714_19_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	5.64E+00	5.638148
tl_term_b1714_19_rib_RF2_2	Translation termination 2 b1714 19 ribosome(s), RF2	19 gtp + 38 h2o + 1 tl_term_b1714_19_rib_cplx2 --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF2_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b1714_aa + 1 b1714_mRNA_2 + 19 gdp + 57 h + 19 lys1_tRNA + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	5.64E+00	5.638148
tl_term_b1714_1_rib1	Translation termination 1 b1714 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1714_1_cplx <==> 1 tl_term_b1714_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	6.37E+00	6.3688
tl_term_b1714_1_rib2	Translation termination 2 b1714 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1714_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1714_aa + 1 b1714_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	6.37E+00	6.3688
tl_term_b1714_1_rib_RF2_1	Translation termination 1 b1714 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1714_1_cplx <==> 1 tl_term_b1714_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	6.37E+00	6.3688
tl_term_b1714_1_rib_RF2_2	Translation termination 2 b1714 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1714_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1714_aa + 1 b1714_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	6.37E+00	6.3688
tl_term_b1714_9_rib1	Translation termination 1 b1714 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b1714_9_cplx <==> 1 tl_term_b1714_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	6.37E+00	6.3688
tl_term_b1714_9_rib2	Translation termination 2 b1714 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b1714_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b1714_aa + 1 b1714_mRNA_2 + 9 gdp + 27 h + 9 lys1_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	6.37E+00	6.3688
tl_term_b1714_9_rib_RF2_1	Translation termination 1 b1714 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b1714_9_cplx <==> 1 tl_term_b1714_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	6.37E+00	6.3688
tl_term_b1714_9_rib_RF2_2	Translation termination 2 b1714 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b1714_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b1714_aa + 1 b1714_mRNA_2 + 9 gdp + 27 h + 9 lys1_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.83E+01	3.83E+01	0	6.28E+01	62.81924	0	6.37E+00	6.3688
tl_term_b1715_1_rib1	Translation termination 1 b1715 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1715_1_cplx <==> 1 tl_term_b1715_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.19E+02	2.19E+02	0	2.24E+02	224.2242	0	1.13E+02	113.3448
tl_term_b1715_1_rib2	Translation termination 2 b1715 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1715_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1715_aa + 1 b1715_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 thr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.19E+02	2.19E+02	0	2.24E+02	224.2242	0	1.13E+02	113.3448
tl_term_b1716_1_rib1	Translation termination 1 b1716 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1716_1_cplx <==> 1 tl_term_b1716_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	1.91E+01	19.086
tl_term_b1716_1_rib2	Translation termination 2 b1716 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1716_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b1716_aa + 1 b1716_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	1.91E+01	19.086
tl_term_b1716_1_rib_RF2_1	Translation termination 1 b1716 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1716_1_cplx <==> 1 tl_term_b1716_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	1.91E+01	19.086
tl_term_b1716_1_rib_RF2_2	Translation termination 2 b1716 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1716_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b1716_aa + 1 b1716_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	1.91E+01	19.086
tl_term_b1716_3_rib1	Translation termination 1 b1716 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b1716_3_cplx <==> 1 tl_term_b1716_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.72E+01	3.72E+01	0	2.76E+01	27.62667	0	2.63E+01	26.265
tl_term_b1716_3_rib2	Translation termination 2 b1716 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b1716_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 ala1_tRNA + 3 b1716_aa + 1 b1716_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.72E+01	3.72E+01	0	2.76E+01	27.62667	0	2.63E+01	26.265
tl_term_b1716_3_rib_RF2_1	Translation termination 1 b1716 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b1716_3_cplx <==> 1 tl_term_b1716_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.72E+01	3.72E+01	0	2.76E+01	27.62667	0	2.63E+01	26.265
tl_term_b1716_3_rib_RF2_2	Translation termination 2 b1716 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b1716_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 ala1_tRNA + 3 b1716_aa + 1 b1716_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.72E+01	3.72E+01	0	2.76E+01	27.62667	0	2.63E+01	26.265
tl_term_b1716_6_rib1	Translation termination 1 b1716 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b1716_6_cplx <==> 1 tl_term_b1716_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b1716_6_rib2	Translation termination 2 b1716 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b1716_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 ala1_tRNA + 6 b1716_aa + 1 b1716_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b1716_6_rib_RF2_1	Translation termination 1 b1716 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b1716_6_cplx <==> 1 tl_term_b1716_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b1716_6_rib_RF2_2	Translation termination 2 b1716 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b1716_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 ala1_tRNA + 6 b1716_aa + 1 b1716_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333

tl_term_b1717_1_rib1	Translation termination 1 b1717 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1717_1_cplx <==> 1 tl_term_b1717_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.72E+01	9.72E+01	0	8.29E+01	82.88	0	7.34E+01	73.365
tl_term_b1717_1_rib2	Translation termination 2 b1717 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1717_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b1717_aa + 1 b1717_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.72E+01	9.72E+01	0	8.29E+01	82.88	0	7.34E+01	73.365
tl_term_b1717_1_rib_RF2_1	Translation termination 1 b1717 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1717_1_cplx <==> 1 tl_term_b1717_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.72E+01	9.72E+01	0	8.29E+01	82.88	0	7.34E+01	73.365
tl_term_b1717_1_rib_RF2_2	Translation termination 2 b1717 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1717_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b1717_aa + 1 b1717_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.72E+01	9.72E+01	0	8.29E+01	82.88	0	7.34E+01	73.365
tl_term_b1717_3_rib1	Translation termination 1 b1717 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b1717_3_cplx <==> 1 tl_term_b1717_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b1717_3_rib2	Translation termination 2 b1717 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b1717_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 ala1_tRNA + 3 b1717_aa + 1 b1717_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b1717_3_rib_RF2_1	Translation termination 1 b1717 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b1717_3_cplx <==> 1 tl_term_b1717_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b1717_3_rib_RF2_2	Translation termination 2 b1717 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b1717_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 ala1_tRNA + 3 b1717_aa + 1 b1717_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b1718_10_rib1	Translation termination 1 b1718 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b1718_10_cplx <==> 1 tl_term_b1718_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.96E+01	29.622
tl_term_b1718_10_rib2	Translation termination 2 b1718 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b1718_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b1718_aa + 1 b1718_mRNA_2 + 10 gdp + 10 gln1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.96E+01	29.622
tl_term_b1718_10_rib_RF2_1	Translation termination 1 b1718 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b1718_10_cplx <==> 1 tl_term_b1718_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.96E+01	29.622
tl_term_b1718_10_rib_RF2_2	Translation termination 2 b1718 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b1718_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b1718_aa + 1 b1718_mRNA_2 + 10 gdp + 10 gln1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.96E+01	29.622
tl_term_b1718_1_rib1	Translation termination 1 b1718 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1718_1_cplx <==> 1 tl_term_b1718_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.60E+01	26.00667
tl_term_b1718_1_rib2	Translation termination 2 b1718 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1718_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1718_aa + 1 b1718_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.60E+01	26.00667
tl_term_b1718_1_rib_RF2_1	Translation termination 1 b1718 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1718_1_cplx <==> 1 tl_term_b1718_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.60E+01	26.00667
tl_term_b1718_1_rib_RF2_2	Translation termination 2 b1718 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1718_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1718_aa + 1 b1718_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.60E+01	26.00667
tl_term_b1718_5_rib1	Translation termination 1 b1718 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b1718_5_cplx <==> 1 tl_term_b1718_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.96E+01	29.622
tl_term_b1718_5_rib2	Translation termination 2 b1718 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b1718_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b1718_aa + 1 b1718_mRNA_2 + 5 gdp + 5 gln1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.96E+01	29.622
tl_term_b1718_5_rib_RF2_1	Translation termination 1 b1718 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b1718_5_cplx <==> 1 tl_term_b1718_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.96E+01	29.622
tl_term_b1718_5_rib_RF2_2	Translation termination 2 b1718 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b1718_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b1718_aa + 1 b1718_mRNA_2 + 5 gdp + 5 gln1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+02	3.02E+02	0	5.11E+02	510.8769	0	2.96E+01	29.622
tl_term_b1719_18_rib1	Translation termination 1 b1719 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b1719_18_cplx <==> 1 tl_term_b1719_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_term_b1719_18_rib2	Translation termination 2 b1719 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b1719_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b1719_aa + 1 b1719_mRNA_2 + 18 gdp + 18 glu1_tRNA + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_term_b1719_18_rib_RF2_1	Translation termination 1 b1719 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b1719_18_cplx <==> 1 tl_term_b1719_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_term_b1719_18_rib_RF2_2	Translation termination 2 b1719 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b1719_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b1719_aa + 1 b1719_mRNA_2 + 18 gdp + 18 glu1_tRNA + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_term_b1719_1_rib1	Translation termination 1 b1719 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1719_1_cplx <==> 1 tl_term_b1719_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_term_b1719_1_rib2	Translation termination 2 b1719 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1719_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1719_aa + 1 b1719_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_term_b1719_1_rib_RF2_1	Translation termination 1 b1719 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1719_1_cplx <==> 1 tl_term_b1719_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_term_b1719_1_rib_RF2_2	Translation termination 2 b1719 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1719_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1719_aa + 1 b1719_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_term_b1719_37_rib1	Translation termination 1 b1719 37 ribosome(s), (RF1_mono)	37 RF1_mono + 37 RF3_mono.GDP + 37 Rrf_mono + 1 rib_70_elo2_b1719_37_cplx <==> 1 tl_term_b1719_37_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_term_b1719_37_rib2	Translation termination 2 b1719 37 ribosome(s), (RF1_mono)	37 gtp + 74 h2o + 1 tl_term_b1719_37_rib_cplx --> 37 EF-G.GDP + 37 EF-Tu.GDP + 37 RF1_mono_inact + 37 RF3_mono.GDP_inact + 37 Rrf_mono_inact + 37 b1719_aa + 1 b1719_mRNA_2 + 37 gdp + 37 glu1_tRNA + 111 h + 111 pi + 37 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_term_b1719_37_rib_RF2_1	Translation termination 1 b1719 37 ribosome(s), RF2_mono	37 RF2_mono + 37 RF3_mono.GDP + 37 Rrf_mono + 1 rib_70_elo2_b1719_37_cplx <==> 1 tl_term_b1719_37_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595

tl_term_b1719_37_rib_RF2_2	Translation termination 2 b1719 37 ribosome(s), RF2	37 gtp + 74 h2o + 1 tl_term_b1719_37_rib_cplx2 --> 37 EF-G.GDP + 37 EF-Tu.GDP + 37 RF2_mono_inact + 37 RF3_mono.GDP_inact + 37 Rrf_mono_inact + 37 b1719_aa + 1 b1719_mRNA_2 + 37 gdp + 37 glu1_tRNA + 111 h + 111 pi + 37 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	7.63E+01	76.33817	0	8.60E+00	8.595
tl_term_b1804_11_rib1	Translation termination 1 b1804 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b1804_11_cplx <==> 1 tl_term_b1804_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+02	1.14E+02	0	1.98E+02	198.3151	0	3.32E+00	3.3245
tl_term_b1804_11_rib2	Translation termination 2 b1804 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b1804_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b1804_aa + 1 b1804_mRNA_2 + 11 gdp + 11 gln1_tRNA + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.98E+02	198.3151	0	3.32E+00	3.3245
tl_term_b1804_11_rib_RF2_1	Translation termination 1 b1804 11 ribosome(s), RF2_mono	11 RF2_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b1804_11_cplx <==> 1 tl_term_b1804_11_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+02	1.14E+02	0	1.98E+02	198.3151	0	3.32E+00	3.3245
tl_term_b1804_11_rib_RF2_2	Translation termination 2 b1804 11 ribosome(s), RF2	11 gtp + 22 h2o + 1 tl_term_b1804_11_rib_cplx2 --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF2_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b1804_aa + 1 b1804_mRNA_2 + 11 gdp + 11 gln1_tRNA + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.98E+02	198.3151	0	3.32E+00	3.3245
tl_term_b1804_1_rib1	Translation termination 1 b1804 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1804_1_cplx <==> 1 tl_term_b1804_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+02	1.14E+02	0	1.98E+02	198.3151	0	3.32E+00	3.3245
tl_term_b1804_1_rib2	Translation termination 2 b1804 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1804_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1804_aa + 1 b1804_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.98E+02	198.3151	0	3.32E+00	3.3245
tl_term_b1804_1_rib_RF2_1	Translation termination 1 b1804 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1804_1_cplx <==> 1 tl_term_b1804_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+02	1.14E+02	0	1.98E+02	198.3151	0	3.32E+00	3.3245
tl_term_b1804_1_rib_RF2_2	Translation termination 2 b1804 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1804_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1804_aa + 1 b1804_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.98E+02	198.3151	0	3.32E+00	3.3245
tl_term_b1804_22_rib1	Translation termination 1 b1804 22 ribosome(s), (RF1_mono)	22 RF1_mono + 22 RF3_mono.GDP + 22 Rrf_mono + 1 rib_70_elo2_b1804_22_cplx <==> 1 tl_term_b1804_22_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+02	1.14E+02	0	1.87E+02	186.9786	0	3.32E+00	3.3245
tl_term_b1804_22_rib2	Translation termination 2 b1804 22 ribosome(s), (RF1_mono)	22 gtp + 44 h2o + 1 tl_term_b1804_22_rib_cplx --> 22 EF-G.GDP + 22 EF-Tu.GDP + 22 RF1_mono_inact + 22 RF3_mono.GDP_inact + 22 Rrf_mono_inact + 22 b1804_aa + 1 b1804_mRNA_2 + 22 gdp + 22 gln1_tRNA + 66 h + 66 pi + 22 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.87E+02	186.9786	0	3.32E+00	3.3245
tl_term_b1804_22_rib_RF2_1	Translation termination 1 b1804 22 ribosome(s), RF2_mono	22 RF2_mono + 22 RF3_mono.GDP + 22 Rrf_mono + 1 rib_70_elo2_b1804_22_cplx <==> 1 tl_term_b1804_22_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+02	1.14E+02	0	1.87E+02	186.9786	0	3.32E+00	3.3245
tl_term_b1804_22_rib_RF2_2	Translation termination 2 b1804 22 ribosome(s), RF2	22 gtp + 44 h2o + 1 tl_term_b1804_22_rib_cplx2 --> 22 EF-G.GDP + 22 EF-Tu.GDP + 22 RF2_mono_inact + 22 RF3_mono.GDP_inact + 22 Rrf_mono_inact + 22 b1804_aa + 1 b1804_mRNA_2 + 22 gdp + 22 gln1_tRNA + 66 h + 66 pi + 22 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.87E+02	186.9786	0	3.32E+00	3.3245
tl_term_b1822_15_rib1	Translation termination 1 b1822 15 ribosome(s), (RF1_mono)	15 RF1_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b1822_15_cplx <==> 1 tl_term_b1822_15_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_term_b1822_15_rib2	Translation termination 2 b1822 15 ribosome(s), (RF1_mono)	15 gtp + 30 h2o + 1 tl_term_b1822_15_rib_cplx --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF1_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b1822_aa + 1 b1822_mRNA_2 + 15 gdp + 45 h + 45 pi + 15 rib_70 + 15 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_term_b1822_15_rib_RF2_1	Translation termination 1 b1822 15 ribosome(s), RF2_mono	15 RF2_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b1822_15_cplx <==> 1 tl_term_b1822_15_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_term_b1822_15_rib_RF2_2	Translation termination 2 b1822 15 ribosome(s), RF2	15 gtp + 30 h2o + 1 tl_term_b1822_15_rib_cplx2 --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF2_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b1822_aa + 1 b1822_mRNA_2 + 15 gdp + 45 h + 45 pi + 15 rib_70 + 15 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_term_b1822_1_rib1	Translation termination 1 b1822 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1822_1_cplx <==> 1 tl_term_b1822_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_term_b1822_1_rib2	Translation termination 2 b1822 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1822_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1822_aa + 1 b1822_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_term_b1822_1_rib_RF2_1	Translation termination 1 b1822 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1822_1_cplx <==> 1 tl_term_b1822_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_term_b1822_1_rib_RF2_2	Translation termination 2 b1822 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1822_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1822_aa + 1 b1822_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_term_b1822_7_rib1	Translation termination 1 b1822 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b1822_7_cplx <==> 1 tl_term_b1822_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_term_b1822_7_rib2	Translation termination 2 b1822 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b1822_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b1822_aa + 1 b1822_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70 + 7 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_term_b1822_7_rib_RF2_1	Translation termination 1 b1822 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b1822_7_cplx <==> 1 tl_term_b1822_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_term_b1822_7_rib_RF2_2	Translation termination 2 b1822 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b1822_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b1822_aa + 1 b1822_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70 + 7 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.68E+02	1.68E+02	0	2.92E+02	292.0808	0	5.97E+00	5.9698
tl_term_b1866_17_rib1	Translation termination 1 b1866 17 ribosome(s), (RF1_mono)	17 RF1_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b1866_17_cplx <==> 1 tl_term_b1866_17_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.30E+01	7.30E+01	0	1.27E+02	127.2202	0	2.31E+00	2.314
tl_term_b1866_17_rib2	Translation termination 2 b1866 17 ribosome(s), (RF1_mono)	17 gtp + 34 h2o + 1 tl_term_b1866_17_rib_cplx --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF1_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 asn1_tRNA + 17 b1866_aa + 1 b1866_mRNA_2 + 17 gdp + 51 h + 51 pi + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.30E+01	7.30E+01	0	1.27E+02	127.2202	0	2.31E+00	2.314
tl_term_b1866_1_rib1	Translation termination 1 b1866 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1866_1_cplx <==> 1 tl_term_b1866_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.30E+01	7.30E+01	0	1.27E+02	127.2202	0	2.31E+00	2.314
tl_term_b1866_1_rib2	Translation termination 2 b1866 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1866_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b1866_aa + 1 b1866_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.30E+01	7.30E+01	0	1.27E+02	127.2202	0	2.31E+00	2.314
tl_term_b1866_34_rib1	Translation termination 1 b1866 34 ribosome(s), (RF1_mono)	34 RF1_mono + 34 RF3_mono.GDP + 34 Rrf_mono + 1 rib_70_elo2_b1866_34_cplx <==> 1 tl_term_b1866_34_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.30E+01	7.30E+01	0	1.24E+02	124.3597	0	2.31E+00	2.314

tl_term_b1866_34_rib2	Translation termination 2 b1866 34 ribosome(s), (RF1_mono)	34 gtp + 68 h2o + 1 tl_term_b1866_34_rib_cplx --> 34 EF-G.GDP + 34 EF-Tu.GDP + 34 RF1_mono_inact + 34 RF3_mono.GDP_inact + 34 Rrf_mono_inact + 34 asn1_tRNA + 34 b1866_aa + 1 b1866_mRNA_2 + 34 gdp + 102 h + 102 pi + 34 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.30E+01	7.30E+01	0	1.24E+02	124.3597	0	2.31E+00	2.314
tl_term_b1869_1_rib1	Translation termination 1 b1869 1 ribosome(s), (RF2_mono)	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1869_1_cplx <==> 1 tl_term_b1869_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258
tl_term_b1869_1_rib2	Translation termination 2 b1869 1 ribosome(s), (RF2_mono)	1 gtp + 2 h2o + 1 tl_term_b1869_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b1869_aa + 1 b1869_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258
tl_term_b1869_3_rib1	Translation termination 1 b1869 3 ribosome(s), (RF2_mono)	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b1869_3_cplx <==> 1 tl_term_b1869_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258
tl_term_b1869_3_rib2	Translation termination 2 b1869 3 ribosome(s), (RF2_mono)	3 gtp + 6 h2o + 1 tl_term_b1869_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 arg1_tRNA + 3 b1869_aa + 1 b1869_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258
tl_term_b1869_7_rib1	Translation termination 1 b1869 7 ribosome(s), (RF2_mono)	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b1869_7_cplx <==> 1 tl_term_b1869_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258
tl_term_b1869_7_rib2	Translation termination 2 b1869 7 ribosome(s), (RF2_mono)	7 gtp + 14 h2o + 1 tl_term_b1869_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 arg1_tRNA + 7 b1869_aa + 1 b1869_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.34E+01	7.34E+01	0	1.20E+02	120.3142	0	1.23E+01	12.258
tl_term_b1870_14_rib1	Translation termination 1 b1870 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b1870_14_cplx <==> 1 tl_term_b1870_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578
tl_term_b1870_14_rib2	Translation termination 2 b1870 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b1870_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 ala1_tRNA + 14 b1870_aa + 1 b1870_mRNA_2 + 14 gdp + 42 h + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578
tl_term_b1870_1_rib1	Translation termination 1 b1870 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1870_1_cplx <==> 1 tl_term_b1870_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578
tl_term_b1870_1_rib2	Translation termination 2 b1870 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1870_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b1870_aa + 1 b1870_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578
tl_term_b1870_7_rib1	Translation termination 1 b1870 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b1870_7_cplx <==> 1 tl_term_b1870_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578
tl_term_b1870_7_rib2	Translation termination 2 b1870 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b1870_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 ala1_tRNA + 7 b1870_aa + 1 b1870_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.77E+01	6.77E+01	0	1.15E+02	114.6342	0	6.58E+00	6.578
tl_term_b1871_19_rib1	Translation termination 1 b1871 19 ribosome(s), (RF1_mono)	19 RF1_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b1871_19_cplx <==> 1 tl_term_b1871_19_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_term_b1871_19_rib2	Translation termination 2 b1871 19 ribosome(s), (RF1_mono)	19 gtp + 38 h2o + 1 tl_term_b1871_19_rib_cplx --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF1_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b1871_aa + 1 b1871_mRNA_2 + 19 gdp + 57 h + 57 pi + 19 pro1_tRNA + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_term_b1871_19_rib_RF2_1	Translation termination 1 b1871 19 ribosome(s), RF2_mono	19 RF2_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b1871_19_cplx <==> 1 tl_term_b1871_19_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_term_b1871_19_rib_RF2_2	Translation termination 2 b1871 19 ribosome(s), RF2	19 gtp + 38 h2o + 1 tl_term_b1871_19_rib_cplx2 --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF2_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b1871_aa + 1 b1871_mRNA_2 + 19 gdp + 57 h + 57 pi + 19 pro1_tRNA + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_term_b1871_1_rib1	Translation termination 1 b1871 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1871_1_cplx <==> 1 tl_term_b1871_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_term_b1871_1_rib2	Translation termination 2 b1871 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1871_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1871_aa + 1 b1871_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 pro1_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_term_b1871_1_rib_RF2_1	Translation termination 1 b1871 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1871_1_cplx <==> 1 tl_term_b1871_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_term_b1871_1_rib_RF2_2	Translation termination 2 b1871 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1871_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1871_aa + 1 b1871_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 pro1_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_term_b1871_9_rib1	Translation termination 1 b1871 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b1871_9_cplx <==> 1 tl_term_b1871_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_term_b1871_9_rib2	Translation termination 2 b1871 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b1871_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b1871_aa + 1 b1871_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 pro1_tRNA + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_term_b1871_9_rib_RF2_1	Translation termination 1 b1871 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b1871_9_cplx <==> 1 tl_term_b1871_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_term_b1871_9_rib_RF2_2	Translation termination 2 b1871 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b1871_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b1871_aa + 1 b1871_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 pro1_tRNA + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.13E+02	113.1242	0	5.07E+00	5.068
tl_term_b1876_16_rib1	Translation termination 1 b1876 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b1876_16_cplx <==> 1 tl_term_b1876_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.60E+01	7.60E+01	0	1.32E+02	132.061	0	3.08E+00	3.076
tl_term_b1876_16_rib2	Translation termination 2 b1876 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b1876_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b1876_aa + 1 b1876_mRNA_2 + 16 gdp + 48 h + 16 met1_tRNA + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.32E+02	132.061	0	3.08E+00	3.076
tl_term_b1876_16_rib_RF2_1	Translation termination 1 b1876 16 ribosome(s), RF2_mono	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b1876_16_cplx <==> 1 tl_term_b1876_16_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.60E+01	7.60E+01	0	1.32E+02	132.061	0	3.08E+00	3.076
tl_term_b1876_16_rib_RF2_2	Translation termination 2 b1876 16 ribosome(s), RF2	16 gtp + 32 h2o + 1 tl_term_b1876_16_rib_cplx2 --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b1876_aa + 1 b1876_mRNA_2 + 16 gdp + 48 h + 16 met1_tRNA + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.32E+02	132.061	0	3.08E+00	3.076
tl_term_b1876_1_rib1	Translation termination 1 b1876 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1876_1_cplx <==> 1 tl_term_b1876_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.60E+01	7.60E+01	0	1.32E+02	132.061	0	3.08E+00	3.076
tl_term_b1876_1_rib2	Translation termination 2 b1876 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1876_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1876_aa + 1 b1876_mRNA_2 + 1 gdp + 3 h + 3 met1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.32E+02	132.061	0	3.08E+00	3.076

tl_term_b1876_1_rib_RF2_1	Translation termination 1 b1876 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1876_1_cplx <==> 1 tl_term_b1876_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.60E+01	7.60E+01	0	1.32E+02	132.061	0	3.08E+00	3.076
tl_term_b1876_1_rib_RF2_2	Translation termination 2 b1876 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1876_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1876_aa + 1 b1876_mRNA_2 + 1 gdp + 3 h + 1 met1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.32E+02	132.061	0	3.08E+00	3.076
tl_term_b1876_33_rib1	Translation termination 1 b1876 33 ribosome(s), (RF1_mono)	33 RF1_mono + 33 RF3_mono.GDP + 33 Rrf_mono + 1 rib_70_elo2_b1876_33_cplx <==> 1 tl_term_b1876_33_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.60E+01	7.60E+01	0	1.24E+02	124.4591	0	3.08E+00	3.076
tl_term_b1876_33_rib2	Translation termination 2 b1876 33 ribosome(s), (RF1_mono)	33 gtp + 66 h2o + 1 tl_term_b1876_33_rib_cplx --> 33 EF-G.GDP + 33 EF-Tu.GDP + 33 RF1_mono_inact + 33 RF3_mono.GDP_inact + 33 Rrf_mono_inact + 33 b1876_aa + 1 b1876_mRNA_2 + 33 gdp + 99 h + 33 met1_tRNA + 99 pi + 33 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.24E+02	124.4591	0	3.08E+00	3.076
tl_term_b1876_33_rib_RF2_1	Translation termination 1 b1876 33 ribosome(s), RF2_mono	33 RF2_mono + 33 RF3_mono.GDP + 33 Rrf_mono + 1 rib_70_elo2_b1876_33_cplx <==> 1 tl_term_b1876_33_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.60E+01	7.60E+01	0	1.24E+02	124.4591	0	3.08E+00	3.076
tl_term_b1876_33_rib_RF2_2	Translation termination 2 b1876 33 ribosome(s), RF2	33 gtp + 66 h2o + 1 tl_term_b1876_33_rib_cplx2 --> 33 EF-G.GDP + 33 EF-Tu.GDP + 33 RF2_mono_inact + 33 RF3_mono.GDP_inact + 33 Rrf_mono_inact + 33 b1876_aa + 1 b1876_mRNA_2 + 33 gdp + 99 h + 33 met1_tRNA + 99 pi + 33 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.24E+02	124.4591	0	3.08E+00	3.076
tl_term_b1920_15_rib1	Translation termination 1 b1920 15 ribosome(s), (RF1_mono)	15 RF1_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b1920_15_cplx <==> 1 tl_term_b1920_15_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_term_b1920_15_rib2	Translation termination 2 b1920 15 ribosome(s), (RF1_mono)	15 gtp + 30 h2o + 1 tl_term_b1920_15_rib_cplx --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF1_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b1920_aa + 1 b1920_mRNA_2 + 15 gdp + 45 h + 15 lys1_tRNA + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_term_b1920_15_rib_RF2_1	Translation termination 1 b1920 15 ribosome(s), RF2_mono	15 RF2_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b1920_15_cplx <==> 1 tl_term_b1920_15_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_term_b1920_15_rib_RF2_2	Translation termination 2 b1920 15 ribosome(s), RF2	15 gtp + 30 h2o + 1 tl_term_b1920_15_rib_cplx2 --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF2_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b1920_aa + 1 b1920_mRNA_2 + 15 gdp + 45 h + 15 lys1_tRNA + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_term_b1920_1_rib1	Translation termination 1 b1920 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1920_1_cplx <==> 1 tl_term_b1920_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_term_b1920_1_rib2	Translation termination 2 b1920 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1920_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1920_aa + 1 b1920_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_term_b1920_1_rib_RF2_1	Translation termination 1 b1920 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1920_1_cplx <==> 1 tl_term_b1920_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_term_b1920_1_rib_RF2_2	Translation termination 2 b1920 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1920_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1920_aa + 1 b1920_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_term_b1920_7_rib1	Translation termination 1 b1920 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b1920_7_cplx <==> 1 tl_term_b1920_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_term_b1920_7_rib2	Translation termination 2 b1920 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b1920_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b1920_aa + 1 b1920_mRNA_2 + 7 gdp + 21 h + 7 lys1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_term_b1920_7_rib_RF2_1	Translation termination 1 b1920 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b1920_7_cplx <==> 1 tl_term_b1920_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_term_b1920_7_rib_RF2_2	Translation termination 2 b1920 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b1920_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b1920_aa + 1 b1920_mRNA_2 + 7 gdp + 21 h + 7 lys1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.12E+01	7.12E+01	0	1.20E+02	119.7967	0	7.87E+00	7.871
tl_term_b1921_10_rib1	Translation termination 1 b1921 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b1921_10_cplx <==> 1 tl_term_b1921_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_term_b1921_10_rib2	Translation termination 2 b1921 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b1921_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b1921_aa + 1 b1921_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70 + 10 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_term_b1921_10_rib_RF2_1	Translation termination 1 b1921 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b1921_10_cplx <==> 1 tl_term_b1921_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_term_b1921_10_rib_RF2_2	Translation termination 2 b1921 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b1921_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b1921_aa + 1 b1921_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70 + 10 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_term_b1921_1_rib1	Translation termination 1 b1921 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1921_1_cplx <==> 1 tl_term_b1921_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_term_b1921_1_rib2	Translation termination 2 b1921 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1921_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1921_aa + 1 b1921_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_term_b1921_1_rib_RF2_1	Translation termination 1 b1921 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1921_1_cplx <==> 1 tl_term_b1921_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_term_b1921_1_rib_RF2_2	Translation termination 2 b1921 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1921_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1921_aa + 1 b1921_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_term_b1921_5_rib1	Translation termination 1 b1921 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b1921_5_cplx <==> 1 tl_term_b1921_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_term_b1921_5_rib2	Translation termination 2 b1921 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b1921_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b1921_aa + 1 b1921_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70 + 5 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_term_b1921_5_rib_RF2_1	Translation termination 1 b1921 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b1921_5_cplx <==> 1 tl_term_b1921_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_term_b1921_5_rib_RF2_2	Translation termination 2 b1921 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b1921_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b1921_aa + 1 b1921_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70 + 5 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.47E+01	7.47E+01	0	1.23E+02	123.2867	0	1.14E+01	11.361
tl_term_b1922_14_rib1	Translation termination 1 b1922 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b1922_14_cplx <==> 1 tl_term_b1922_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791

tl_term_b1922_14_rib2	Translation termination 2 b1922 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b1922_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b1922_aa + 1 b1922_mRNA_2 + 14 gdp + 42 h + 14 leuZ_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_term_b1922_14_rib_RF2_1	Translation termination 1 b1922 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b1922_14_cplx <==> 1 tl_term_b1922_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_term_b1922_14_rib_RF2_2	Translation termination 2 b1922 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b1922_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b1922_aa + 1 b1922_mRNA_2 + 14 gdp + 42 h + 14 leuZ_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_term_b1922_1_rib1	Translation termination 1 b1922 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1922_1_cplx <==> 1 tl_term_b1922_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_term_b1922_1_rib2	Translation termination 2 b1922 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b1922_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1922_aa + 1 b1922_mRNA_2 + 1 gdp + 3 h + 1 leuZ_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_term_b1922_1_rib_RF2_1	Translation termination 1 b1922 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b1922_1_cplx <==> 1 tl_term_b1922_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_term_b1922_1_rib_RF2_2	Translation termination 2 b1922 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b1922_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b1922_aa + 1 b1922_mRNA_2 + 1 gdp + 3 h + 1 leuZ_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_term_b1922_7_rib1	Translation termination 1 b1922 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b1922_7_cplx <==> 1 tl_term_b1922_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_term_b1922_7_rib2	Translation termination 2 b1922 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b1922_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b1922_aa + 1 b1922_mRNA_2 + 7 gdp + 21 h + 7 leuZ_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_term_b1922_7_rib_RF2_1	Translation termination 1 b1922 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b1922_7_cplx <==> 1 tl_term_b1922_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_term_b1922_7_rib_RF2_2	Translation termination 2 b1922 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b1922_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b1922_aa + 1 b1922_mRNA_2 + 7 gdp + 21 h + 7 leuZ_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.01E+01	7.01E+01	0	1.19E+02	118.7167	0	6.79E+00	6.791
tl_term_b2114_19_rib1	Translation termination 1 b2114 19 ribosome(s), (RF1_mono)	19 RF1_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b2114_19_cplx <==> 1 tl_term_b2114_19_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.21E+01	6.21E+01	0	1.08E+02	107.9198	0	2.85E+00	2.853
tl_term_b2114_19_rib2	Translation termination 2 b2114 19 ribosome(s), (RF1_mono)	19 gtp + 38 h2o + 1 tl_term_b2114_19_rib_cplx --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF1_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b2114_aa + 1 b2114_mRNA_2 + 19 gdp + 57 h + 19 lys1_tRNA + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.08E+02	107.9198	0	2.85E+00	2.853
tl_term_b2114_19_rib_RF2_1	Translation termination 1 b2114 19 ribosome(s), RF2_mono	19 RF2_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b2114_19_cplx <==> 1 tl_term_b2114_19_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.21E+01	6.21E+01	0	1.08E+02	107.9198	0	2.85E+00	2.853
tl_term_b2114_19_rib_RF2_2	Translation termination 2 b2114 19 ribosome(s), RF2	19 gtp + 38 h2o + 1 tl_term_b2114_19_rib_cplx2 --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF2_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b2114_aa + 1 b2114_mRNA_2 + 19 gdp + 57 h + 19 lys1_tRNA + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.08E+02	107.9198	0	2.85E+00	2.853
tl_term_b2114_1_rib1	Translation termination 1 b2114 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2114_1_cplx <==> 1 tl_term_b2114_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.21E+01	6.21E+01	0	1.08E+02	107.9198	0	2.85E+00	2.853
tl_term_b2114_1_rib2	Translation termination 2 b2114 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2114_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2114_aa + 1 b2114_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.08E+02	107.9198	0	2.85E+00	2.853
tl_term_b2114_1_rib_RF2_1	Translation termination 1 b2114 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2114_1_cplx <==> 1 tl_term_b2114_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.21E+01	6.21E+01	0	1.08E+02	107.9198	0	2.85E+00	2.853
tl_term_b2114_1_rib_RF2_2	Translation termination 2 b2114 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2114_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2114_aa + 1 b2114_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.08E+02	107.9198	0	2.85E+00	2.853
tl_term_b2114_39_rib1	Translation termination 1 b2114 39 ribosome(s), (RF1_mono)	39 RF1_mono + 39 RF3_mono.GDP + 39 Rrf_mono + 1 rib_70_elo2_b2114_39_cplx <==> 1 tl_term_b2114_39_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.21E+01	6.21E+01	0	1.06E+02	106.4596	0	2.85E+00	2.853
tl_term_b2114_39_rib2	Translation termination 2 b2114 39 ribosome(s), (RF1_mono)	39 gtp + 78 h2o + 1 tl_term_b2114_39_rib_cplx --> 39 EF-G.GDP + 39 EF-Tu.GDP + 39 RF1_mono_inact + 39 RF3_mono.GDP_inact + 39 Rrf_mono_inact + 39 b2114_aa + 1 b2114_mRNA_2 + 39 gdp + 117 h + 39 lys1_tRNA + 117 pi + 39 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.06E+02	106.4596	0	2.85E+00	2.853
tl_term_b2114_39_rib_RF2_1	Translation termination 1 b2114 39 ribosome(s), RF2_mono	39 RF2_mono + 39 RF3_mono.GDP + 39 Rrf_mono + 1 rib_70_elo2_b2114_39_cplx <==> 1 tl_term_b2114_39_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.21E+01	6.21E+01	0	1.06E+02	106.4596	0	2.85E+00	2.853
tl_term_b2114_39_rib_RF2_2	Translation termination 2 b2114 39 ribosome(s), RF2	39 gtp + 78 h2o + 1 tl_term_b2114_39_rib_cplx2 --> 39 EF-G.GDP + 39 EF-Tu.GDP + 39 RF2_mono_inact + 39 RF3_mono.GDP_inact + 39 Rrf_mono_inact + 39 b2114_aa + 1 b2114_mRNA_2 + 39 gdp + 117 h + 39 lys1_tRNA + 117 pi + 39 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.21E+01	6.21E+01	0	1.06E+02	106.4596	0	2.85E+00	2.853
tl_term_b2140_18_rib1	Translation termination 1 b2140 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b2140_18_cplx <==> 1 tl_term_b2140_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_term_b2140_18_rib2	Translation termination 2 b2140 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b2140_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b2140_aa + 1 b2140_mRNA_2 + 18 gdp + 54 h + 18 leuU_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_term_b2140_18_rib_RF2_1	Translation termination 1 b2140 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b2140_18_cplx <==> 1 tl_term_b2140_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_term_b2140_18_rib_RF2_2	Translation termination 2 b2140 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b2140_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b2140_aa + 1 b2140_mRNA_2 + 18 gdp + 54 h + 18 leuU_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_term_b2140_1_rib1	Translation termination 1 b2140 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2140_1_cplx <==> 1 tl_term_b2140_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_term_b2140_1_rib2	Translation termination 2 b2140 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2140_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2140_aa + 1 b2140_mRNA_2 + 1 gdp + 3 h + 1 leuU_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_term_b2140_1_rib_RF2_1	Translation termination 1 b2140 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2140_1_cplx <==> 1 tl_term_b2140_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213

tl_term_b2140_1_rib_RF2_2	Translation termination 2 b2140 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2140_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2140_aa + 1 b2140_mRNA_2 + 1 gdp + 3 h + 1 leuU_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_term_b2140_9_rib1	Translation termination 1 b2140 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2140_9_cplx <==> 1 tl_term_b2140_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_term_b2140_9_rib2	Translation termination 2 b2140 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b2140_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b2140_aa + 1 b2140_mRNA_2 + 9 gdp + 27 h + 9 leuU_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_term_b2140_9_rib_RF2_1	Translation termination 1 b2140 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2140_9_cplx <==> 1 tl_term_b2140_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_term_b2140_9_rib_RF2_2	Translation termination 2 b2140 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b2140_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b2140_aa + 1 b2140_mRNA_2 + 9 gdp + 27 h + 9 leuU_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.68E+02	268.486	0	5.21E+00	5.213
tl_term_b2183_13_rib1	Translation termination 1 b2183 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b2183_13_cplx <==> 1 tl_term_b2183_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_term_b2183_13_rib2	Translation termination 2 b2183 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b2183_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b2183_aa + 1 b2183_mRNA_2 + 13 gdp + 39 h + 39 pi + 13 rib_70 + 13 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_term_b2183_13_rib_RF2_1	Translation termination 1 b2183 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b2183_13_cplx <==> 1 tl_term_b2183_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_term_b2183_13_rib_RF2_2	Translation termination 2 b2183 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b2183_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b2183_aa + 1 b2183_mRNA_2 + 13 gdp + 39 h + 39 pi + 13 rib_70 + 13 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_term_b2183_1_rib1	Translation termination 1 b2183 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2183_1_cplx <==> 1 tl_term_b2183_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_term_b2183_1_rib2	Translation termination 2 b2183 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2183_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2183_aa + 1 b2183_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_term_b2183_1_rib_RF2_1	Translation termination 1 b2183 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2183_1_cplx <==> 1 tl_term_b2183_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_term_b2183_1_rib_RF2_2	Translation termination 2 b2183 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2183_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2183_aa + 1 b2183_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_term_b2183_6_rib1	Translation termination 1 b2183 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2183_6_cplx <==> 1 tl_term_b2183_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_term_b2183_6_rib2	Translation termination 2 b2183 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b2183_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b2183_aa + 1 b2183_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70 + 6 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_term_b2183_6_rib_RF2_1	Translation termination 1 b2183 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2183_6_cplx <==> 1 tl_term_b2183_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_term_b2183_6_rib_RF2_2	Translation termination 2 b2183 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b2183_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b2183_aa + 1 b2183_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70 + 6 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.85E+02	1.85E+02	0	3.22E+02	321.8298	0	7.05E+00	7.046
tl_term_b2185_1_rib1	Translation termination 1 b2185 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2185_1_cplx <==> 1 tl_term_b2185_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	5.06E+01	50.6475
tl_term_b2185_1_rib2	Translation termination 2 b2185 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2185_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b2185_aa + 1 b2185_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	5.06E+01	50.6475
tl_term_b2185_1_rib_RF2_1	Translation termination 1 b2185 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2185_1_cplx <==> 1 tl_term_b2185_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	5.06E+01	50.6475
tl_term_b2185_1_rib_RF2_2	Translation termination 2 b2185 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2185_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b2185_aa + 1 b2185_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	5.06E+01	50.6475
tl_term_b2185_2_rib1	Translation termination 1 b2185 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b2185_2_cplx <==> 1 tl_term_b2185_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.62E+01	5.62E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b2185_2_rib2	Translation termination 2 b2185 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b2185_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 ala1_tRNA + 2 b2185_aa + 1 b2185_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.62E+01	5.62E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b2185_2_rib_RF2_1	Translation termination 1 b2185 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b2185_2_cplx <==> 1 tl_term_b2185_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.62E+01	5.62E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b2185_2_rib_RF2_2	Translation termination 2 b2185 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b2185_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 ala1_tRNA + 2 b2185_aa + 1 b2185_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.62E+01	5.62E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b2185_5_rib1	Translation termination 1 b2185 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b2185_5_cplx <==> 1 tl_term_b2185_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b2185_5_rib2	Translation termination 2 b2185 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b2185_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 ala1_tRNA + 5 b2185_aa + 1 b2185_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b2185_5_rib_RF2_1	Translation termination 1 b2185 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b2185_5_cplx <==> 1 tl_term_b2185_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b2185_5_rib_RF2_2	Translation termination 2 b2185 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b2185_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 ala1_tRNA + 5 b2185_aa + 1 b2185_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b2268_17_rib1	Translation termination 1 b2268 17 ribosome(s), (RF1_mono)	17 RF1_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b2268_17_cplx <==> 1 tl_term_b2268_17_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_term_b2268_17_rib2	Translation termination 2 b2268 17 ribosome(s), (RF1_mono)	17 gtp + 34 h2o + 1 tl_term_b2268_17_rib_cplx --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF1_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 b2268_aa + 1 b2268_mRNA_2 + 17 gdp + 51 h + 51 pi + 17 rib_70 + 17 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_term_b2268_17_rib_RF2_1	Translation termination 1 b2268 17 ribosome(s), RF2_mono	17 RF2_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b2268_17_cplx <==> 1 tl_term_b2268_17_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371

tl_term_b2268_17_rib_RF2_2	Translation termination 2 b2268 17 ribosome(s), RF2	17 gtp + 34 h2o + 1 tl_term_b2268_17_rib_cplx2 --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF2_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 b2268_aa + 1 b2268_mRNA_2 + 17 gdp + 51 h + 51 pi + 17 rib_70 + 17 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_term_b2268_1_rib1	Translation termination 1 b2268 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2268_1_cplx <==> 1 tl_term_b2268_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_term_b2268_1_rib2	Translation termination 2 b2268 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2268_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2268_aa + 1 b2268_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_term_b2268_1_rib_RF2_1	Translation termination 1 b2268 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2268_1_cplx <==> 1 tl_term_b2268_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_term_b2268_1_rib_RF2_2	Translation termination 2 b2268 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2268_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2268_aa + 1 b2268_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_term_b2268_8_rib1	Translation termination 1 b2268 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b2268_8_cplx <==> 1 tl_term_b2268_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_term_b2268_8_rib2	Translation termination 2 b2268 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b2268_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b2268_aa + 1 b2268_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70 + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_term_b2268_8_rib_RF2_1	Translation termination 1 b2268 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b2268_8_cplx <==> 1 tl_term_b2268_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_term_b2268_8_rib_RF2_2	Translation termination 2 b2268 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b2268_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b2268_aa + 1 b2268_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70 + 8 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.47E+02	247.1725	0	5.37E+00	5.371
tl_term_b2317_12_rib1	Translation termination 1 b2317 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b2317_12_cplx <==> 1 tl_term_b2317_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_term_b2317_12_rib2	Translation termination 2 b2317 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b2317_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b2317_aa + 1 b2317_mRNA_2 + 12 gdp + 36 h + 12 lys1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_term_b2317_12_rib_RF2_1	Translation termination 1 b2317 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b2317_12_cplx <==> 1 tl_term_b2317_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_term_b2317_12_rib_RF2_2	Translation termination 2 b2317 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b2317_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b2317_aa + 1 b2317_mRNA_2 + 12 gdp + 36 h + 12 lys1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_term_b2317_1_rib1	Translation termination 1 b2317 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2317_1_cplx <==> 1 tl_term_b2317_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_term_b2317_1_rib2	Translation termination 2 b2317 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2317_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2317_aa + 1 b2317_mRNA_2 + 1 gdp + 3 h + 3 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_term_b2317_1_rib_RF2_1	Translation termination 1 b2317 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2317_1_cplx <==> 1 tl_term_b2317_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_term_b2317_1_rib_RF2_2	Translation termination 2 b2317 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2317_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2317_aa + 1 b2317_mRNA_2 + 1 gdp + 3 h + 3 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_term_b2317_6_rib1	Translation termination 1 b2317 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2317_6_cplx <==> 1 tl_term_b2317_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_term_b2317_6_rib2	Translation termination 2 b2317 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b2317_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b2317_aa + 1 b2317_mRNA_2 + 6 gdp + 18 h + 6 lys1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_term_b2317_6_rib_RF2_1	Translation termination 1 b2317 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2317_6_cplx <==> 1 tl_term_b2317_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_term_b2317_6_rib_RF2_2	Translation termination 2 b2317 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b2317_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b2317_aa + 1 b2317_mRNA_2 + 6 gdp + 18 h + 6 lys1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.82E+01	5.82E+01	0	9.72E+01	97.15961	0	7.33E+00	7.3345
tl_term_b2318_15_rib1	Translation termination 1 b2318 15 ribosome(s), (RF1_mono)	15 RF1_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b2318_15_cplx <==> 1 tl_term_b2318_15_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_term_b2318_15_rib2	Translation termination 2 b2318 15 ribosome(s), (RF1_mono)	15 gtp + 30 h2o + 1 tl_term_b2318_15_rib_cplx --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF1_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 asp1_tRNA + 15 b2318_aa + 1 b2318_mRNA_2 + 15 gdp + 45 h + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_term_b2318_15_rib_RF2_1	Translation termination 1 b2318 15 ribosome(s), RF2_mono	15 RF2_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b2318_15_cplx <==> 1 tl_term_b2318_15_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_term_b2318_15_rib_RF2_2	Translation termination 2 b2318 15 ribosome(s), RF2	15 gtp + 30 h2o + 1 tl_term_b2318_15_rib_cplx2 --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF2_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 asp1_tRNA + 15 b2318_aa + 1 b2318_mRNA_2 + 15 gdp + 45 h + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_term_b2318_1_rib1	Translation termination 1 b2318 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2318_1_cplx <==> 1 tl_term_b2318_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_term_b2318_1_rib2	Translation termination 2 b2318 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2318_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b2318_aa + 1 b2318_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_term_b2318_1_rib_RF2_1	Translation termination 1 b2318 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2318_1_cplx <==> 1 tl_term_b2318_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_term_b2318_1_rib_RF2_2	Translation termination 2 b2318 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2318_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b2318_aa + 1 b2318_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_term_b2318_7_rib1	Translation termination 1 b2318 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2318_7_cplx <==> 1 tl_term_b2318_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_term_b2318_7_rib2	Translation termination 2 b2318 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b2318_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 asp1_tRNA + 7 b2318_aa + 1 b2318_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545

tl_term_b2318_7_rib_RF2_1	Translation termination 1 b2318 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2318_7_cplx <==> 1 tl_term_b2318_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_term_b2318_7_rib_RF2_2	Translation termination 2 b2318 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b2318_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 asp1_tRNA + 7 b2318_aa + 1 b2318_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.75E+01	5.75E+01	0	9.65E+01	96.47961	0	6.65E+00	6.6545
tl_term_b2319_19_rib1	Translation termination 1 b2319 19 ribosome(s), (RF1_mono)	19 RF1_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b2319_19_cplx <==> 1 tl_term_b2319_19_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_term_b2319_19_rib2	Translation termination 2 b2319 19 ribosome(s), (RF1_mono)	19 gtp + 38 h2o + 1 tl_term_b2319_19_rib_cplx --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF1_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b2319_aa + 1 b2319_mRNA_2 + 19 gdp + 57 h + 57 pi + 19 rib_70 + 19 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_term_b2319_19_rib_RF2_1	Translation termination 1 b2319 19 ribosome(s), RF2_mono	19 RF2_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b2319_19_cplx <==> 1 tl_term_b2319_19_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_term_b2319_19_rib_RF2_2	Translation termination 2 b2319 19 ribosome(s), RF2	19 gtp + 38 h2o + 1 tl_term_b2319_19_rib_cplx2 --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF2_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b2319_aa + 1 b2319_mRNA_2 + 19 gdp + 57 h + 57 pi + 19 rib_70 + 19 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_term_b2319_1_rib1	Translation termination 1 b2319 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2319_1_cplx <==> 1 tl_term_b2319_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_term_b2319_1_rib2	Translation termination 2 b2319 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2319_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2319_aa + 1 b2319_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_term_b2319_1_rib_RF2_1	Translation termination 1 b2319 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2319_1_cplx <==> 1 tl_term_b2319_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_term_b2319_1_rib_RF2_2	Translation termination 2 b2319 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2319_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2319_aa + 1 b2319_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_term_b2319_9_rib1	Translation termination 1 b2319 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2319_9_cplx <==> 1 tl_term_b2319_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_term_b2319_9_rib2	Translation termination 2 b2319 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b2319_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b2319_aa + 1 b2319_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70 + 9 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_term_b2319_9_rib_RF2_1	Translation termination 1 b2319 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2319_9_cplx <==> 1 tl_term_b2319_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_term_b2319_9_rib_RF2_2	Translation termination 2 b2319 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b2319_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b2319_aa + 1 b2319_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70 + 9 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.43E+01	5.43E+01	0	9.32E+01	93.23961	0	3.41E+00	3.4145
tl_term_b2320_11_rib1	Translation termination 1 b2320 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b2320_11_cplx <==> 1 tl_term_b2320_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_term_b2320_11_rib2	Translation termination 2 b2320 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b2320_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 arg1_tRNA + 11 b2320_aa + 1 b2320_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_term_b2320_11_rib_RF2_1	Translation termination 1 b2320 11 ribosome(s), RF2_mono	11 RF2_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b2320_11_cplx <==> 1 tl_term_b2320_11_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_term_b2320_11_rib_RF2_2	Translation termination 2 b2320 11 ribosome(s), RF2	11 gtp + 22 h2o + 1 tl_term_b2320_11_rib_cplx2 --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF2_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 arg1_tRNA + 11 b2320_aa + 1 b2320_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_term_b2320_1_rib1	Translation termination 1 b2320 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2320_1_cplx <==> 1 tl_term_b2320_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_term_b2320_1_rib2	Translation termination 2 b2320 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2320_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b2320_aa + 1 b2320_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_term_b2320_1_rib_RF2_1	Translation termination 1 b2320 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2320_1_cplx <==> 1 tl_term_b2320_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_term_b2320_1_rib_RF2_2	Translation termination 2 b2320 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2320_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b2320_aa + 1 b2320_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_term_b2320_22_rib1	Translation termination 1 b2320 22 ribosome(s), (RF1_mono)	22 RF1_mono + 22 RF3_mono.GDP + 22 Rrf_mono + 1 rib_70_elo2_b2320_22_cplx <==> 1 tl_term_b2320_22_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_term_b2320_22_rib2	Translation termination 2 b2320 22 ribosome(s), (RF1_mono)	22 gtp + 44 h2o + 1 tl_term_b2320_22_rib_cplx --> 22 EF-G.GDP + 22 EF-Tu.GDP + 22 RF1_mono_inact + 22 RF3_mono.GDP_inact + 22 Rrf_mono_inact + 22 arg1_tRNA + 22 b2320_aa + 1 b2320_mRNA_2 + 22 gdp + 66 h + 66 pi + 22 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_term_b2320_22_rib_RF2_1	Translation termination 1 b2320 22 ribosome(s), RF2_mono	22 RF2_mono + 22 RF3_mono.GDP + 22 Rrf_mono + 1 rib_70_elo2_b2320_22_cplx <==> 1 tl_term_b2320_22_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_term_b2320_22_rib_RF2_2	Translation termination 2 b2320 22 ribosome(s), RF2	22 gtp + 44 h2o + 1 tl_term_b2320_22_rib_cplx2 --> 22 EF-G.GDP + 22 EF-Tu.GDP + 22 RF2_mono_inact + 22 RF3_mono.GDP_inact + 22 Rrf_mono_inact + 22 arg1_tRNA + 22 b2320_aa + 1 b2320_mRNA_2 + 22 gdp + 66 h + 66 pi + 22 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.53E+01	65.26973	0	3.54E+00	3.5445
tl_term_b2324_19_rib1	Translation termination 1 b2324 19 ribosome(s), (RF1_mono)	19 RF1_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b2324_19_cplx <==> 1 tl_term_b2324_19_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.82E+01	6.82E+01	0	1.19E+02	119.1375	0	1.80E+00	1.797
tl_term_b2324_19_rib2	Translation termination 2 b2324 19 ribosome(s), (RF1_mono)	19 gtp + 38 h2o + 1 tl_term_b2324_19_rib_cplx --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF1_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b2324_aa + 1 b2324_mRNA_2 + 19 gdp + 19 glyU_tRNA + 57 h + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	1.19E+02	119.1375	0	1.80E+00	1.797
tl_term_b2324_19_rib_RF2_1	Translation termination 1 b2324 19 ribosome(s), RF2_mono	19 RF2_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b2324_19_cplx <==> 1 tl_term_b2324_19_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.82E+01	6.82E+01	0	1.19E+02	119.1375	0	1.80E+00	1.797
tl_term_b2324_19_rib_RF2_2	Translation termination 2 b2324 19 ribosome(s), RF2	19 gtp + 38 h2o + 1 tl_term_b2324_19_rib_cplx2 --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF2_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b2324_aa + 1 b2324_mRNA_2 + 19 gdp + 19 glyU_tRNA + 57 h + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	1.19E+02	119.1375	0	1.80E+00	1.797

tl_term_b2324_1_rib1	Translation termination 1 b2324 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2324_1_cplx <==> 1 tl_term_b2324_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.82E+01	6.82E+01	0	1.19E+02	119.1375	0	1.80E+00	1.797
tl_term_b2324_1_rib2	Translation termination 2 b2324 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2324_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2324_aa + 1 b2324_mRNA_2 + 1 gdp + 1 glyU_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	1.19E+02	119.1375	0	1.80E+00	1.797
tl_term_b2324_1_rib_RF2_1	Translation termination 1 b2324 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2324_1_cplx <==> 1 tl_term_b2324_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.82E+01	6.82E+01	0	1.19E+02	119.1375	0	1.80E+00	1.797
tl_term_b2324_1_rib_RF2_2	Translation termination 2 b2324 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2324_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2324_aa + 1 b2324_mRNA_2 + 1 gdp + 1 glyU_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	1.19E+02	119.1375	0	1.80E+00	1.797
tl_term_b2324_39_rib1	Translation termination 1 b2324 39 ribosome(s), (RF1_mono)	39 RF1_mono + 39 RF3_mono.GDP + 39 Rrf_mono + 1 rib_70_elo2_b2324_39_cplx <==> 1 tl_term_b2324_39_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.82E+01	6.82E+01	0	8.44E+01	84.38009	0	1.80E+00	1.797
tl_term_b2324_39_rib2	Translation termination 2 b2324 39 ribosome(s), (RF1_mono)	39 gtp + 78 h2o + 1 tl_term_b2324_39_rib_cplx --> 39 EF-G.GDP + 39 EF-Tu.GDP + 39 RF1_mono_inact + 39 RF3_mono.GDP_inact + 39 Rrf_mono_inact + 39 b2324_aa + 1 b2324_mRNA_2 + 39 gdp + 39 glyU_tRNA + 117 h + 117 pi + 39 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	8.44E+01	84.38009	0	1.80E+00	1.797
tl_term_b2324_39_rib_RF2_1	Translation termination 1 b2324 39 ribosome(s), RF2_mono	39 RF2_mono + 39 RF3_mono.GDP + 39 Rrf_mono + 1 rib_70_elo2_b2324_39_cplx <==> 1 tl_term_b2324_39_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.82E+01	6.82E+01	0	8.44E+01	84.38009	0	1.80E+00	1.797
tl_term_b2324_39_rib_RF2_2	Translation termination 2 b2324 39 ribosome(s), RF2	39 gtp + 78 h2o + 1 tl_term_b2324_39_rib_cplx2 --> 39 EF-G.GDP + 39 EF-Tu.GDP + 39 RF2_mono_inact + 39 RF3_mono.GDP_inact + 39 Rrf_mono_inact + 39 b2324_aa + 1 b2324_mRNA_2 + 39 gdp + 39 glyU_tRNA + 117 h + 117 pi + 39 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.82E+01	6.82E+01	0	8.44E+01	84.38009	0	1.80E+00	1.797
tl_term_b2325_1_rib1	Translation termination 1 b2325 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2325_1_cplx <==> 1 tl_term_b2325_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_term_b2325_1_rib2	Translation termination 2 b2325 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2325_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2325_aa + 1 b2325_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_term_b2325_1_rib_RF2_1	Translation termination 1 b2325 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2325_1_cplx <==> 1 tl_term_b2325_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_term_b2325_1_rib_RF2_2	Translation termination 2 b2325 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2325_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2325_aa + 1 b2325_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_term_b2325_2_rib1	Translation termination 1 b2325 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b2325_2_cplx <==> 1 tl_term_b2325_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_term_b2325_2_rib2	Translation termination 2 b2325 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b2325_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b2325_aa + 1 b2325_mRNA_2 + 2 gdp + 2 gln1_tRNA + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_term_b2325_2_rib_RF2_1	Translation termination 1 b2325 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b2325_2_cplx <==> 1 tl_term_b2325_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_term_b2325_2_rib_RF2_2	Translation termination 2 b2325 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b2325_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b2325_aa + 1 b2325_mRNA_2 + 2 gdp + 2 gln1_tRNA + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_term_b2325_5_rib1	Translation termination 1 b2325 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b2325_5_cplx <==> 1 tl_term_b2325_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_term_b2325_5_rib2	Translation termination 2 b2325 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b2325_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b2325_aa + 1 b2325_mRNA_2 + 5 gdp + 5 gln1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_term_b2325_5_rib_RF2_1	Translation termination 1 b2325 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b2325_5_cplx <==> 1 tl_term_b2325_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_term_b2325_5_rib_RF2_2	Translation termination 2 b2325 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b2325_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b2325_aa + 1 b2325_mRNA_2 + 5 gdp + 5 gln1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.49E+01	64.89847	0	1.73E+01	17.2876
tl_term_b2326_10_rib1	Translation termination 1 b2326 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b2326_10_cplx <==> 1 tl_term_b2326_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276
tl_term_b2326_10_rib2	Translation termination 2 b2326 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b2326_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 asn1_tRNA + 10 b2326_aa + 1 b2326_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276
tl_term_b2326_1_rib1	Translation termination 1 b2326 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2326_1_cplx <==> 1 tl_term_b2326_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276
tl_term_b2326_1_rib2	Translation termination 2 b2326 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2326_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b2326_aa + 1 b2326_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276
tl_term_b2326_5_rib1	Translation termination 1 b2326 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b2326_5_cplx <==> 1 tl_term_b2326_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276
tl_term_b2326_5_rib2	Translation termination 2 b2326 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b2326_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 asn1_tRNA + 5 b2326_aa + 1 b2326_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.33E+01	53.33847	0	5.73E+00	5.7276
tl_term_b2327_15_rib1	Translation termination 1 b2327 15 ribosome(s), (RF1_mono)	15 RF1_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b2327_15_cplx <==> 1 tl_term_b2327_15_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_term_b2327_15_rib2	Translation termination 2 b2327 15 ribosome(s), (RF1_mono)	15 gtp + 30 h2o + 1 tl_term_b2327_15_rib_cplx --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF1_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 asn1_tRNA + 15 b2327_aa + 1 b2327_mRNA_2 + 15 gdp + 45 h + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_term_b2327_15_rib_RF2_1	Translation termination 1 b2327 15 ribosome(s), RF2_mono	15 RF2_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b2327_15_cplx <==> 1 tl_term_b2327_15_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_term_b2327_15_rib_RF2_2	Translation termination 2 b2327 15 ribosome(s), RF2	15 gtp + 30 h2o + 1 tl_term_b2327_15_rib_cplx2 --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF2_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 asn1_tRNA + 15 b2327_aa + 1 b2327_mRNA_2 + 15 gdp + 45 h + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_term_b2327_1_rib1	Translation termination 1 b2327 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2327_1_cplx <==> 1 tl_term_b2327_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776

tl_term_b2327_1_rib2	Translation termination 2 b2327 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2327_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b2327_aa + 1 b2327_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_term_b2327_1_rib_RF2_1	Translation termination 1 b2327 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2327_1_cplx <==> 1 tl_term_b2327_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_term_b2327_1_rib_RF2_2	Translation termination 2 b2327 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2327_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b2327_aa + 1 b2327_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_term_b2327_7_rib1	Translation termination 1 b2327 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2327_7_cplx <==> 1 tl_term_b2327_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_term_b2327_7_rib2	Translation termination 2 b2327 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b2327_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 asn1_tRNA + 7 b2327_aa + 1 b2327_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_term_b2327_7_rib_RF2_1	Translation termination 1 b2327 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2327_7_cplx <==> 1 tl_term_b2327_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_term_b2327_7_rib_RF2_2	Translation termination 2 b2327 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b2327_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 asn1_tRNA + 7 b2327_aa + 1 b2327_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.29E+01	3.29E+01	0	5.36E+01	53.58847	0	5.98E+00	5.9776
tl_term_b2328_16_rib1	Translation termination 1 b2328 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b2328_16_cplx <==> 1 tl_term_b2328_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_term_b2328_16_rib2	Translation termination 2 b2328 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b2328_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b2328_aa + 1 b2328_mRNA_2 + 16 gdp + 48 h + 16 ile1_tRNA + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_term_b2328_16_rib_RF2_1	Translation termination 1 b2328 16 ribosome(s), RF2_mono	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b2328_16_cplx <==> 1 tl_term_b2328_16_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_term_b2328_16_rib_RF2_2	Translation termination 2 b2328 16 ribosome(s), RF2	16 gtp + 32 h2o + 1 tl_term_b2328_16_rib_cplx2 --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b2328_aa + 1 b2328_mRNA_2 + 16 gdp + 48 h + 16 ile1_tRNA + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_term_b2328_1_rib1	Translation termination 1 b2328 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2328_1_cplx <==> 1 tl_term_b2328_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_term_b2328_1_rib2	Translation termination 2 b2328 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2328_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2328_aa + 1 b2328_mRNA_2 + 1 gdp + 3 h + 1 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_term_b2328_1_rib_RF2_1	Translation termination 1 b2328 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2328_1_cplx <==> 1 tl_term_b2328_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_term_b2328_1_rib_RF2_2	Translation termination 2 b2328 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2328_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2328_aa + 1 b2328_mRNA_2 + 1 gdp + 3 h + 1 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_term_b2328_8_rib1	Translation termination 1 b2328 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b2328_8_cplx <==> 1 tl_term_b2328_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_term_b2328_8_rib2	Translation termination 2 b2328 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b2328_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b2328_aa + 1 b2328_mRNA_2 + 8 gdp + 24 h + 8 ile1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_term_b2328_8_rib_RF2_1	Translation termination 1 b2328 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b2328_8_cplx <==> 1 tl_term_b2328_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_term_b2328_8_rib_RF2_2	Translation termination 2 b2328 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b2328_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b2328_aa + 1 b2328_mRNA_2 + 8 gdp + 24 h + 8 ile1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.21E+01	52.11847	0	4.51E+00	4.5076
tl_term_b2329_10_rib1	Translation termination 1 b2329 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b2329_10_cplx <==> 1 tl_term_b2329_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_term_b2329_10_rib2	Translation termination 2 b2329 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b2329_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b2329_aa + 1 b2329_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70 + 10 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_term_b2329_10_rib_RF2_1	Translation termination 1 b2329 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b2329_10_cplx <==> 1 tl_term_b2329_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_term_b2329_10_rib_RF2_2	Translation termination 2 b2329 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b2329_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b2329_aa + 1 b2329_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70 + 10 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_term_b2329_1_rib1	Translation termination 1 b2329 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2329_1_cplx <==> 1 tl_term_b2329_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_term_b2329_1_rib2	Translation termination 2 b2329 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2329_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2329_aa + 1 b2329_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_term_b2329_1_rib_RF2_1	Translation termination 1 b2329 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2329_1_cplx <==> 1 tl_term_b2329_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_term_b2329_1_rib_RF2_2	Translation termination 2 b2329 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2329_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2329_aa + 1 b2329_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_term_b2329_21_rib1	Translation termination 1 b2329 21 ribosome(s), (RF1_mono)	21 RF1_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b2329_21_cplx <==> 1 tl_term_b2329_21_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_term_b2329_21_rib2	Translation termination 2 b2329 21 ribosome(s), (RF1_mono)	21 gtp + 42 h2o + 1 tl_term_b2329_21_rib_cplx --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF1_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 b2329_aa + 1 b2329_mRNA_2 + 21 gdp + 63 h + 63 pi + 21 rib_70 + 21 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_term_b2329_21_rib_RF2_1	Translation termination 1 b2329 21 ribosome(s), RF2_mono	21 RF2_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b2329_21_cplx <==> 1 tl_term_b2329_21_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976
tl_term_b2329_21_rib_RF2_2	Translation termination 2 b2329 21 ribosome(s), RF2	21 gtp + 42 h2o + 1 tl_term_b2329_21_rib_cplx2 --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF2_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 b2329_aa + 1 b2329_mRNA_2 + 21 gdp + 63 h + 63 pi + 21 rib_70 + 21 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.26E+01	52.60847	0	5.00E+00	4.9976

tl_term_b2330_18_rib1	Translation termination 1 b2330 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b2330_18_cplx <==> 1 tl_term_b2330_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_term_b2330_18_rib2	Translation termination 2 b2330 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b2330_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 asp1_tRNA + 18 b2330_aa + 1 b2330_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_term_b2330_18_rib_RF2_1	Translation termination 1 b2330 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b2330_18_cplx <==> 1 tl_term_b2330_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_term_b2330_18_rib_RF2_2	Translation termination 2 b2330 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b2330_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 asp1_tRNA + 18 b2330_aa + 1 b2330_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_term_b2330_1_rib1	Translation termination 1 b2330 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2330_1_cplx <==> 1 tl_term_b2330_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_term_b2330_1_rib2	Translation termination 2 b2330 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2330_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b2330_aa + 1 b2330_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_term_b2330_1_rib_RF2_1	Translation termination 1 b2330 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2330_1_cplx <==> 1 tl_term_b2330_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_term_b2330_1_rib_RF2_2	Translation termination 2 b2330 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2330_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b2330_aa + 1 b2330_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_term_b2330_9_rib1	Translation termination 1 b2330 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2330_9_cplx <==> 1 tl_term_b2330_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_term_b2330_9_rib2	Translation termination 2 b2330 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b2330_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 asp1_tRNA + 9 b2330_aa + 1 b2330_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_term_b2330_9_rib_RF2_1	Translation termination 1 b2330 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2330_9_cplx <==> 1 tl_term_b2330_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_term_b2330_9_rib_RF2_2	Translation termination 2 b2330 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b2330_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 asp1_tRNA + 9 b2330_aa + 1 b2330_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.21E+01	3.21E+01	0	5.28E+01	52.80847	0	5.20E+00	5.1976
tl_term_b2400_13_rib1	Translation termination 1 b2400 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b2400_13_cplx <==> 1 tl_term_b2400_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.66E+01	9.66E+01	0	1.66E+02	165.6044	0	6.92E+00	6.917
tl_term_b2400_13_rib2	Translation termination 2 b2400 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b2400_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b2400_aa + 1 b2400_mRNA_2 + 13 gdp + 13 gln1_tRNA + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.66E+02	165.6044	0	6.92E+00	6.917
tl_term_b2400_13_rib_RF2_1	Translation termination 1 b2400 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b2400_13_cplx <==> 1 tl_term_b2400_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.66E+01	9.66E+01	0	1.66E+02	165.6044	0	6.92E+00	6.917
tl_term_b2400_13_rib_RF2_2	Translation termination 2 b2400 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b2400_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b2400_aa + 1 b2400_mRNA_2 + 13 gdp + 13 gln1_tRNA + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.66E+02	165.6044	0	6.92E+00	6.917
tl_term_b2400_1_rib1	Translation termination 1 b2400 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2400_1_cplx <==> 1 tl_term_b2400_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.66E+01	9.66E+01	0	1.66E+02	165.6044	0	6.92E+00	6.917
tl_term_b2400_1_rib2	Translation termination 2 b2400 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2400_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2400_aa + 1 b2400_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.66E+02	165.6044	0	6.92E+00	6.917
tl_term_b2400_1_rib_RF2_1	Translation termination 1 b2400 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2400_1_cplx <==> 1 tl_term_b2400_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.66E+01	9.66E+01	0	1.66E+02	165.6044	0	6.92E+00	6.917
tl_term_b2400_1_rib_RF2_2	Translation termination 2 b2400 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2400_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2400_aa + 1 b2400_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.66E+02	165.6044	0	6.92E+00	6.917
tl_term_b2400_27_rib1	Translation termination 1 b2400 27 ribosome(s), (RF1_mono)	27 RF1_mono + 27 RF3_mono.GDP + 27 Rrf_mono + 1 rib_70_elo2_b2400_27_cplx <==> 1 tl_term_b2400_27_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.66E+01	9.66E+01	0	1.48E+02	148.3353	0	6.92E+00	6.917
tl_term_b2400_27_rib2	Translation termination 2 b2400 27 ribosome(s), (RF1_mono)	27 gtp + 54 h2o + 1 tl_term_b2400_27_rib_cplx --> 27 EF-G.GDP + 27 EF-Tu.GDP + 27 RF1_mono_inact + 27 RF3_mono.GDP_inact + 27 Rrf_mono_inact + 27 b2400_aa + 1 b2400_mRNA_2 + 27 gdp + 27 gln1_tRNA + 81 h + 81 pi + 27 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.48E+02	148.3353	0	6.92E+00	6.917
tl_term_b2400_27_rib_RF2_1	Translation termination 1 b2400 27 ribosome(s), RF2_mono	27 RF2_mono + 27 RF3_mono.GDP + 27 Rrf_mono + 1 rib_70_elo2_b2400_27_cplx <==> 1 tl_term_b2400_27_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.66E+01	9.66E+01	0	1.48E+02	148.3353	0	6.92E+00	6.917
tl_term_b2400_27_rib_RF2_2	Translation termination 2 b2400 27 ribosome(s), RF2	27 gtp + 54 h2o + 1 tl_term_b2400_27_rib_cplx2 --> 27 EF-G.GDP + 27 EF-Tu.GDP + 27 RF2_mono_inact + 27 RF3_mono.GDP_inact + 27 Rrf_mono_inact + 27 b2400_aa + 1 b2400_mRNA_2 + 27 gdp + 27 gln1_tRNA + 81 h + 81 pi + 27 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.66E+01	9.66E+01	0	1.48E+02	148.3353	0	6.92E+00	6.917
tl_term_b2514_12_rib1	Translation termination 1 b2514 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b2514_12_cplx <==> 1 tl_term_b2514_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_term_b2514_12_rib2	Translation termination 2 b2514 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b2514_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b2514_aa + 1 b2514_mRNA_2 + 12 gdp + 12 gly1_tRNA + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_term_b2514_12_rib_RF2_1	Translation termination 1 b2514 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b2514_12_cplx <==> 1 tl_term_b2514_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_term_b2514_12_rib_RF2_2	Translation termination 2 b2514 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b2514_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b2514_aa + 1 b2514_mRNA_2 + 12 gdp + 12 gly1_tRNA + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_term_b2514_1_rib1	Translation termination 1 b2514 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2514_1_cplx <==> 1 tl_term_b2514_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_term_b2514_1_rib2	Translation termination 2 b2514 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2514_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2514_aa + 1 b2514_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219

tl_term_b2514_1_rib_RF2_1	Translation termination 1 b2514 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2514_1_cplx <==> 1 tl_term_b2514_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_term_b2514_1_rib_RF2_2	Translation termination 2 b2514 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2514_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2514_aa + 1 b2514_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_term_b2514_24_rib1	Translation termination 1 b2514 24 ribosome(s), (RF1_mono)	24 RF1_mono + 24 RF3_mono.GDP + 24 Rrf_mono + 1 rib_70_elo2_b2514_24_cplx <==> 1 tl_term_b2514_24_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_term_b2514_24_rib2	Translation termination 2 b2514 24 ribosome(s), (RF1_mono)	24 gtp + 48 h2o + 1 tl_term_b2514_24_rib_cplx --> 24 EF-G.GDP + 24 EF-Tu.GDP + 24 RF1_mono_inact + 24 RF3_mono.GDP_inact + 24 Rrf_mono_inact + 24 b2514_aa + 1 b2514_mRNA_2 + 24 gdp + 24 gly1_tRNA + 72 h + 72 pi + 24 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_term_b2514_24_rib_RF2_1	Translation termination 1 b2514 24 ribosome(s), RF2_mono	24 RF2_mono + 24 RF3_mono.GDP + 24 Rrf_mono + 1 rib_70_elo2_b2514_24_cplx <==> 1 tl_term_b2514_24_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_term_b2514_24_rib_RF2_2	Translation termination 2 b2514 24 ribosome(s), RF2	24 gtp + 48 h2o + 1 tl_term_b2514_24_rib_cplx2 --> 24 EF-G.GDP + 24 EF-Tu.GDP + 24 RF2_mono_inact + 24 RF3_mono.GDP_inact + 24 Rrf_mono_inact + 24 b2514_aa + 1 b2514_mRNA_2 + 24 gdp + 24 gly1_tRNA + 72 h + 72 pi + 24 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	1.85E+02	184.7465	0	5.22E+00	5.219
tl_term_b2528_1_rib1	Translation termination 1 b2528 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2528_1_cplx <==> 1 tl_term_b2528_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868
tl_term_b2528_1_rib2	Translation termination 2 b2528 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2528_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2528_aa + 1 b2528_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868
tl_term_b2528_3_rib1	Translation termination 1 b2528 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b2528_3_cplx <==> 1 tl_term_b2528_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868
tl_term_b2528_3_rib2	Translation termination 2 b2528 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b2528_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b2528_aa + 1 b2528_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70 + 3 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868
tl_term_b2528_6_rib1	Translation termination 1 b2528 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2528_6_cplx <==> 1 tl_term_b2528_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868
tl_term_b2528_6_rib2	Translation termination 2 b2528 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b2528_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b2528_aa + 1 b2528_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70 + 6 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	6.62E+01	6.62E+01	0	1.05E+02	104.9082	0	1.59E+01	15.868
tl_term_b2529_1_rib1	Translation termination 1 b2529 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2529_1_cplx <==> 1 tl_term_b2529_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_term_b2529_1_rib2	Translation termination 2 b2529 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2529_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2529_aa + 1 b2529_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_term_b2529_1_rib_RF2_1	Translation termination 1 b2529 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2529_1_cplx <==> 1 tl_term_b2529_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_term_b2529_1_rib_RF2_2	Translation termination 2 b2529 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2529_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2529_aa + 1 b2529_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_term_b2529_3_rib1	Translation termination 1 b2529 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b2529_3_cplx <==> 1 tl_term_b2529_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_term_b2529_3_rib2	Translation termination 2 b2529 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b2529_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b2529_aa + 1 b2529_mRNA_2 + 3 gdp + 9 h + 3 lys1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_term_b2529_3_rib_RF2_1	Translation termination 1 b2529 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b2529_3_cplx <==> 1 tl_term_b2529_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_term_b2529_3_rib_RF2_2	Translation termination 2 b2529 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b2529_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b2529_aa + 1 b2529_mRNA_2 + 3 gdp + 9 h + 3 lys1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_term_b2529_7_rib1	Translation termination 1 b2529 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2529_7_cplx <==> 1 tl_term_b2529_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_term_b2529_7_rib2	Translation termination 2 b2529 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b2529_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2529_aa + 1 b2529_mRNA_2 + 7 gdp + 21 h + 7 lys1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_term_b2529_7_rib_RF2_1	Translation termination 1 b2529 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2529_7_cplx <==> 1 tl_term_b2529_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_term_b2529_7_rib_RF2_2	Translation termination 2 b2529 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b2529_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2529_aa + 1 b2529_mRNA_2 + 7 gdp + 21 h + 7 lys1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.80E+01	6.80E+01	0	1.07E+02	106.7082	0	1.77E+01	17.668
tl_term_b2530_11_rib1	Translation termination 1 b2530 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b2530_11_cplx <==> 1 tl_term_b2530_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_term_b2530_11_rib2	Translation termination 2 b2530 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b2530_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b2530_aa + 1 b2530_mRNA_2 + 11 gdp + 33 h + 11 hisR_tRNA + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_term_b2530_11_rib_RF2_1	Translation termination 1 b2530 11 ribosome(s), RF2_mono	11 RF2_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b2530_11_cplx <==> 1 tl_term_b2530_11_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_term_b2530_11_rib_RF2_2	Translation termination 2 b2530 11 ribosome(s), RF2	11 gtp + 22 h2o + 1 tl_term_b2530_11_rib_cplx2 --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF2_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b2530_aa + 1 b2530_mRNA_2 + 11 gdp + 33 h + 11 hisR_tRNA + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_term_b2530_1_rib1	Translation termination 1 b2530 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2530_1_cplx <==> 1 tl_term_b2530_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_term_b2530_1_rib2	Translation termination 2 b2530 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2530_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2530_aa + 1 b2530_mRNA_2 + 1 gdp + 3 h + 1 hisR_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_term_b2530_1_rib_RF2_1	Translation termination 1 b2530 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2530_1_cplx <==> 1 tl_term_b2530_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088

tl_term_b2530_1_rib_RF2_2	Translation termination 2 b2530 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2530_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2530_aa + 1 b2530_mRNA_2 + 1 gdp + 3 h + 1 hisR_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_term_b2530_23_rib1	Translation termination 1 b2530 23 ribosome(s), (RF1_mono)	23 RF1_mono + 23 RF3_mono.GDP + 23 Rrf_mono + 1 rib_70_elo2_b2530_23_cplx <==> 1 tl_term_b2530_23_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_term_b2530_23_rib2	Translation termination 2 b2530 23 ribosome(s), (RF1_mono)	23 gtp + 46 h2o + 1 tl_term_b2530_23_rib_cplx --> 23 EF-G.GDP + 23 EF-Tu.GDP + 23 RF1_mono_inact + 23 RF3_mono.GDP_inact + 23 Rrf_mono_inact + 23 b2530_aa + 1 b2530_mRNA_2 + 23 gdp + 69 h + 23 hisR_tRNA + 69 pi + 23 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_term_b2530_23_rib_RF2_1	Translation termination 1 b2530 23 ribosome(s), RF2_mono	23 RF2_mono + 23 RF3_mono.GDP + 23 Rrf_mono + 1 rib_70_elo2_b2530_23_cplx <==> 1 tl_term_b2530_23_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_term_b2530_23_rib_RF2_2	Translation termination 2 b2530 23 ribosome(s), RF2	23 gtp + 46 h2o + 1 tl_term_b2530_23_rib_cplx2 --> 23 EF-G.GDP + 23 EF-Tu.GDP + 23 RF2_mono_inact + 23 RF3_mono.GDP_inact + 23 Rrf_mono_inact + 23 b2530_aa + 1 b2530_mRNA_2 + 23 gdp + 69 h + 23 hisR_tRNA + 69 pi + 23 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.45E+01	5.45E+01	0	9.31E+01	93.12822	0	4.09E+00	4.088
tl_term_b2531_1_rib1	Translation termination 1 b2531 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2531_1_cplx <==> 1 tl_term_b2531_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_term_b2531_1_rib2	Translation termination 2 b2531 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2531_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b2531_aa + 1 b2531_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_term_b2531_1_rib_RF2_1	Translation termination 1 b2531 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2531_1_cplx <==> 1 tl_term_b2531_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_term_b2531_1_rib_RF2_2	Translation termination 2 b2531 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2531_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b2531_aa + 1 b2531_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_term_b2531_4_rib1	Translation termination 1 b2531 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b2531_4_cplx <==> 1 tl_term_b2531_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_term_b2531_4_rib2	Translation termination 2 b2531 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b2531_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 ala1_tRNA + 4 b2531_aa + 1 b2531_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_term_b2531_4_rib_RF2_1	Translation termination 1 b2531 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b2531_4_cplx <==> 1 tl_term_b2531_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_term_b2531_4_rib_RF2_2	Translation termination 2 b2531 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b2531_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 ala1_tRNA + 4 b2531_aa + 1 b2531_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_term_b2531_9_rib1	Translation termination 1 b2531 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2531_9_cplx <==> 1 tl_term_b2531_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_term_b2531_9_rib2	Translation termination 2 b2531 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b2531_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 ala1_tRNA + 9 b2531_aa + 1 b2531_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_term_b2531_9_rib_RF2_1	Translation termination 1 b2531 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2531_9_cplx <==> 1 tl_term_b2531_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_term_b2531_9_rib_RF2_2	Translation termination 2 b2531 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b2531_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 ala1_tRNA + 9 b2531_aa + 1 b2531_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.03E+01	6.03E+01	0	9.90E+01	98.99822	0	9.96E+00	9.958
tl_term_b2559_10_rib1	Translation termination 1 b2559 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b2559_10_cplx <==> 1 tl_term_b2559_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_term_b2559_10_rib2	Translation termination 2 b2559 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b2559_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 asp1_tRNA + 10 b2559_aa + 1 b2559_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_term_b2559_10_rib_RF2_1	Translation termination 1 b2559 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b2559_10_cplx <==> 1 tl_term_b2559_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_term_b2559_10_rib_RF2_2	Translation termination 2 b2559 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b2559_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 asp1_tRNA + 10 b2559_aa + 1 b2559_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_term_b2559_1_rib1	Translation termination 1 b2559 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2559_1_cplx <==> 1 tl_term_b2559_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_term_b2559_1_rib2	Translation termination 2 b2559 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2559_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b2559_aa + 1 b2559_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_term_b2559_1_rib_RF2_1	Translation termination 1 b2559 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2559_1_cplx <==> 1 tl_term_b2559_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_term_b2559_1_rib_RF2_2	Translation termination 2 b2559 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2559_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b2559_aa + 1 b2559_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_term_b2559_5_rib1	Translation termination 1 b2559 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b2559_5_cplx <==> 1 tl_term_b2559_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_term_b2559_5_rib2	Translation termination 2 b2559 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b2559_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 asp1_tRNA + 5 b2559_aa + 1 b2559_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_term_b2559_5_rib_RF2_1	Translation termination 1 b2559 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b2559_5_cplx <==> 1 tl_term_b2559_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_term_b2559_5_rib_RF2_2	Translation termination 2 b2559 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b2559_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 asp1_tRNA + 5 b2559_aa + 1 b2559_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.21E+02	1.21E+02	0	2.07E+02	206.7331	0	9.04E+00	9.041
tl_term_b2560_12_rib1	Translation termination 1 b2560 12 ribosome(s), (RF2_mono)	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b2560_12_cplx <==> 1 tl_term_b2560_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641
tl_term_b2560_12_rib2	Translation termination 2 b2560 12 ribosome(s), (RF2_mono)	12 gtp + 24 h2o + 1 tl_term_b2560_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b2560_aa + 1 b2560_mRNA_2 + 12 gdp + 12 glu1_tRNA + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641

tl_term_b2560_1_rib1	Translation termination 1 b2560 1 ribosome(s), (RF2_mono)	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2560_1_cplx <==> 1 tl_term_b2560_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641
tl_term_b2560_1_rib2	Translation termination 2 b2560 1 ribosome(s), (RF2_mono)	1 gtp + 2 h2o + 1 tl_term_b2560_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2560_aa + 1 b2560_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641
tl_term_b2560_6_rib1	Translation termination 1 b2560 6 ribosome(s), (RF2_mono)	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2560_6_cplx <==> 1 tl_term_b2560_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641
tl_term_b2560_6_rib2	Translation termination 2 b2560 6 ribosome(s), (RF2_mono)	6 gtp + 12 h2o + 1 tl_term_b2560_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b2560_aa + 1 b2560_mRNA_2 + 6 gdp + 6 glu1_tRNA + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.20E+02	1.20E+02	0	2.05E+02	205.3331	0	7.64E+00	7.641
tl_term_b2563_1_rib1	Translation termination 1 b2563 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2563_1_cplx <==> 1 tl_term_b2563_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_term_b2563_1_rib2	Translation termination 2 b2563 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2563_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2563_aa + 1 b2563_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_term_b2563_1_rib_RF2_1	Translation termination 1 b2563 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2563_1_cplx <==> 1 tl_term_b2563_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_term_b2563_1_rib_RF2_2	Translation termination 2 b2563 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2563_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2563_aa + 1 b2563_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_term_b2563_3_rib1	Translation termination 1 b2563 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b2563_3_cplx <==> 1 tl_term_b2563_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_term_b2563_3_rib2	Translation termination 2 b2563 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b2563_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b2563_aa + 1 b2563_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70 + 3 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_term_b2563_3_rib_RF2_1	Translation termination 1 b2563 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b2563_3_cplx <==> 1 tl_term_b2563_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_term_b2563_3_rib_RF2_2	Translation termination 2 b2563 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b2563_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b2563_aa + 1 b2563_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70 + 3 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_term_b2563_7_rib1	Translation termination 1 b2563 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2563_7_cplx <==> 1 tl_term_b2563_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_term_b2563_7_rib2	Translation termination 2 b2563 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b2563_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2563_aa + 1 b2563_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70 + 7 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_term_b2563_7_rib_RF2_1	Translation termination 1 b2563 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2563_7_cplx <==> 1 tl_term_b2563_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_term_b2563_7_rib_RF2_2	Translation termination 2 b2563 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b2563_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2563_aa + 1 b2563_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70 + 7 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.74E+01	4.74E+01	0	7.57E+01	75.72977	0	1.05E+01	10.506
tl_term_b2564_14_rib1	Translation termination 1 b2564 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b2564_14_cplx <==> 1 tl_term_b2564_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_term_b2564_14_rib2	Translation termination 2 b2564 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b2564_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b2564_aa + 1 b2564_mRNA_2 + 14 gdp + 14 gly1_tRNA + 42 h + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_term_b2564_14_rib_RF2_1	Translation termination 1 b2564 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b2564_14_cplx <==> 1 tl_term_b2564_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_term_b2564_14_rib_RF2_2	Translation termination 2 b2564 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b2564_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b2564_aa + 1 b2564_mRNA_2 + 14 gdp + 14 gly1_tRNA + 42 h + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_term_b2564_1_rib1	Translation termination 1 b2564 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2564_1_cplx <==> 1 tl_term_b2564_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_term_b2564_1_rib2	Translation termination 2 b2564 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2564_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2564_aa + 1 b2564_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_term_b2564_1_rib_RF2_1	Translation termination 1 b2564 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2564_1_cplx <==> 1 tl_term_b2564_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_term_b2564_1_rib_RF2_2	Translation termination 2 b2564 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2564_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2564_aa + 1 b2564_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_term_b2564_7_rib1	Translation termination 1 b2564 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2564_7_cplx <==> 1 tl_term_b2564_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_term_b2564_7_rib2	Translation termination 2 b2564 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b2564_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2564_aa + 1 b2564_mRNA_2 + 7 gdp + 7 gly1_tRNA + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_term_b2564_7_rib_RF2_1	Translation termination 1 b2564 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2564_7_cplx <==> 1 tl_term_b2564_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_term_b2564_7_rib_RF2_2	Translation termination 2 b2564 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b2564_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2564_aa + 1 b2564_mRNA_2 + 7 gdp + 7 gly1_tRNA + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	7.18E+01	71.84977	0	6.63E+00	6.626
tl_term_b2565_14_rib1	Translation termination 1 b2565 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b2565_14_cplx <==> 1 tl_term_b2565_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726
tl_term_b2565_14_rib2	Translation termination 2 b2565 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b2565_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b2565_aa + 1 b2565_mRNA_2 + 14 gdp + 14 glu1_tRNA + 42 h + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726
tl_term_b2565_1_rib1	Translation termination 1 b2565 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2565_1_cplx <==> 1 tl_term_b2565_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726
tl_term_b2565_1_rib2	Translation termination 2 b2565 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2565_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2565_aa + 1 b2565_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726

tl_term_b2565_7_rib1	Translation termination 1 b2565 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2565_7_cplx <==> 1 tl_term_b2565_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726
tl_term_b2565_7_rib2	Translation termination 2 b2565 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b2565_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2565_aa + 1 b2565_mRNA_2 + 7 gdp + 7 glu1_tRNA + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.16E+01	4.16E+01	0	6.99E+01	69.94977	0	4.73E+00	4.726
tl_term_b2566_17_rib1	Translation termination 1 b2566 17 ribosome(s), (RF1_mono)	17 RF1_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b2566_17_cplx <==> 1 tl_term_b2566_17_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_term_b2566_17_rib2	Translation termination 2 b2566 17 ribosome(s), (RF1_mono)	17 gtp + 34 h2o + 1 tl_term_b2566_17_rib_cplx --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF1_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 b2566_aa + 1 b2566_mRNA_2 + 17 gdp + 51 h + 17 leuU_tRNA + 51 pi + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_term_b2566_17_rib_RF2_1	Translation termination 1 b2566 17 ribosome(s), RF2_mono	17 RF2_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b2566_17_cplx <==> 1 tl_term_b2566_17_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_term_b2566_17_rib_RF2_2	Translation termination 2 b2566 17 ribosome(s), RF2	17 gtp + 34 h2o + 1 tl_term_b2566_17_rib_cplx2 --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF2_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 b2566_aa + 1 b2566_mRNA_2 + 17 gdp + 51 h + 17 leuU_tRNA + 51 pi + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_term_b2566_1_rib1	Translation termination 1 b2566 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2566_1_cplx <==> 1 tl_term_b2566_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_term_b2566_1_rib2	Translation termination 2 b2566 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2566_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2566_aa + 1 b2566_mRNA_2 + 1 gdp + 3 h + 1 leuU_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_term_b2566_1_rib_RF2_1	Translation termination 1 b2566 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2566_1_cplx <==> 1 tl_term_b2566_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_term_b2566_1_rib_RF2_2	Translation termination 2 b2566 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2566_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2566_aa + 1 b2566_mRNA_2 + 1 gdp + 3 h + 1 leuU_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_term_b2566_8_rib1	Translation termination 1 b2566 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b2566_8_cplx <==> 1 tl_term_b2566_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_term_b2566_8_rib2	Translation termination 2 b2566 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b2566_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b2566_aa + 1 b2566_mRNA_2 + 8 gdp + 24 h + 8 leuU_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_term_b2566_8_rib_RF2_1	Translation termination 1 b2566 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b2566_8_cplx <==> 1 tl_term_b2566_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_term_b2566_8_rib_RF2_2	Translation termination 2 b2566 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b2566_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b2566_aa + 1 b2566_mRNA_2 + 8 gdp + 24 h + 8 leuU_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.62E+01	8.62E+01	0	1.49E+02	148.9031	0	4.48E+00	4.475
tl_term_b2567_13_rib1	Translation termination 1 b2567 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b2567_13_cplx <==> 1 tl_term_b2567_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085
tl_term_b2567_13_rib2	Translation termination 2 b2567 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b2567_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b2567_aa + 1 b2567_mRNA_2 + 13 gdp + 13 glu1_tRNA + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085
tl_term_b2567_1_rib1	Translation termination 1 b2567 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2567_1_cplx <==> 1 tl_term_b2567_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085
tl_term_b2567_1_rib2	Translation termination 2 b2567 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2567_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2567_aa + 1 b2567_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085
tl_term_b2567_6_rib1	Translation termination 1 b2567 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2567_6_cplx <==> 1 tl_term_b2567_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085
tl_term_b2567_6_rib2	Translation termination 2 b2567 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b2567_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b2567_aa + 1 b2567_mRNA_2 + 6 gdp + 6 glu1_tRNA + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.50E+02	149.5131	0	5.09E+00	5.085
tl_term_b2570_1_rib1	Translation termination 1 b2570 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2570_1_cplx <==> 1 tl_term_b2570_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269
tl_term_b2570_1_rib2	Translation termination 2 b2570 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2570_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2570_aa + 1 b2570_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269
tl_term_b2570_4_rib1	Translation termination 1 b2570 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b2570_4_cplx <==> 1 tl_term_b2570_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269
tl_term_b2570_4_rib2	Translation termination 2 b2570 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b2570_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b2570_aa + 1 b2570_mRNA_2 + 4 gdp + 4 gln1_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269
tl_term_b2570_9_rib1	Translation termination 1 b2570 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2570_9_cplx <==> 1 tl_term_b2570_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269
tl_term_b2570_9_rib2	Translation termination 2 b2570 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b2570_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b2570_aa + 1 b2570_mRNA_2 + 9 gdp + 9 gln1_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.79E+01	5.79E+01	0	9.46E+01	94.62405	0	1.03E+01	10.269
tl_term_b2571_18_rib1	Translation termination 1 b2571 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b2571_18_cplx <==> 1 tl_term_b2571_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459
tl_term_b2571_18_rib2	Translation termination 2 b2571 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b2571_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b2571_aa + 1 b2571_mRNA_2 + 18 gdp + 18 gln2_tRNA + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459
tl_term_b2571_1_rib1	Translation termination 1 b2571 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2571_1_cplx <==> 1 tl_term_b2571_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459
tl_term_b2571_1_rib2	Translation termination 2 b2571 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2571_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2571_aa + 1 b2571_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459
tl_term_b2571_9_rib1	Translation termination 1 b2571 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2571_9_cplx <==> 1 tl_term_b2571_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459

tl_term_b2571_9_rib2	Translation termination 2 b2571 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b2571_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b2571_aa + 1 b2571_mRNA_2 + 9 gdp + 9 gln2_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.41E+01	5.41E+01	0	9.08E+01	90.81405	0	6.46E+00	6.459
tl_term_b2572_12_rib1	Translation termination 1 b2572 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b2572_12_cplx <==> 1 tl_term_b2572_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_term_b2572_12_rib2	Translation termination 2 b2572 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b2572_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b2572_aa + 1 b2572_mRNA_2 + 12 gdp + 12 gln1_tRNA + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_term_b2572_12_rib_RF2_1	Translation termination 1 b2572 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b2572_12_cplx <==> 1 tl_term_b2572_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_term_b2572_12_rib_RF2_2	Translation termination 2 b2572 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b2572_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b2572_aa + 1 b2572_mRNA_2 + 12 gdp + 12 gln1_tRNA + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_term_b2572_1_rib1	Translation termination 1 b2572 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2572_1_cplx <==> 1 tl_term_b2572_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_term_b2572_1_rib2	Translation termination 2 b2572 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2572_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2572_aa + 1 b2572_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_term_b2572_1_rib_RF2_1	Translation termination 1 b2572 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2572_1_cplx <==> 1 tl_term_b2572_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_term_b2572_1_rib_RF2_2	Translation termination 2 b2572 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2572_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2572_aa + 1 b2572_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_term_b2572_6_rib1	Translation termination 1 b2572 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2572_6_cplx <==> 1 tl_term_b2572_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_term_b2572_6_rib2	Translation termination 2 b2572 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b2572_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b2572_aa + 1 b2572_mRNA_2 + 6 gdp + 6 gln1_tRNA + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_term_b2572_6_rib_RF2_1	Translation termination 1 b2572 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2572_6_cplx <==> 1 tl_term_b2572_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_term_b2572_6_rib_RF2_2	Translation termination 2 b2572 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b2572_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b2572_aa + 1 b2572_mRNA_2 + 6 gdp + 6 gln1_tRNA + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.97E+01	5.97E+01	0	9.64E+01	96.35405	0	1.20E+01	11.999
tl_term_b2573_11_rib1	Translation termination 1 b2573 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b2573_11_cplx <==> 1 tl_term_b2573_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579
tl_term_b2573_11_rib2	Translation termination 2 b2573 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b2573_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 arg1_tRNA + 11 b2573_aa + 1 b2573_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579
tl_term_b2573_1_rib1	Translation termination 1 b2573 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2573_1_cplx <==> 1 tl_term_b2573_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579
tl_term_b2573_1_rib2	Translation termination 2 b2573 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2573_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b2573_aa + 1 b2573_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579
tl_term_b2573_5_rib1	Translation termination 1 b2573 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b2573_5_cplx <==> 1 tl_term_b2573_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579
tl_term_b2573_5_rib2	Translation termination 2 b2573 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b2573_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 arg1_tRNA + 5 b2573_aa + 1 b2573_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.72E+01	5.72E+01	0	9.39E+01	93.93405	0	9.58E+00	9.579
tl_term_b2593_14_rib1	Translation termination 1 b2593 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b2593_14_cplx <==> 1 tl_term_b2593_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_term_b2593_14_rib2	Translation termination 2 b2593 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b2593_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b2593_aa + 1 b2593_mRNA_2 + 14 gdp + 42 h + 14 ile2_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_term_b2593_14_rib_RF2_1	Translation termination 1 b2593 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b2593_14_cplx <==> 1 tl_term_b2593_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_term_b2593_14_rib_RF2_2	Translation termination 2 b2593 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b2593_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b2593_aa + 1 b2593_mRNA_2 + 14 gdp + 42 h + 14 ile2_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_term_b2593_1_rib1	Translation termination 1 b2593 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2593_1_cplx <==> 1 tl_term_b2593_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_term_b2593_1_rib2	Translation termination 2 b2593 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2593_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2593_aa + 1 b2593_mRNA_2 + 1 gdp + 3 h + 1 ile2_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_term_b2593_1_rib_RF2_1	Translation termination 1 b2593 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2593_1_cplx <==> 1 tl_term_b2593_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_term_b2593_1_rib_RF2_2	Translation termination 2 b2593 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2593_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2593_aa + 1 b2593_mRNA_2 + 1 gdp + 3 h + 1 ile2_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_term_b2593_7_rib1	Translation termination 1 b2593 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2593_7_cplx <==> 1 tl_term_b2593_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_term_b2593_7_rib2	Translation termination 2 b2593 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b2593_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2593_aa + 1 b2593_mRNA_2 + 7 gdp + 21 h + 7 ile2_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_term_b2593_7_rib_RF2_1	Translation termination 1 b2593 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2593_7_cplx <==> 1 tl_term_b2593_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716
tl_term_b2593_7_rib_RF2_2	Translation termination 2 b2593 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b2593_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2593_aa + 1 b2593_mRNA_2 + 7 gdp + 21 h + 7 ile2_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.38E+02	138.248	0	6.72E+00	6.716

tl_term_b2594_19_rib1	Translation termination 1 b2594 19 ribosome(s), (RF1_mono)	19 RF1_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b2594_19_cplx <==> 1 tl_term_b2594_19_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916
tl_term_b2594_19_rib2	Translation termination 2 b2594 19 ribosome(s), (RF1_mono)	19 gtp + 38 h2o + 1 tl_term_b2594_19_rib_cplx --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF1_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b2594_aa + 1 b2594_mRNA_2 + 19 gdp + 57 h + 19 leuZ_tRNA + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916
tl_term_b2594_1_rib1	Translation termination 1 b2594 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2594_1_cplx <==> 1 tl_term_b2594_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916
tl_term_b2594_1_rib2	Translation termination 2 b2594 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2594_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2594_aa + 1 b2594_mRNA_2 + 1 gdp + 3 h + 1 leuZ_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916
tl_term_b2594_9_rib1	Translation termination 1 b2594 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2594_9_cplx <==> 1 tl_term_b2594_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916
tl_term_b2594_9_rib2	Translation termination 2 b2594 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b2594_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b2594_aa + 1 b2594_mRNA_2 + 9 gdp + 27 h + 9 leuZ_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.37E+02	137.448	0	5.92E+00	5.916
tl_term_b2606_1_rib1	Translation termination 1 b2606 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2606_1_cplx <==> 1 tl_term_b2606_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	2.29E+01	22.9428
tl_term_b2606_1_rib2	Translation termination 2 b2606 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2606_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b2606_aa + 1 b2606_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	2.29E+01	22.9428
tl_term_b2606_1_rib_RF2_1	Translation termination 1 b2606 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2606_1_cplx <==> 1 tl_term_b2606_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	2.29E+01	22.9428
tl_term_b2606_1_rib_RF2_2	Translation termination 2 b2606 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2606_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b2606_aa + 1 b2606_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	2.29E+01	22.9428
tl_term_b2606_3_rib1	Translation termination 1 b2606 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b2606_3_cplx <==> 1 tl_term_b2606_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.65E+01	3.65E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b2606_3_rib2	Translation termination 2 b2606 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b2606_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 asn1_tRNA + 3 b2606_aa + 1 b2606_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.65E+01	3.65E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b2606_3_rib_RF2_1	Translation termination 1 b2606 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b2606_3_cplx <==> 1 tl_term_b2606_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.65E+01	3.65E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b2606_3_rib_RF2_2	Translation termination 2 b2606 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b2606_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 asn1_tRNA + 3 b2606_aa + 1 b2606_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.65E+01	3.65E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b2606_6_rib1	Translation termination 1 b2606 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2606_6_cplx <==> 1 tl_term_b2606_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b2606_6_rib2	Translation termination 2 b2606 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b2606_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 asn1_tRNA + 6 b2606_aa + 1 b2606_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b2606_6_rib_RF2_1	Translation termination 1 b2606 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2606_6_cplx <==> 1 tl_term_b2606_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b2606_6_rib_RF2_2	Translation termination 2 b2606 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b2606_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 asn1_tRNA + 6 b2606_aa + 1 b2606_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b2607_15_rib1	Translation termination 1 b2607 15 ribosome(s), (RF1_mono)	15 RF1_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b2607_15_cplx <==> 1 tl_term_b2607_15_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_term_b2607_15_rib2	Translation termination 2 b2607 15 ribosome(s), (RF1_mono)	15 gtp + 30 h2o + 1 tl_term_b2607_15_rib_cplx --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF1_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 ala1_tRNA + 15 b2607_aa + 1 b2607_mRNA_2 + 15 gdp + 45 h + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_term_b2607_15_rib_RF2_1	Translation termination 1 b2607 15 ribosome(s), RF2_mono	15 RF2_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b2607_15_cplx <==> 1 tl_term_b2607_15_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_term_b2607_15_rib_RF2_2	Translation termination 2 b2607 15 ribosome(s), RF2	15 gtp + 30 h2o + 1 tl_term_b2607_15_rib_cplx2 --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF2_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 ala1_tRNA + 15 b2607_aa + 1 b2607_mRNA_2 + 15 gdp + 45 h + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_term_b2607_1_rib1	Translation termination 1 b2607 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2607_1_cplx <==> 1 tl_term_b2607_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_term_b2607_1_rib2	Translation termination 2 b2607 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2607_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b2607_aa + 1 b2607_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_term_b2607_1_rib_RF2_1	Translation termination 1 b2607 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2607_1_cplx <==> 1 tl_term_b2607_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_term_b2607_1_rib_RF2_2	Translation termination 2 b2607 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2607_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b2607_aa + 1 b2607_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_term_b2607_7_rib1	Translation termination 1 b2607 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2607_7_cplx <==> 1 tl_term_b2607_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_term_b2607_7_rib2	Translation termination 2 b2607 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b2607_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 ala1_tRNA + 7 b2607_aa + 1 b2607_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_term_b2607_7_rib_RF2_1	Translation termination 1 b2607 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2607_7_cplx <==> 1 tl_term_b2607_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_term_b2607_7_rib_RF2_2	Translation termination 2 b2607 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b2607_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 ala1_tRNA + 7 b2607_aa + 1 b2607_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.42E+01	9.42E+01	0	1.04E+02	104.3339	0	2.55E+01	25.479
tl_term_b2608_10_rib1	Translation termination 1 b2608 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b2608_10_cplx <==> 1 tl_term_b2608_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179

tl_term_b2608_10_rib2	Translation termination 2 b2608 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b2608_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b2608_aa + 1 b2608_mRNA_2 + 10 gdp + 30 h + 10 phe1_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_term_b2608_10_rib_RF2_1	Translation termination 1 b2608 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b2608_10_cplx <==> 1 tl_term_b2608_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_term_b2608_10_rib_RF2_2	Translation termination 2 b2608 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b2608_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b2608_aa + 1 b2608_mRNA_2 + 10 gdp + 30 h + 10 phe1_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_term_b2608_1_rib1	Translation termination 1 b2608 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2608_1_cplx <==> 1 tl_term_b2608_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_term_b2608_1_rib2	Translation termination 2 b2608 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2608_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2608_aa + 1 b2608_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_term_b2608_1_rib_RF2_1	Translation termination 1 b2608 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2608_1_cplx <==> 1 tl_term_b2608_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_term_b2608_1_rib_RF2_2	Translation termination 2 b2608 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2608_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2608_aa + 1 b2608_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_term_b2608_5_rib1	Translation termination 1 b2608 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b2608_5_cplx <==> 1 tl_term_b2608_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_term_b2608_5_rib2	Translation termination 2 b2608 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b2608_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b2608_aa + 1 b2608_mRNA_2 + 5 gdp + 15 h + 5 phe1_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_term_b2608_5_rib_RF2_1	Translation termination 1 b2608 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b2608_5_cplx <==> 1 tl_term_b2608_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_term_b2608_5_rib_RF2_2	Translation termination 2 b2608 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b2608_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b2608_aa + 1 b2608_mRNA_2 + 5 gdp + 15 h + 5 phe1_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.59E+01	8.59E+01	0	9.60E+01	96.03389	0	1.72E+01	17.179
tl_term_b2609_1_rib1	Translation termination 1 b2609 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2609_1_cplx <==> 1 tl_term_b2609_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.02E+01	9.02E+01	0	8.29E+01	82.88	0	2.67E+01	26.71867
tl_term_b2609_1_rib2	Translation termination 2 b2609 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2609_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b2609_aa + 1 b2609_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.02E+01	9.02E+01	0	8.29E+01	82.88	0	2.67E+01	26.71867
tl_term_b2609_1_rib_RF2_1	Translation termination 1 b2609 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2609_1_cplx <==> 1 tl_term_b2609_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.02E+01	9.02E+01	0	8.29E+01	82.88	0	2.67E+01	26.71867
tl_term_b2609_1_rib_RF2_2	Translation termination 2 b2609 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2609_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b2609_aa + 1 b2609_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.02E+01	9.02E+01	0	8.29E+01	82.88	0	2.67E+01	26.71867
tl_term_b2609_2_rib1	Translation termination 1 b2609 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b2609_2_cplx <==> 1 tl_term_b2609_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.28E+01	5.28E+01	0	4.14E+01	41.44	0	3.56E+01	35.579
tl_term_b2609_2_rib2	Translation termination 2 b2609 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b2609_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 ala1_tRNA + 2 b2609_aa + 1 b2609_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.28E+01	5.28E+01	0	4.14E+01	41.44	0	3.56E+01	35.579
tl_term_b2609_2_rib_RF2_1	Translation termination 1 b2609 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b2609_2_cplx <==> 1 tl_term_b2609_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.28E+01	5.28E+01	0	4.14E+01	41.44	0	3.56E+01	35.579
tl_term_b2609_2_rib_RF2_2	Translation termination 2 b2609 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b2609_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 ala1_tRNA + 2 b2609_aa + 1 b2609_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.28E+01	5.28E+01	0	4.14E+01	41.44	0	3.56E+01	35.579
tl_term_b2609_4_rib1	Translation termination 1 b2609 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b2609_4_cplx <==> 1 tl_term_b2609_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b2609_4_rib2	Translation termination 2 b2609 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b2609_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 ala1_tRNA + 4 b2609_aa + 1 b2609_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b2609_4_rib_RF2_1	Translation termination 1 b2609 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b2609_4_cplx <==> 1 tl_term_b2609_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b2609_4_rib_RF2_2	Translation termination 2 b2609 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b2609_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 ala1_tRNA + 4 b2609_aa + 1 b2609_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b2614_11_rib1	Translation termination 1 b2614 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b2614_11_cplx <==> 1 tl_term_b2614_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_term_b2614_11_rib2	Translation termination 2 b2614 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b2614_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 ala1_tRNA + 11 b2614_aa + 1 b2614_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_term_b2614_11_rib_RF2_1	Translation termination 1 b2614 11 ribosome(s), RF2_mono	11 RF2_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b2614_11_cplx <==> 1 tl_term_b2614_11_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_term_b2614_11_rib_RF2_2	Translation termination 2 b2614 11 ribosome(s), RF2	11 gtp + 22 h2o + 1 tl_term_b2614_11_rib_cplx2 --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF2_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 ala1_tRNA + 11 b2614_aa + 1 b2614_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_term_b2614_1_rib1	Translation termination 1 b2614 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2614_1_cplx <==> 1 tl_term_b2614_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_term_b2614_1_rib2	Translation termination 2 b2614 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2614_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b2614_aa + 1 b2614_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_term_b2614_1_rib_RF2_1	Translation termination 1 b2614 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2614_1_cplx <==> 1 tl_term_b2614_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_term_b2614_1_rib_RF2_2	Translation termination 2 b2614 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2614_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b2614_aa + 1 b2614_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787

tl_term_b2614_5_rib1	Translation termination 1 b2614 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b2614_5_cplx <==> 1 tl_term_b2614_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_term_b2614_5_rib2	Translation termination 2 b2614 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b2614_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 ala1_tRNA + 5 b2614_aa + 1 b2614_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_term_b2614_5_rib_RF2_1	Translation termination 1 b2614 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b2614_5_cplx <==> 1 tl_term_b2614_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_term_b2614_5_rib_RF2_2	Translation termination 2 b2614 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b2614_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 ala1_tRNA + 5 b2614_aa + 1 b2614_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+02	2.82E+02	0	4.84E+02	484.4471	0	1.88E+01	18.787
tl_term_b2697_1_rib1	Translation termination 1 b2697 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2697_1_cplx <==> 1 tl_term_b2697_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.21E+01	5.21E+01	0	9.04E+01	90.428	0	2.46E+00	2.459
tl_term_b2697_1_rib2	Translation termination 2 b2697 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2697_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2697_aa + 1 b2697_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	9.04E+01	90.428	0	2.46E+00	2.459
tl_term_b2697_1_rib_RF2_1	Translation termination 1 b2697 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2697_1_cplx <==> 1 tl_term_b2697_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.21E+01	5.21E+01	0	9.04E+01	90.428	0	2.46E+00	2.459
tl_term_b2697_1_rib_RF2_2	Translation termination 2 b2697 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2697_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2697_aa + 1 b2697_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	9.04E+01	90.428	0	2.46E+00	2.459
tl_term_b2697_25_rib1	Translation termination 1 b2697 25 ribosome(s), (RF1_mono)	25 RF1_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b2697_25_cplx <==> 1 tl_term_b2697_25_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.21E+01	5.21E+01	0	9.04E+01	90.428	0	2.46E+00	2.459
tl_term_b2697_25_rib2	Translation termination 2 b2697 25 ribosome(s), (RF1_mono)	25 gtp + 50 h2o + 1 tl_term_b2697_25_rib_cplx --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF1_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 b2697_aa + 1 b2697_mRNA_2 + 25 gdp + 25 gln2_tRNA + 75 h + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	9.04E+01	90.428	0	2.46E+00	2.459
tl_term_b2697_25_rib_RF2_1	Translation termination 1 b2697 25 ribosome(s), RF2_mono	25 RF2_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b2697_25_cplx <==> 1 tl_term_b2697_25_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.21E+01	5.21E+01	0	9.04E+01	90.428	0	2.46E+00	2.459
tl_term_b2697_25_rib_RF2_2	Translation termination 2 b2697 25 ribosome(s), RF2	25 gtp + 50 h2o + 1 tl_term_b2697_25_rib_cplx2 --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF2_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 b2697_aa + 1 b2697_mRNA_2 + 25 gdp + 25 gln2_tRNA + 75 h + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	9.04E+01	90.428	0	2.46E+00	2.459
tl_term_b2697_51_rib1	Translation termination 1 b2697 51 ribosome(s), (RF1_mono)	51 RF1_mono + 51 RF3_mono.GDP + 51 Rrf_mono + 1 rib_70_elo2_b2697_51_cplx <==> 1 tl_term_b2697_51_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.21E+01	5.21E+01	0	6.04E+01	60.39927	0	2.46E+00	2.459
tl_term_b2697_51_rib2	Translation termination 2 b2697 51 ribosome(s), (RF1_mono)	51 gtp + 102 h2o + 1 tl_term_b2697_51_rib_cplx --> 51 EF-G.GDP + 51 EF-Tu.GDP + 51 RF1_mono_inact + 51 RF3_mono.GDP_inact + 51 Rrf_mono_inact + 51 b2697_aa + 1 b2697_mRNA_2 + 51 gdp + 51 gln2_tRNA + 153 h + 153 pi + 51 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	6.04E+01	60.39927	0	2.46E+00	2.459
tl_term_b2697_51_rib_RF2_1	Translation termination 1 b2697 51 ribosome(s), RF2_mono	51 RF2_mono + 51 RF3_mono.GDP + 51 Rrf_mono + 1 rib_70_elo2_b2697_51_cplx <==> 1 tl_term_b2697_51_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.21E+01	5.21E+01	0	6.04E+01	60.39927	0	2.46E+00	2.459
tl_term_b2697_51_rib_RF2_2	Translation termination 2 b2697 51 ribosome(s), RF2	51 gtp + 102 h2o + 1 tl_term_b2697_51_rib_cplx2 --> 51 EF-G.GDP 51 EF-Tu.GDP + 51 RF2_mono_inact + 51 RF3_mono.GDP_inact + 51 Rrf_mono_inact + 51 b2697_aa + 1 b2697_mRNA_2 + 51 gdp + 51 gln2_tRNA + 153 h + 153 pi + 51 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.21E+01	5.21E+01	0	6.04E+01	60.39927	0	2.46E+00	2.459
tl_term_b2741_19_rib1	Translation termination 1 b2741 19 ribosome(s), (RF1_mono)	19 RF1_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b2741_19_cplx <==> 1 tl_term_b2741_19_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.53E+02	253.0722	0	7.30E+00	7.301
tl_term_b2741_19_rib2	Translation termination 2 b2741 19 ribosome(s), (RF1_mono)	19 gtp + 38 h2o + 1 tl_term_b2741_19_rib_cplx --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF1_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b2741_aa + 1 b2741_mRNA_2 + 19 gdp + 19 glu1_tRNA + 57 h + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.53E+02	253.0722	0	7.30E+00	7.301
tl_term_b2741_19_rib_RF2_1	Translation termination 1 b2741 19 ribosome(s), RF2_mono	19 RF2_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b2741_19_cplx <==> 1 tl_term_b2741_19_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.53E+02	253.0722	0	7.30E+00	7.301
tl_term_b2741_19_rib_RF2_2	Translation termination 2 b2741 19 ribosome(s), RF2	19 gtp + 38 h2o + 1 tl_term_b2741_19_rib_cplx2 --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF2_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b2741_aa + 1 b2741_mRNA_2 + 19 gdp + 19 glu1_tRNA + 57 h + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.53E+02	253.0722	0	7.30E+00	7.301
tl_term_b2741_1_rib1	Translation termination 1 b2741 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2741_1_cplx <==> 1 tl_term_b2741_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.58E+02	257.646	0	7.30E+00	7.301
tl_term_b2741_1_rib2	Translation termination 2 b2741 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2741_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2741_aa + 1 b2741_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.58E+02	257.646	0	7.30E+00	7.301
tl_term_b2741_1_rib_RF2_1	Translation termination 1 b2741 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2741_1_cplx <==> 1 tl_term_b2741_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.58E+02	257.646	0	7.30E+00	7.301
tl_term_b2741_1_rib_RF2_2	Translation termination 2 b2741 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2741_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2741_aa + 1 b2741_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.58E+02	257.646	0	7.30E+00	7.301
tl_term_b2741_9_rib1	Translation termination 1 b2741 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2741_9_cplx <==> 1 tl_term_b2741_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.58E+02	257.646	0	7.30E+00	7.301
tl_term_b2741_9_rib2	Translation termination 2 b2741 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b2741_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b2741_aa + 1 b2741_mRNA_2 + 9 gdp + 9 glu1_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.58E+02	257.646	0	7.30E+00	7.301
tl_term_b2741_9_rib_RF2_1	Translation termination 1 b2741 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2741_9_cplx <==> 1 tl_term_b2741_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.58E+02	257.646	0	7.30E+00	7.301
tl_term_b2741_9_rib_RF2_2	Translation termination 2 b2741 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b2741_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b2741_aa + 1 b2741_mRNA_2 + 9 gdp + 9 glu1_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.58E+02	257.646	0	7.30E+00	7.301
tl_term_b2742_11_rib1	Translation termination 1 b2742 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b2742_11_cplx <==> 1 tl_term_b2742_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_term_b2742_11_rib2	Translation termination 2 b2742 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b2742_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 arg1_tRNA + 11 b2742_aa + 1 b2742_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_term_b2742_11_rib_RF2_1	Translation termination 1 b2742 11 ribosome(s), RF2_mono	11 RF2_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b2742_11_cplx <==> 1 tl_term_b2742_11_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331

tl_term_b2742_11_rib_RF2_2	Translation termination 2 b2742 11 ribosome(s), RF2	11 gtp + 22 h2o + 1 tl_term_b2742_11_rib_cplx2 --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF2_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 arg1_tRNA + 11 b2742_aa + 1 b2742_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_term_b2742_1_rib1	Translation termination 1 b2742 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2742_1_cplx <==> 1 tl_term_b2742_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_term_b2742_1_rib2	Translation termination 2 b2742 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2742_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b2742_aa + 1 b2742_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_term_b2742_1_rib_RF2_1	Translation termination 1 b2742 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2742_1_cplx <==> 1 tl_term_b2742_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_term_b2742_1_rib_RF2_2	Translation termination 2 b2742 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2742_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b2742_aa + 1 b2742_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_term_b2742_22_rib1	Translation termination 1 b2742 22 ribosome(s), (RF1_mono)	22 RF1_mono + 22 RF3_mono.GDP + 22 Rrf_mono + 1 rib_70_elo2_b2742_22_cplx <==> 1 tl_term_b2742_22_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_term_b2742_22_rib2	Translation termination 2 b2742 22 ribosome(s), (RF1_mono)	22 gtp + 44 h2o + 1 tl_term_b2742_22_rib_cplx --> 22 EF-G.GDP + 22 EF-Tu.GDP + 22 RF1_mono_inact + 22 RF3_mono.GDP_inact + 22 Rrf_mono_inact + 22 arg1_tRNA + 22 b2742_aa + 1 b2742_mRNA_2 + 22 gdp + 66 h + 66 pi + 22 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_term_b2742_22_rib_RF2_1	Translation termination 1 b2742 22 ribosome(s), RF2_mono	22 RF2_mono + 22 RF3_mono.GDP + 22 Rrf_mono + 1 rib_70_elo2_b2742_22_cplx <==> 1 tl_term_b2742_22_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_term_b2742_22_rib_RF2_2	Translation termination 2 b2742 22 ribosome(s), RF2	22 gtp + 44 h2o + 1 tl_term_b2742_22_rib_cplx2 --> 22 EF-G.GDP + 22 EF-Tu.GDP + 22 RF2_mono_inact + 22 RF3_mono.GDP_inact + 22 Rrf_mono_inact + 22 arg1_tRNA + 22 b2742_aa + 1 b2742_mRNA_2 + 22 gdp + 66 h + 66 pi + 22 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+01	7.04E+01	0	1.15E+02	114.9825	0	1.23E+01	12.331
tl_term_b2745_10_rib1	Translation termination 1 b2745 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b2745_10_cplx <==> 1 tl_term_b2745_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_term_b2745_10_rib2	Translation termination 2 b2745 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b2745_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b2745_aa + 1 b2745_mRNA_2 + 10 gdp + 10 glu1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_term_b2745_10_rib_RF2_1	Translation termination 1 b2745 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b2745_10_cplx <==> 1 tl_term_b2745_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_term_b2745_10_rib_RF2_2	Translation termination 2 b2745 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b2745_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b2745_aa + 1 b2745_mRNA_2 + 10 gdp + 10 glu1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_term_b2745_1_rib1	Translation termination 1 b2745 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2745_1_cplx <==> 1 tl_term_b2745_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_term_b2745_1_rib2	Translation termination 2 b2745 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2745_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2745_aa + 1 b2745_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_term_b2745_1_rib_RF2_1	Translation termination 1 b2745 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2745_1_cplx <==> 1 tl_term_b2745_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_term_b2745_1_rib_RF2_2	Translation termination 2 b2745 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2745_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2745_aa + 1 b2745_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_term_b2745_20_rib1	Translation termination 1 b2745 20 ribosome(s), (RF1_mono)	20 RF1_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b2745_20_cplx <==> 1 tl_term_b2745_20_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_term_b2745_20_rib2	Translation termination 2 b2745 20 ribosome(s), (RF1_mono)	20 gtp + 40 h2o + 1 tl_term_b2745_20_rib_cplx --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF1_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 b2745_aa + 1 b2745_mRNA_2 + 20 gdp + 20 glu1_tRNA + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_term_b2745_20_rib_RF2_1	Translation termination 1 b2745 20 ribosome(s), RF2_mono	20 RF2_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b2745_20_cplx <==> 1 tl_term_b2745_20_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_term_b2745_20_rib_RF2_2	Translation termination 2 b2745 20 ribosome(s), RF2	20 gtp + 40 h2o + 1 tl_term_b2745_20_rib_cplx2 --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF2_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 b2745_aa + 1 b2745_mRNA_2 + 20 gdp + 20 glu1_tRNA + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.41E+02	241.1691	0	4.51E+00	4.509
tl_term_b2779_12_rib1	Translation termination 1 b2779 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b2779_12_cplx <==> 1 tl_term_b2779_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.91E+01	2.91E+01	0	3.96E+01	39.60592	0	4.80E+00	4.802417
tl_term_b2779_12_rib2	Translation termination 2 b2779 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b2779_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 ala1_tRNA + 12 b2779_aa + 1 b2779_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.91E+01	2.91E+01	0	3.96E+01	39.60592	0	4.80E+00	4.802417
tl_term_b2779_12_rib_RF2_1	Translation termination 1 b2779 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b2779_12_cplx <==> 1 tl_term_b2779_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.91E+01	2.91E+01	0	3.96E+01	39.60592	0	4.80E+00	4.802417
tl_term_b2779_12_rib_RF2_2	Translation termination 2 b2779 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b2779_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 ala1_tRNA + 12 b2779_aa + 1 b2779_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.91E+01	2.91E+01	0	3.96E+01	39.60592	0	4.80E+00	4.802417
tl_term_b2779_1_rib1	Translation termination 1 b2779 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2779_1_cplx <==> 1 tl_term_b2779_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.17E+01	5.17E+01	0	8.35E+01	83.50058	0	9.05E+00	9.054
tl_term_b2779_1_rib2	Translation termination 2 b2779 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2779_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b2779_aa + 1 b2779_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.17E+01	5.17E+01	0	8.35E+01	83.50058	0	9.05E+00	9.054
tl_term_b2779_1_rib_RF2_1	Translation termination 1 b2779 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2779_1_cplx <==> 1 tl_term_b2779_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.17E+01	5.17E+01	0	8.35E+01	83.50058	0	9.05E+00	9.054
tl_term_b2779_1_rib_RF2_2	Translation termination 2 b2779 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2779_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b2779_aa + 1 b2779_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.17E+01	5.17E+01	0	8.35E+01	83.50058	0	9.05E+00	9.054
tl_term_b2779_25_rib1	Translation termination 1 b2779 25 ribosome(s), (RF1_mono)	25 RF1_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b2779_25_cplx <==> 1 tl_term_b2779_25_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.76E+01	1.76E+01	0	1.91E+01	19.09647	0	2.31E+00	2.30516

tl_term_b2779_25_rib2	Translation termination 2 b2779 25 ribosome(s), (RF1_mono)	25 gtp + 50 h2o + 1 tl_term_b2779_25_rib_cplx --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF1_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 ala1_tRNA + 25 b2779_aa + 1 b2779_mRNA_2 + 25 gdp + 75 h + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.76E+01	1.76E+01	0	1.91E+01	19.09647	0	2.31E+00	2.30516
tl_term_b2779_25_rib_RF2_1	Translation termination 1 b2779 25 ribosome(s), RF2_mono	25 RF2_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b2779_25_cplx <==> 1 tl_term_b2779_25_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.76E+01	1.76E+01	0	1.91E+01	19.09647	0	2.31E+00	2.30516
tl_term_b2779_25_rib_RF2_2	Translation termination 2 b2779 25 ribosome(s), RF2	25 gtp + 50 h2o + 1 tl_term_b2779_25_rib_cplx2 --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF2_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 ala1_tRNA + 25 b2779_aa + 1 b2779_mRNA_2 + 25 gdp + 75 h + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.76E+01	1.76E+01	0	1.91E+01	19.09647	0	2.31E+00	2.30516
tl_term_b2780_16_rib1	Translation termination 1 b2780 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b2780_16_cplx <==> 1 tl_term_b2780_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_term_b2780_16_rib2	Translation termination 2 b2780 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b2780_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b2780_aa + 1 b2780_mRNA_2 + 16 gdp + 48 h + 16 lys1_tRNA + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_term_b2780_16_rib_RF2_1	Translation termination 1 b2780 16 ribosome(s), RF2_mono	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b2780_16_cplx <==> 1 tl_term_b2780_16_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_term_b2780_16_rib_RF2_2	Translation termination 2 b2780 16 ribosome(s), RF2	16 gtp + 32 h2o + 1 tl_term_b2780_16_rib_cplx2 --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b2780_aa + 1 b2780_mRNA_2 + 16 gdp + 48 h + 16 lys1_tRNA + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_term_b2780_1_rib1	Translation termination 1 b2780 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2780_1_cplx <==> 1 tl_term_b2780_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_term_b2780_1_rib2	Translation termination 2 b2780 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2780_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2780_aa + 1 b2780_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_term_b2780_1_rib_RF2_1	Translation termination 1 b2780 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2780_1_cplx <==> 1 tl_term_b2780_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_term_b2780_1_rib_RF2_2	Translation termination 2 b2780 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2780_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2780_aa + 1 b2780_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_term_b2780_32_rib1	Translation termination 1 b2780 32 ribosome(s), (RF1_mono)	32 RF1_mono + 32 RF3_mono.GDP + 32 Rrf_mono + 1 rib_70_elo2_b2780_32_cplx <==> 1 tl_term_b2780_32_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_term_b2780_32_rib2	Translation termination 2 b2780 32 ribosome(s), (RF1_mono)	32 gtp + 64 h2o + 1 tl_term_b2780_32_rib_cplx --> 32 EF-G.GDP + 32 EF-Tu.GDP + 32 RF1_mono_inact + 32 RF3_mono.GDP_inact + 32 Rrf_mono_inact + 32 b2780_aa + 1 b2780_mRNA_2 + 32 gdp + 96 h + 32 lys1_tRNA + 96 pi + 32 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_term_b2780_32_rib_RF2_1	Translation termination 1 b2780 32 ribosome(s), RF2_mono	32 RF2_mono + 32 RF3_mono.GDP + 32 Rrf_mono + 1 rib_70_elo2_b2780_32_cplx <==> 1 tl_term_b2780_32_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_term_b2780_32_rib_RF2_2	Translation termination 2 b2780 32 ribosome(s), RF2	32 gtp + 64 h2o + 1 tl_term_b2780_32_rib_cplx2 --> 32 EF-G.GDP + 32 EF-Tu.GDP + 32 RF2_mono_inact + 32 RF3_mono.GDP_inact + 32 Rrf_mono_inact + 32 b2780_aa + 1 b2780_mRNA_2 + 32 gdp + 96 h + 32 lys1_tRNA + 96 pi + 32 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.91E+01	4.91E+01	0	8.12E+01	81.1718	0	6.40E+00	6.404
tl_term_b2785_12_rib1	Translation termination 1 b2785 12 ribosome(s), (RF2_mono)	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b2785_12_cplx <==> 1 tl_term_b2785_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145
tl_term_b2785_12_rib2	Translation termination 2 b2785 12 ribosome(s), (RF2_mono)	12 gtp + 24 h2o + 1 tl_term_b2785_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b2785_aa + 1 b2785_mRNA_2 + 12 gdp + 36 h + 12 lys1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145
tl_term_b2785_1_rib1	Translation termination 1 b2785 1 ribosome(s), (RF2_mono)	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2785_1_cplx <==> 1 tl_term_b2785_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145
tl_term_b2785_1_rib2	Translation termination 2 b2785 1 ribosome(s), (RF2_mono)	1 gtp + 2 h2o + 1 tl_term_b2785_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2785_aa + 1 b2785_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145
tl_term_b2785_25_rib1	Translation termination 1 b2785 25 ribosome(s), (RF2_mono)	25 RF2_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b2785_25_cplx <==> 1 tl_term_b2785_25_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145
tl_term_b2785_25_rib2	Translation termination 2 b2785 25 ribosome(s), (RF2_mono)	25 gtp + 50 h2o + 1 tl_term_b2785_25_rib_cplx --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF2_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 b2785_aa + 1 b2785_mRNA_2 + 25 gdp + 75 h + 25 lys1_tRNA + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.79E+02	178.6574	0	3.11E+00	3.1145
tl_term_b2790_1_rib1	Translation termination 1 b2790 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2790_1_cplx <==> 1 tl_term_b2790_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789
tl_term_b2790_1_rib2	Translation termination 2 b2790 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2790_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2790_aa + 1 b2790_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 ser1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789
tl_term_b2790_4_rib1	Translation termination 1 b2790 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b2790_4_cplx <==> 1 tl_term_b2790_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789
tl_term_b2790_4_rib2	Translation termination 2 b2790 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b2790_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b2790_aa + 1 b2790_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70 + 4 ser1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789
tl_term_b2790_8_rib1	Translation termination 1 b2790 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b2790_8_cplx <==> 1 tl_term_b2790_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789
tl_term_b2790_8_rib2	Translation termination 2 b2790 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b2790_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b2790_aa + 1 b2790_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70 + 8 ser1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.33E+01	9.33E+01	0	1.57E+02	156.6611	0	1.08E+01	10.789
tl_term_b2791_15_rib1	Translation termination 1 b2791 15 ribosome(s), (RF1_mono)	15 RF1_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b2791_15_cplx <==> 1 tl_term_b2791_15_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_term_b2791_15_rib2	Translation termination 2 b2791 15 ribosome(s), (RF1_mono)	15 gtp + 30 h2o + 1 tl_term_b2791_15_rib_cplx --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF1_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b2791_aa + 1 b2791_mRNA_2 + 15 gdp + 45 h + 45 pi + 15 rib_70 + 15 ser1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_term_b2791_15_rib_RF2_1	Translation termination 1 b2791 15 ribosome(s), RF2_mono	15 RF2_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b2791_15_cplx <==> 1 tl_term_b2791_15_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289

tl_term_b2791_15_rib_RF2_2	Translation termination 2 b2791 15 ribosome(s), RF2	15 gtp + 30 h2o + 1 tl_term_b2791_15_rib_cplx2 --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF2_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b2791_aa + 1 b2791_mRNA_2 + 15 gdp + 45 h + 45 pi + 15 rib_70 + 15 ser1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_term_b2791_1_rib1	Translation termination 1 b2791 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2791_1_cplx <==> 1 tl_term_b2791_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_term_b2791_1_rib2	Translation termination 2 b2791 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2791_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2791_aa + 1 b2791_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 ser1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_term_b2791_1_rib_RF2_1	Translation termination 1 b2791 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2791_1_cplx <==> 1 tl_term_b2791_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_term_b2791_1_rib_RF2_2	Translation termination 2 b2791 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2791_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2791_aa + 1 b2791_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 ser1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_term_b2791_7_rib1	Translation termination 1 b2791 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2791_7_cplx <==> 1 tl_term_b2791_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_term_b2791_7_rib2	Translation termination 2 b2791 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b2791_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2791_aa + 1 b2791_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70 + 7 ser1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_term_b2791_7_rib_RF2_1	Translation termination 1 b2791 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2791_7_cplx <==> 1 tl_term_b2791_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_term_b2791_7_rib_RF2_2	Translation termination 2 b2791 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b2791_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2791_aa + 1 b2791_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70 + 7 ser1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.88E+01	8.88E+01	0	1.52E+02	152.1611	0	6.29E+00	6.289
tl_term_b2792_1_rib1	Translation termination 1 b2792 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2792_1_cplx <==> 1 tl_term_b2792_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_term_b2792_1_rib2	Translation termination 2 b2792 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2792_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2792_aa + 1 b2792_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_term_b2792_1_rib_RF2_1	Translation termination 1 b2792 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2792_1_cplx <==> 1 tl_term_b2792_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_term_b2792_1_rib_RF2_2	Translation termination 2 b2792 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2792_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2792_aa + 1 b2792_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_term_b2792_3_rib1	Translation termination 1 b2792 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b2792_3_cplx <==> 1 tl_term_b2792_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_term_b2792_3_rib2	Translation termination 2 b2792 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b2792_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b2792_aa + 1 b2792_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70 + 3 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_term_b2792_3_rib_RF2_1	Translation termination 1 b2792 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b2792_3_cplx <==> 1 tl_term_b2792_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_term_b2792_3_rib_RF2_2	Translation termination 2 b2792 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b2792_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b2792_aa + 1 b2792_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70 + 3 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_term_b2792_6_rib1	Translation termination 1 b2792 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2792_6_cplx <==> 1 tl_term_b2792_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_term_b2792_6_rib2	Translation termination 2 b2792 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b2792_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b2792_aa + 1 b2792_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70 + 6 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_term_b2792_6_rib_RF2_1	Translation termination 1 b2792 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2792_6_cplx <==> 1 tl_term_b2792_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_term_b2792_6_rib_RF2_2	Translation termination 2 b2792 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b2792_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b2792_aa + 1 b2792_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70 + 6 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.55E+01	9.55E+01	0	1.59E+02	158.8611	0	1.30E+01	12.989
tl_term_b2794_16_rib1	Translation termination 1 b2794 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b2794_16_cplx <==> 1 tl_term_b2794_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_term_b2794_16_rib2	Translation termination 2 b2794 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b2794_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b2794_aa + 1 b2794_mRNA_2 + 16 gdp + 16 gln2_tRNA + 48 h + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_term_b2794_16_rib_RF2_1	Translation termination 1 b2794 16 ribosome(s), RF2_mono	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b2794_16_cplx <==> 1 tl_term_b2794_16_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_term_b2794_16_rib_RF2_2	Translation termination 2 b2794 16 ribosome(s), RF2	16 gtp + 32 h2o + 1 tl_term_b2794_16_rib_cplx2 --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b2794_aa + 1 b2794_mRNA_2 + 16 gdp + 16 gln2_tRNA + 48 h + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_term_b2794_1_rib1	Translation termination 1 b2794 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2794_1_cplx <==> 1 tl_term_b2794_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_term_b2794_1_rib2	Translation termination 2 b2794 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2794_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2794_aa + 1 b2794_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_term_b2794_1_rib_RF2_1	Translation termination 1 b2794 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2794_1_cplx <==> 1 tl_term_b2794_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_term_b2794_1_rib_RF2_2	Translation termination 2 b2794 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2794_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2794_aa + 1 b2794_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_term_b2794_8_rib1	Translation termination 1 b2794 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b2794_8_cplx <==> 1 tl_term_b2794_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_term_b2794_8_rib2	Translation termination 2 b2794 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b2794_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b2794_aa + 1 b2794_mRNA_2 + 8 gdp + 8 gln2_tRNA + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_term_b2794_8_rib_RF2_1	Translation termination 1 b2794 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b2794_8_cplx <==> 1 tl_term_b2794_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074

tl_term_b2794_8_rib_RF2_2	Translation termination 2 b2794 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b2794_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b2794_aa + 1 b2794_mRNA_2 + 8 gdp + 8 gln2_tRNA + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.75E+02	275.0257	0	4.07E+00	4.074
tl_term_b2890_14_rib1	Translation termination 1 b2890 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b2890_14_cplx <==> 1 tl_term_b2890_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_term_b2890_14_rib2	Translation termination 2 b2890 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b2890_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b2890_aa + 1 b2890_mRNA_2 + 14 gdp + 42 h + 14 lys1_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_term_b2890_14_rib_RF2_1	Translation termination 1 b2890 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b2890_14_cplx <==> 1 tl_term_b2890_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_term_b2890_14_rib_RF2_2	Translation termination 2 b2890 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b2890_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b2890_aa + 1 b2890_mRNA_2 + 14 gdp + 42 h + 14 lys1_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_term_b2890_1_rib1	Translation termination 1 b2890 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2890_1_cplx <==> 1 tl_term_b2890_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_term_b2890_1_rib2	Translation termination 2 b2890 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2890_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2890_aa + 1 b2890_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_term_b2890_1_rib_RF2_1	Translation termination 1 b2890 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2890_1_cplx <==> 1 tl_term_b2890_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_term_b2890_1_rib_RF2_2	Translation termination 2 b2890 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2890_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2890_aa + 1 b2890_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_term_b2890_29_rib1	Translation termination 1 b2890 29 ribosome(s), (RF1_mono)	29 RF1_mono + 29 RF3_mono.GDP + 29 Rrf_mono + 1 rib_70_elo2_b2890_29_cplx <==> 1 tl_term_b2890_29_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_term_b2890_29_rib2	Translation termination 2 b2890 29 ribosome(s), (RF1_mono)	29 gtp + 58 h2o + 1 tl_term_b2890_29_rib_cplx --> 29 EF-G.GDP + 29 EF-Tu.GDP + 29 RF1_mono_inact + 29 RF3_mono.GDP_inact + 29 Rrf_mono_inact + 29 b2890_aa + 1 b2890_mRNA_2 + 29 gdp + 87 h + 29 lys1_tRNA + 87 pi + 29 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_term_b2890_29_rib_RF2_1	Translation termination 1 b2890 29 ribosome(s), RF2_mono	29 RF2_mono + 29 RF3_mono.GDP + 29 Rrf_mono + 1 rib_70_elo2_b2890_29_cplx <==> 1 tl_term_b2890_29_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_term_b2890_29_rib_RF2_2	Translation termination 2 b2890 29 ribosome(s), RF2	29 gtp + 58 h2o + 1 tl_term_b2890_29_rib_cplx2 --> 29 EF-G.GDP + 29 EF-Tu.GDP + 29 RF2_mono_inact + 29 RF3_mono.GDP_inact + 29 Rrf_mono_inact + 29 b2890_aa + 1 b2890_mRNA_2 + 29 gdp + 87 h + 29 lys1_tRNA + 87 pi + 29 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.07E+01	5.07E+01	0	8.67E+01	86.72328	0	3.98E+00	3.981
tl_term_b2891_10_rib1	Translation termination 1 b2891 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b2891_10_cplx <==> 1 tl_term_b2891_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121
tl_term_b2891_10_rib2	Translation termination 2 b2891 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b2891_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b2891_aa + 1 b2891_mRNA_2 + 10 gdp + 30 h + 10 leuZ_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121
tl_term_b2891_1_rib1	Translation termination 1 b2891 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2891_1_cplx <==> 1 tl_term_b2891_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121
tl_term_b2891_1_rib2	Translation termination 2 b2891 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2891_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2891_aa + 1 b2891_mRNA_2 + 1 gdp + 3 h + 1 leuZ_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121
tl_term_b2891_21_rib1	Translation termination 1 b2891 21 ribosome(s), (RF1_mono)	21 RF1_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b2891_21_cplx <==> 1 tl_term_b2891_21_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121
tl_term_b2891_21_rib2	Translation termination 2 b2891 21 ribosome(s), (RF1_mono)	21 gtp + 42 h2o + 1 tl_term_b2891_21_rib_cplx --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF1_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 b2891_aa + 1 b2891_mRNA_2 + 21 gdp + 63 h + 21 leuZ_tRNA + 63 pi + 21 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.69E+01	86.86328	0	4.12E+00	4.121
tl_term_b2892_16_rib1	Translation termination 1 b2892 16 ribosome(s), (RF2_mono)	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b2892_16_cplx <==> 1 tl_term_b2892_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922
tl_term_b2892_16_rib2	Translation termination 2 b2892 16 ribosome(s), (RF2_mono)	16 gtp + 32 h2o + 1 tl_term_b2892_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b2892_aa + 1 b2892_mRNA_2 + 16 gdp + 48 h + 16 ile1_tRNA + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922
tl_term_b2892_1_rib1	Translation termination 1 b2892 1 ribosome(s), (RF2_mono)	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2892_1_cplx <==> 1 tl_term_b2892_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922
tl_term_b2892_1_rib2	Translation termination 2 b2892 1 ribosome(s), (RF2_mono)	1 gtp + 2 h2o + 1 tl_term_b2892_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2892_aa + 1 b2892_mRNA_2 + 1 gdp + 3 h + 1 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922
tl_term_b2892_33_rib1	Translation termination 1 b2892 33 ribosome(s), (RF2_mono)	33 RF2_mono + 33 RF3_mono.GDP + 33 Rrf_mono + 1 rib_70_elo2_b2892_33_cplx <==> 1 tl_term_b2892_33_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922
tl_term_b2892_33_rib2	Translation termination 2 b2892 33 ribosome(s), (RF2_mono)	33 gtp + 66 h2o + 1 tl_term_b2892_33_rib_cplx --> 33 EF-G.GDP + 33 EF-Tu.GDP + 33 RF2_mono_inact + 33 RF3_mono.GDP_inact + 33 Rrf_mono_inact + 33 b2892_aa + 1 b2892_mRNA_2 + 33 gdp + 99 h + 33 ile1_tRNA + 99 pi + 33 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	6.42E+01	64.21587	0	1.92E+00	1.922
tl_term_b2893_13_rib1	Translation termination 1 b2893 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b2893_13_cplx <==> 1 tl_term_b2893_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_term_b2893_13_rib2	Translation termination 2 b2893 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b2893_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b2893_aa + 1 b2893_mRNA_2 + 13 gdp + 39 h + 13 lys1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_term_b2893_13_rib_RF2_1	Translation termination 1 b2893 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b2893_13_cplx <==> 1 tl_term_b2893_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_term_b2893_13_rib_RF2_2	Translation termination 2 b2893 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b2893_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b2893_aa + 1 b2893_mRNA_2 + 13 gdp + 39 h + 13 lys1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_term_b2893_1_rib1	Translation termination 1 b2893 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2893_1_cplx <==> 1 tl_term_b2893_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862

tl_term_b2893_1_rib2	Translation termination 2 b2893 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2893_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2893_aa + 1 b2893_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_term_b2893_1_rib_RF2_1	Translation termination 1 b2893 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2893_1_cplx <==> 1 tl_term_b2893_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_term_b2893_1_rib_RF2_2	Translation termination 2 b2893 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2893_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2893_aa + 1 b2893_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_term_b2893_6_rib1	Translation termination 1 b2893 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2893_6_cplx <==> 1 tl_term_b2893_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_term_b2893_6_rib2	Translation termination 2 b2893 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b2893_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b2893_aa + 1 b2893_mRNA_2 + 6 gdp + 18 h + 6 lys1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_term_b2893_6_rib_RF2_1	Translation termination 1 b2893 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2893_6_cplx <==> 1 tl_term_b2893_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_term_b2893_6_rib_RF2_2	Translation termination 2 b2893 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b2893_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b2893_aa + 1 b2893_mRNA_2 + 6 gdp + 18 h + 6 lys1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	6.92E+01	69.15587	0	6.86E+00	6.862
tl_term_b2946_14_rib1	Translation termination 1 b2946 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b2946_14_cplx <==> 1 tl_term_b2946_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_term_b2946_14_rib2	Translation termination 2 b2946 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b2946_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b2946_aa + 1 b2946_mRNA_2 + 14 gdp + 14 gly1_tRNA + 42 h + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_term_b2946_14_rib_RF2_1	Translation termination 1 b2946 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b2946_14_cplx <==> 1 tl_term_b2946_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_term_b2946_14_rib_RF2_2	Translation termination 2 b2946 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b2946_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b2946_aa + 1 b2946_mRNA_2 + 14 gdp + 14 gly1_tRNA + 42 h + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_term_b2946_1_rib1	Translation termination 1 b2946 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2946_1_cplx <==> 1 tl_term_b2946_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_term_b2946_1_rib2	Translation termination 2 b2946 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2946_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2946_aa + 1 b2946_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_term_b2946_1_rib_RF2_1	Translation termination 1 b2946 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2946_1_cplx <==> 1 tl_term_b2946_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_term_b2946_1_rib_RF2_2	Translation termination 2 b2946 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2946_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2946_aa + 1 b2946_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_term_b2946_7_rib1	Translation termination 1 b2946 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2946_7_cplx <==> 1 tl_term_b2946_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_term_b2946_7_rib2	Translation termination 2 b2946 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b2946_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2946_aa + 1 b2946_mRNA_2 + 7 gdp + 7 gly1_tRNA + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_term_b2946_7_rib_RF2_1	Translation termination 1 b2946 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2946_7_cplx <==> 1 tl_term_b2946_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_term_b2946_7_rib_RF2_2	Translation termination 2 b2946 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b2946_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2946_aa + 1 b2946_mRNA_2 + 7 gdp + 7 gly1_tRNA + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.04E+01	8.04E+01	0	1.37E+02	137.488	0	5.96E+00	5.956
tl_term_b2947_18_rib1	Translation termination 1 b2947 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b2947_18_cplx <==> 1 tl_term_b2947_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_term_b2947_18_rib2	Translation termination 2 b2947 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b2947_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b2947_aa + 1 b2947_mRNA_2 + 18 gdp + 18 gln1_tRNA + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_term_b2947_18_rib_RF2_1	Translation termination 1 b2947 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b2947_18_cplx <==> 1 tl_term_b2947_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_term_b2947_18_rib_RF2_2	Translation termination 2 b2947 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b2947_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b2947_aa + 1 b2947_mRNA_2 + 18 gdp + 18 gln1_tRNA + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_term_b2947_1_rib1	Translation termination 1 b2947 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2947_1_cplx <==> 1 tl_term_b2947_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_term_b2947_1_rib2	Translation termination 2 b2947 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2947_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2947_aa + 1 b2947_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_term_b2947_1_rib_RF2_1	Translation termination 1 b2947 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2947_1_cplx <==> 1 tl_term_b2947_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_term_b2947_1_rib_RF2_2	Translation termination 2 b2947 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2947_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2947_aa + 1 b2947_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_term_b2947_9_rib1	Translation termination 1 b2947 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2947_9_cplx <==> 1 tl_term_b2947_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_term_b2947_9_rib2	Translation termination 2 b2947 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b2947_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b2947_aa + 1 b2947_mRNA_2 + 9 gdp + 9 gln1_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_term_b2947_9_rib_RF2_1	Translation termination 1 b2947 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b2947_9_cplx <==> 1 tl_term_b2947_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276
tl_term_b2947_9_rib_RF2_2	Translation termination 2 b2947 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b2947_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b2947_aa + 1 b2947_mRNA_2 + 9 gdp + 9 gln1_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.17E+01	8.17E+01	0	1.39E+02	138.808	0	7.28E+00	7.276

tl_term_b2959_1_rib1	Translation termination 1 b2959 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2959_1_cplx <==> 1 tl_term_b2959_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_term_b2959_1_rib2	Translation termination 2 b2959 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2959_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b2959_aa + 1 b2959_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_term_b2959_1_rib_RF2_1	Translation termination 1 b2959 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2959_1_cplx <==> 1 tl_term_b2959_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_term_b2959_1_rib_RF2_2	Translation termination 2 b2959 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2959_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b2959_aa + 1 b2959_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_term_b2959_3_rib1	Translation termination 1 b2959 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b2959_3_cplx <==> 1 tl_term_b2959_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_term_b2959_3_rib2	Translation termination 2 b2959 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b2959_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 asp1_tRNA + 3 b2959_aa + 1 b2959_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_term_b2959_3_rib_RF2_1	Translation termination 1 b2959 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b2959_3_cplx <==> 1 tl_term_b2959_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_term_b2959_3_rib_RF2_2	Translation termination 2 b2959 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b2959_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 asp1_tRNA + 3 b2959_aa + 1 b2959_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_term_b2959_6_rib1	Translation termination 1 b2959 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2959_6_cplx <==> 1 tl_term_b2959_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_term_b2959_6_rib2	Translation termination 2 b2959 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b2959_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 asp1_tRNA + 6 b2959_aa + 1 b2959_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_term_b2959_6_rib_RF2_1	Translation termination 1 b2959 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b2959_6_cplx <==> 1 tl_term_b2959_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_term_b2959_6_rib_RF2_2	Translation termination 2 b2959 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b2959_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 asp1_tRNA + 6 b2959_aa + 1 b2959_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.65E+02	264.7675	0	2.09E+01	20.852
tl_term_b2960_14_rib1	Translation termination 1 b2960 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b2960_14_cplx <==> 1 tl_term_b2960_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_term_b2960_14_rib2	Translation termination 2 b2960 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b2960_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b2960_aa + 1 b2960_mRNA_2 + 14 gdp + 42 h + 14 lys1_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_term_b2960_14_rib_RF2_1	Translation termination 1 b2960 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b2960_14_cplx <==> 1 tl_term_b2960_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_term_b2960_14_rib_RF2_2	Translation termination 2 b2960 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b2960_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b2960_aa + 1 b2960_mRNA_2 + 14 gdp + 42 h + 14 lys1_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_term_b2960_1_rib1	Translation termination 1 b2960 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2960_1_cplx <==> 1 tl_term_b2960_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_term_b2960_1_rib2	Translation termination 2 b2960 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b2960_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2960_aa + 1 b2960_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_term_b2960_1_rib_RF2_1	Translation termination 1 b2960 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b2960_1_cplx <==> 1 tl_term_b2960_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_term_b2960_1_rib_RF2_2	Translation termination 2 b2960 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b2960_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b2960_aa + 1 b2960_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_term_b2960_7_rib1	Translation termination 1 b2960 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2960_7_cplx <==> 1 tl_term_b2960_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_term_b2960_7_rib2	Translation termination 2 b2960 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b2960_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2960_aa + 1 b2960_mRNA_2 + 7 gdp + 21 h + 7 lys1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_term_b2960_7_rib_RF2_1	Translation termination 1 b2960 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b2960_7_cplx <==> 1 tl_term_b2960_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_term_b2960_7_rib_RF2_2	Translation termination 2 b2960 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b2960_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b2960_aa + 1 b2960_mRNA_2 + 7 gdp + 21 h + 7 lys1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.45E+02	1.45E+02	0	2.51E+02	250.6975	0	6.78E+00	6.782
tl_term_b3065_1_rib1	Translation termination 1 b3065 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3065_1_cplx <==> 1 tl_term_b3065_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3065_1_rib2	Translation termination 2 b3065 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3065_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3065_aa + 1 b3065_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3065_1_rib_RF2_1	Translation termination 1 b3065 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3065_1_cplx <==> 1 tl_term_b3065_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3065_1_rib_RF2_2	Translation termination 2 b3065 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3065_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3065_aa + 1 b3065_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3065_2_rib1	Translation termination 1 b3065 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3065_2_cplx <==> 1 tl_term_b3065_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3065_2_rib2	Translation termination 2 b3065 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3065_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3065_aa + 1 b3065_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70 + 2 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3065_2_rib_RF2_1	Translation termination 1 b3065 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3065_2_cplx <==> 1 tl_term_b3065_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3065_2_rib_RF2_2	Translation termination 2 b3065 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b3065_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3065_aa + 1 b3065_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70 + 2 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44

tl_term_b3065_4_rib1	Translation termination 1 b3065 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3065_4_cplx <==> 1 tl_term_b3065_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3065_4_rib2	Translation termination 2 b3065 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3065_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3065_aa + 1 b3065_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70 + 4 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3065_4_rib_RF2_1	Translation termination 1 b3065 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3065_4_cplx <==> 1 tl_term_b3065_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3065_4_rib_RF2_2	Translation termination 2 b3065 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3065_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3065_aa + 1 b3065_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70 + 4 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3066_17_rib1	Translation termination 1 b3066 17 ribosome(s), (RF1_mono)	17 RF1_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b3066_17_cplx <==> 1 tl_term_b3066_17_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015
tl_term_b3066_17_rib2	Translation termination 2 b3066 17 ribosome(s), (RF1_mono)	17 gtp + 34 h2o + 1 tl_term_b3066_17_rib_cplx --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF1_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 b3066_aa + 1 b3066_mRNA_2 + 17 gdp + 51 h + 17 lys1_tRNA + 51 pi + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015
tl_term_b3066_1_rib1	Translation termination 1 b3066 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3066_1_cplx <==> 1 tl_term_b3066_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015
tl_term_b3066_1_rib2	Translation termination 2 b3066 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3066_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3066_aa + 1 b3066_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015
tl_term_b3066_34_rib1	Translation termination 1 b3066 34 ribosome(s), (RF1_mono)	34 RF1_mono + 34 RF3_mono.GDP + 34 Rrf_mono + 1 rib_70_elo2_b3066_34_cplx <==> 1 tl_term_b3066_34_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015
tl_term_b3066_34_rib2	Translation termination 2 b3066 34 ribosome(s), (RF1_mono)	34 gtp + 68 h2o + 1 tl_term_b3066_34_rib_cplx --> 34 EF-G.GDP + 34 EF-Tu.GDP + 34 RF1_mono_inact + 34 RF3_mono.GDP_inact + 34 Rrf_mono_inact + 34 b3066_aa + 1 b3066_mRNA_2 + 34 gdp + 102 h + 34 lys1_tRNA + 102 pi + 34 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.52E+01	55.21037	0	2.02E+00	2.015
tl_term_b3067_18_rib1	Translation termination 1 b3067 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b3067_18_cplx <==> 1 tl_term_b3067_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.94E+01	6.94E+01	0	1.21E+02	120.6262	0	2.83E+00	2.829
tl_term_b3067_18_rib2	Translation termination 2 b3067 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b3067_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 asp1_tRNA + 18 b3067_aa + 1 b3067_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	1.21E+02	120.6262	0	2.83E+00	2.829
tl_term_b3067_18_rib_RF2_1	Translation termination 1 b3067 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b3067_18_cplx <==> 1 tl_term_b3067_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.94E+01	6.94E+01	0	1.21E+02	120.6262	0	2.83E+00	2.829
tl_term_b3067_18_rib_RF2_2	Translation termination 2 b3067 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b3067_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 asp1_tRNA + 18 b3067_aa + 1 b3067_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	1.21E+02	120.6262	0	2.83E+00	2.829
tl_term_b3067_1_rib1	Translation termination 1 b3067 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3067_1_cplx <==> 1 tl_term_b3067_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.94E+01	6.94E+01	0	1.21E+02	120.6262	0	2.83E+00	2.829
tl_term_b3067_1_rib2	Translation termination 2 b3067 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3067_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b3067_aa + 1 b3067_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	1.21E+02	120.6262	0	2.83E+00	2.829
tl_term_b3067_1_rib_RF2_1	Translation termination 1 b3067 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3067_1_cplx <==> 1 tl_term_b3067_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.94E+01	6.94E+01	0	1.21E+02	120.6262	0	2.83E+00	2.829
tl_term_b3067_1_rib_RF2_2	Translation termination 2 b3067 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3067_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b3067_aa + 1 b3067_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	1.21E+02	120.6262	0	2.83E+00	2.829
tl_term_b3067_36_rib1	Translation termination 1 b3067 36 ribosome(s), (RF1_mono)	36 RF1_mono + 36 RF3_mono.GDP + 36 Rrf_mono + 1 rib_70_elo2_b3067_36_cplx <==> 1 tl_term_b3067_36_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.94E+01	6.94E+01	0	7.71E+01	77.12959	0	2.83E+00	2.829
tl_term_b3067_36_rib2	Translation termination 2 b3067 36 ribosome(s), (RF1_mono)	36 gtp + 72 h2o + 1 tl_term_b3067_36_rib_cplx --> 36 EF-G.GDP + 36 EF-Tu.GDP + 36 RF1_mono_inact + 36 RF3_mono.GDP_inact + 36 Rrf_mono_inact + 36 asp1_tRNA + 36 b3067_aa + 1 b3067_mRNA_2 + 36 gdp + 108 h + 108 pi + 36 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	7.71E+01	77.12959	0	2.83E+00	2.829
tl_term_b3067_36_rib_RF2_1	Translation termination 1 b3067 36 ribosome(s), RF2_mono	36 RF2_mono + 36 RF3_mono.GDP + 36 Rrf_mono + 1 rib_70_elo2_b3067_36_cplx <==> 1 tl_term_b3067_36_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.94E+01	6.94E+01	0	7.71E+01	77.12959	0	2.83E+00	2.829
tl_term_b3067_36_rib_RF2_2	Translation termination 2 b3067 36 ribosome(s), RF2	36 gtp + 72 h2o + 1 tl_term_b3067_36_rib_cplx2 --> 36 EF-G.GDP + 36 EF-Tu.GDP + 36 RF2_mono_inact + 36 RF3_mono.GDP_inact + 36 Rrf_mono_inact + 36 asp1_tRNA + 36 b3067_aa + 1 b3067_mRNA_2 + 36 gdp + 108 h + 108 pi + 36 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.94E+01	6.94E+01	0	7.71E+01	77.12959	0	2.83E+00	2.829
tl_term_b3124_12_rib1	Translation termination 1 b3124 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3124_12_cplx <==> 1 tl_term_b3124_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399
tl_term_b3124_12_rib2	Translation termination 2 b3124 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b3124_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b3124_aa + 1 b3124_mRNA_2 + 12 gdp + 12 glyU_tRNA + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399
tl_term_b3124_1_rib1	Translation termination 1 b3124 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3124_1_cplx <==> 1 tl_term_b3124_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399
tl_term_b3124_1_rib2	Translation termination 2 b3124 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3124_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3124_aa + 1 b3124_mRNA_2 + 1 gdp + 1 glyU_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399
tl_term_b3124_24_rib1	Translation termination 1 b3124 24 ribosome(s), (RF1_mono)	24 RF1_mono + 24 RF3_mono.GDP + 24 Rrf_mono + 1 rib_70_elo2_b3124_24_cplx <==> 1 tl_term_b3124_24_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399
tl_term_b3124_24_rib2	Translation termination 2 b3124 24 ribosome(s), (RF1_mono)	24 gtp + 48 h2o + 1 tl_term_b3124_24_rib_cplx --> 24 EF-G.GDP + 24 EF-Tu.GDP + 24 RF1_mono_inact + 24 RF3_mono.GDP_inact + 24 Rrf_mono_inact + 24 b3124_aa + 1 b3124_mRNA_2 + 24 gdp + 24 glyU_tRNA + 72 h + 72 pi + 24 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.19E+01	3.19E+01	0	5.33E+01	53.30244	0	3.94E+00	3.9399
tl_term_b3125_17_rib1	Translation termination 1 b3125 17 ribosome(s), (RF1_mono)	17 RF1_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b3125_17_cplx <==> 1 tl_term_b3125_17_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_term_b3125_17_rib2	Translation termination 2 b3125 17 ribosome(s), (RF1_mono)	17 gtp + 34 h2o + 1 tl_term_b3125_17_rib_cplx --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF1_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 arg1_tRNA + 17 b3125_aa + 1 b3125_mRNA_2 + 17 gdp + 51 h + 51 pi + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299

tl_term_b3125_17_rib_RF2_1	Translation termination 1 b3125 17 ribosome(s), RF2_mono	17 RF2_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b3125_17_cplx <==> 1 tl_term_b3125_17_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_term_b3125_17_rib_RF2_2	Translation termination 2 b3125 17 ribosome(s), RF2	17 gtp + 34 h2o + 1 tl_term_b3125_17_rib_cplx2 --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF2_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 arg1_tRNA + 17 b3125_aa + 1 b3125_mRNA_2 + 17 gdp + 51 h + 51 pi + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_term_b3125_1_rib1	Translation termination 1 b3125 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3125_1_cplx <==> 1 tl_term_b3125_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_term_b3125_1_rib2	Translation termination 2 b3125 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3125_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b3125_aa + 1 b3125_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_term_b3125_1_rib_RF2_1	Translation termination 1 b3125 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3125_1_cplx <==> 1 tl_term_b3125_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_term_b3125_1_rib_RF2_2	Translation termination 2 b3125 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3125_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b3125_aa + 1 b3125_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_term_b3125_8_rib1	Translation termination 1 b3125 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3125_8_cplx <==> 1 tl_term_b3125_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_term_b3125_8_rib2	Translation termination 2 b3125 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3125_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 arg1_tRNA + 8 b3125_aa + 1 b3125_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_term_b3125_8_rib_RF2_1	Translation termination 1 b3125 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3125_8_cplx <==> 1 tl_term_b3125_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_term_b3125_8_rib_RF2_2	Translation termination 2 b3125 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b3125_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 arg1_tRNA + 8 b3125_aa + 1 b3125_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.32E+01	53.19244	0	3.83E+00	3.8299
tl_term_b3126_15_rib1	Translation termination 1 b3126 15 ribosome(s), (RF1_mono)	15 RF1_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b3126_15_cplx <==> 1 tl_term_b3126_15_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_term_b3126_15_rib2	Translation termination 2 b3126 15 ribosome(s), (RF1_mono)	15 gtp + 30 h2o + 1 tl_term_b3126_15_rib_cplx --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF1_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b3126_aa + 1 b3126_mRNA_2 + 15 gdp + 45 h + 15 lys1_tRNA + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_term_b3126_15_rib_RF2_1	Translation termination 1 b3126 15 ribosome(s), RF2_mono	15 RF2_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b3126_15_cplx <==> 1 tl_term_b3126_15_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_term_b3126_15_rib_RF2_2	Translation termination 2 b3126 15 ribosome(s), RF2	15 gtp + 30 h2o + 1 tl_term_b3126_15_rib_cplx2 --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF2_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b3126_aa + 1 b3126_mRNA_2 + 15 gdp + 45 h + 15 lys1_tRNA + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_term_b3126_1_rib1	Translation termination 1 b3126 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3126_1_cplx <==> 1 tl_term_b3126_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_term_b3126_1_rib2	Translation termination 2 b3126 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3126_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3126_aa + 1 b3126_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_term_b3126_1_rib_RF2_1	Translation termination 1 b3126 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3126_1_cplx <==> 1 tl_term_b3126_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_term_b3126_1_rib_RF2_2	Translation termination 2 b3126 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3126_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3126_aa + 1 b3126_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_term_b3126_7_rib1	Translation termination 1 b3126 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3126_7_cplx <==> 1 tl_term_b3126_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_term_b3126_7_rib2	Translation termination 2 b3126 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3126_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3126_aa + 1 b3126_mRNA_2 + 7 gdp + 21 h + 7 lys1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_term_b3126_7_rib_RF2_1	Translation termination 1 b3126 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3126_7_cplx <==> 1 tl_term_b3126_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_term_b3126_7_rib_RF2_2	Translation termination 2 b3126 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b3126_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3126_aa + 1 b3126_mRNA_2 + 7 gdp + 21 h + 7 lys1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.56E+01	55.60244	0	6.24E+00	6.2399
tl_term_b3127_13_rib1	Translation termination 1 b3127 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3127_13_cplx <==> 1 tl_term_b3127_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_term_b3127_13_rib2	Translation termination 2 b3127 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b3127_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b3127_aa + 1 b3127_mRNA_2 + 13 gdp + 39 h + 13 lys1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_term_b3127_13_rib_RF2_1	Translation termination 1 b3127 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3127_13_cplx <==> 1 tl_term_b3127_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_term_b3127_13_rib_RF2_2	Translation termination 2 b3127 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b3127_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b3127_aa + 1 b3127_mRNA_2 + 13 gdp + 39 h + 13 lys1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_term_b3127_1_rib1	Translation termination 1 b3127 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3127_1_cplx <==> 1 tl_term_b3127_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_term_b3127_1_rib2	Translation termination 2 b3127 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3127_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3127_aa + 1 b3127_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_term_b3127_1_rib_RF2_1	Translation termination 1 b3127 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3127_1_cplx <==> 1 tl_term_b3127_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_term_b3127_1_rib_RF2_2	Translation termination 2 b3127 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3127_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3127_aa + 1 b3127_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_term_b3127_26_rib1	Translation termination 1 b3127 26 ribosome(s), (RF1_mono)	26 RF1_mono + 26 RF3_mono.GDP + 26 Rrf_mono + 1 rib_70_elo2_b3127_26_cplx <==> 1 tl_term_b3127_26_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599

tl_term_b3127_26_rib2	Translation termination 2 b3127 26 ribosome(s), (RF1_mono)	26 gtp + 52 h2o + 1 tl_term_b3127_26_rib_cplx --> 26 EF-G.GDP + 26 EF-Tu.GDP + 26 RF1_mono_inact + 26 RF3_mono.GDP_inact + 26 Rrf_mono_inact + 26 b3127_aa + 1 b3127_mRNA_2 + 26 gdp + 78 h + 26 lys1_tRNA + 78 pi + 26 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_term_b3127_26_rib_RF2_1	Translation termination 1 b3127 26 ribosome(s), RF2_mono	26 RF2_mono + 26 RF3_mono.GDP + 26 Rrf_mono + 1 rib_70_elo2_b3127_26_cplx <==> 1 tl_term_b3127_26_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_term_b3127_26_rib_RF2_2	Translation termination 2 b3127 26 ribosome(s), RF2	26 gtp + 52 h2o + 1 tl_term_b3127_26_rib_cplx2 --> 26 EF-G.GDP + 26 EF-Tu.GDP + 26 RF2_mono_inact + 26 RF3_mono.GDP_inact + 26 Rrf_mono_inact + 26 b3127_aa + 1 b3127_mRNA_2 + 26 gdp + 78 h + 26 lys1_tRNA + 78 pi + 26 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.17E+01	51.72244	0	2.36E+00	2.3599
tl_term_b3164_1_rib1	Translation termination 1 b3164 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3164_1_cplx <==> 1 tl_term_b3164_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.09E+01	6.09E+01	0	1.04E+02	103.7766	0	4.46E+00	4.456
tl_term_b3164_1_rib2	Translation termination 2 b3164 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3164_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3164_aa + 1 b3164_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.09E+01	6.09E+01	0	1.04E+02	103.7766	0	4.46E+00	4.456
tl_term_b3164_1_rib_RF2_1	Translation termination 1 b3164 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3164_1_cplx <==> 1 tl_term_b3164_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.09E+01	6.09E+01	0	1.04E+02	103.7766	0	4.46E+00	4.456
tl_term_b3164_1_rib_RF2_2	Translation termination 2 b3164 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3164_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3164_aa + 1 b3164_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.09E+01	6.09E+01	0	1.04E+02	103.7766	0	4.46E+00	4.456
tl_term_b3164_21_rib1	Translation termination 1 b3164 21 ribosome(s), (RF1_mono)	21 RF1_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b3164_21_cplx <==> 1 tl_term_b3164_21_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.76E+01	2.76E+01	0	3.41E+01	34.10083	0	4.12E+00	4.116357
tl_term_b3164_21_rib2	Translation termination 2 b3164 21 ribosome(s), (RF1_mono)	21 gtp + 42 h2o + 1 tl_term_b3164_21_rib_cplx --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF1_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 b3164_aa + 1 b3164_mRNA_2 + 21 gdp + 21 glu1_tRNA + 63 h + 63 pi + 21 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.76E+01	2.76E+01	0	3.41E+01	34.10083	0	4.12E+00	4.116357
tl_term_b3164_21_rib_RF2_1	Translation termination 1 b3164 21 ribosome(s), RF2_mono	21 RF2_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b3164_21_cplx <==> 1 tl_term_b3164_21_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.76E+01	2.76E+01	0	3.41E+01	34.10083	0	4.12E+00	4.116357
tl_term_b3164_21_rib_RF2_2	Translation termination 2 b3164 21 ribosome(s), RF2	21 gtp + 42 h2o + 1 tl_term_b3164_21_rib_cplx2 --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF2_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 b3164_aa + 1 b3164_mRNA_2 + 21 gdp + 21 glu1_tRNA + 63 h + 63 pi + 21 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.76E+01	2.76E+01	0	3.41E+01	34.10083	0	4.12E+00	4.116357
tl_term_b3164_43_rib1	Translation termination 1 b3164 43 ribosome(s), (RF1_mono)	43 RF1_mono + 43 RF3_mono.GDP + 43 Rrf_mono + 1 rib_70_elo2_b3164_43_cplx <==> 1 tl_term_b3164_43_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.53E+01	1.53E+01	0	1.67E+01	16.65389	0	2.01E+00	2.010314
tl_term_b3164_43_rib2	Translation termination 2 b3164 43 ribosome(s), (RF1_mono)	43 gtp + 86 h2o + 1 tl_term_b3164_43_rib_cplx --> 43 EF-G.GDP + 43 EF-Tu.GDP + 43 RF1_mono_inact + 43 RF3_mono.GDP_inact + 43 Rrf_mono_inact + 43 b3164_aa + 1 b3164_mRNA_2 + 43 gdp + 43 glu1_tRNA + 129 h + 129 pi + 43 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	1.67E+01	16.65389	0	2.01E+00	2.010314
tl_term_b3164_43_rib_RF2_1	Translation termination 1 b3164 43 ribosome(s), RF2_mono	43 RF2_mono + 43 RF3_mono.GDP + 43 Rrf_mono + 1 rib_70_elo2_b3164_43_cplx <==> 1 tl_term_b3164_43_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.53E+01	1.53E+01	0	1.67E+01	16.65389	0	2.01E+00	2.010314
tl_term_b3164_43_rib_RF2_2	Translation termination 2 b3164 43 ribosome(s), RF2	43 gtp + 86 h2o + 1 tl_term_b3164_43_rib_cplx2 --> 43 EF-G.GDP + 43 EF-Tu.GDP + 43 RF2_mono_inact + 43 RF3_mono.GDP_inact + 43 Rrf_mono_inact + 43 b3164_aa + 1 b3164_mRNA_2 + 43 gdp + 43 glu1_tRNA + 129 h + 129 pi + 43 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	1.67E+01	16.65389	0	2.01E+00	2.010314
tl_term_b3165_1_rib1	Translation termination 1 b3165 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3165_1_cplx <==> 1 tl_term_b3165_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	5.44E+01	54.43625
tl_term_b3165_1_rib2	Translation termination 2 b3165 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3165_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b3165_aa + 1 b3165_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	5.44E+01	54.43625
tl_term_b3165_1_rib_RF2_1	Translation termination 1 b3165 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3165_1_cplx <==> 1 tl_term_b3165_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	5.44E+01	54.43625
tl_term_b3165_1_rib_RF2_2	Translation termination 2 b3165 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3165_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b3165_aa + 1 b3165_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	5.44E+01	54.43625
tl_term_b3165_2_rib1	Translation termination 1 b3165 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3165_2_cplx <==> 1 tl_term_b3165_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3165_2_rib2	Translation termination 2 b3165 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3165_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 arg1_tRNA + 2 b3165_aa + 1 b3165_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3165_2_rib_RF2_1	Translation termination 1 b3165 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3165_2_cplx <==> 1 tl_term_b3165_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3165_2_rib_RF2_2	Translation termination 2 b3165 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b3165_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 arg1_tRNA + 2 b3165_aa + 1 b3165_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3165_5_rib1	Translation termination 1 b3165 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3165_5_cplx <==> 1 tl_term_b3165_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3165_5_rib2	Translation termination 2 b3165 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3165_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 arg1_tRNA + 5 b3165_aa + 1 b3165_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3165_5_rib_RF2_1	Translation termination 1 b3165 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3165_5_cplx <==> 1 tl_term_b3165_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3165_5_rib_RF2_2	Translation termination 2 b3165 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3165_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 arg1_tRNA + 5 b3165_aa + 1 b3165_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3166_18_rib1	Translation termination 1 b3166 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b3166_18_cplx <==> 1 tl_term_b3166_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_term_b3166_18_rib2	Translation termination 2 b3166 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b3166_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 ala1_tRNA + 18 b3166_aa + 1 b3166_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_term_b3166_18_rib_RF2_1	Translation termination 1 b3166 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b3166_18_cplx <==> 1 tl_term_b3166_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006

tl_term_b3166_18_rib_RF2_2	Translation termination 2 b3166 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b3166_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 ala1_tRNA + 18 b3166_aa + 1 b3166_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_term_b3166_1_rib1	Translation termination 1 b3166 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3166_1_cplx <==> 1 tl_term_b3166_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_term_b3166_1_rib2	Translation termination 2 b3166 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3166_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3166_aa + 1 b3166_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_term_b3166_1_rib_RF2_1	Translation termination 1 b3166 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3166_1_cplx <==> 1 tl_term_b3166_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_term_b3166_1_rib_RF2_2	Translation termination 2 b3166 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3166_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3166_aa + 1 b3166_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_term_b3166_9_rib1	Translation termination 1 b3166 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3166_9_cplx <==> 1 tl_term_b3166_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_term_b3166_9_rib2	Translation termination 2 b3166 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b3166_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 ala1_tRNA + 9 b3166_aa + 1 b3166_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_term_b3166_9_rib_RF2_1	Translation termination 1 b3166 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3166_9_cplx <==> 1 tl_term_b3166_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_term_b3166_9_rib_RF2_2	Translation termination 2 b3166 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b3166_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 ala1_tRNA + 9 b3166_aa + 1 b3166_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	2.90E+01	29.02946	0	4.01E+00	4.006
tl_term_b3167_1_rib1	Translation termination 1 b3167 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3167_1_cplx <==> 1 tl_term_b3167_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_term_b3167_1_rib2	Translation termination 2 b3167 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3167_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b3167_aa + 1 b3167_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_term_b3167_1_rib_RF2_1	Translation termination 1 b3167 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3167_1_cplx <==> 1 tl_term_b3167_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_term_b3167_1_rib_RF2_2	Translation termination 2 b3167 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3167_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b3167_aa + 1 b3167_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_term_b3167_3_rib1	Translation termination 1 b3167 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3167_3_cplx <==> 1 tl_term_b3167_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_term_b3167_3_rib2	Translation termination 2 b3167 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3167_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 asp1_tRNA + 3 b3167_aa + 1 b3167_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_term_b3167_3_rib_RF2_1	Translation termination 1 b3167 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3167_3_cplx <==> 1 tl_term_b3167_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_term_b3167_3_rib_RF2_2	Translation termination 2 b3167 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3167_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 asp1_tRNA + 3 b3167_aa + 1 b3167_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_term_b3167_7_rib1	Translation termination 1 b3167 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3167_7_cplx <==> 1 tl_term_b3167_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_term_b3167_7_rib2	Translation termination 2 b3167 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3167_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 asp1_tRNA + 7 b3167_aa + 1 b3167_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_term_b3167_7_rib_RF2_1	Translation termination 1 b3167 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3167_7_cplx <==> 1 tl_term_b3167_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_term_b3167_7_rib_RF2_2	Translation termination 2 b3167 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b3167_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 asp1_tRNA + 7 b3167_aa + 1 b3167_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	3.50E+01	34.98946	0	9.97E+00	9.966
tl_term_b3168_1_rib1	Translation termination 1 b3168 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3168_1_cplx <==> 1 tl_term_b3168_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.97E+01	2.97E+01	0	5.26E+01	52.64525	0	9.63E-01	0.9631374
tl_term_b3168_1_rib2	Translation termination 2 b3168 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3168_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3168_aa + 1 b3168_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.97E+01	2.97E+01	0	5.26E+01	52.64525	0	9.63E-01	0.9631374
tl_term_b3168_1_rib_RF2_1	Translation termination 1 b3168 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3168_1_cplx <==> 1 tl_term_b3168_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.97E+01	2.97E+01	0	5.26E+01	52.64525	0	9.63E-01	0.9631374
tl_term_b3168_1_rib_RF2_2	Translation termination 2 b3168 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3168_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3168_aa + 1 b3168_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.97E+01	2.97E+01	0	5.26E+01	52.64525	0	9.63E-01	0.9631374
tl_term_b3168_26_rib1	Translation termination 1 b3168 26 ribosome(s), (RF1_mono)	26 RF1_mono + 26 RF3_mono.GDP + 26 Rrf_mono + 1 rib_70_elo2_b3168_26_cplx <==> 1 tl_term_b3168_26_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.08E+01	3.08E+01	0	5.28E+01	52.82823	0	1.89E+00	1.889231
tl_term_b3168_26_rib2	Translation termination 2 b3168 26 ribosome(s), (RF1_mono)	26 gtp + 52 h2o + 1 tl_term_b3168_26_rib_cplx --> 26 EF-G.GDP + 26 EF-Tu.GDP + 26 RF1_mono_inact + 26 RF3_mono.GDP_inact + 26 Rrf_mono_inact + 26 ala1_tRNA + 26 b3168_aa + 1 b3168_mRNA_2 + 26 gdp + 78 h + 78 pi + 26 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.08E+01	3.08E+01	0	5.28E+01	52.82823	0	1.89E+00	1.889231
tl_term_b3168_26_rib_RF2_1	Translation termination 1 b3168 26 ribosome(s), RF2_mono	26 RF2_mono + 26 RF3_mono.GDP + 26 Rrf_mono + 1 rib_70_elo2_b3168_26_cplx <==> 1 tl_term_b3168_26_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.08E+01	3.08E+01	0	5.28E+01	52.82823	0	1.89E+00	1.889231
tl_term_b3168_26_rib_RF2_2	Translation termination 2 b3168 26 ribosome(s), RF2	26 gtp + 52 h2o + 1 tl_term_b3168_26_rib_cplx2 --> 26 EF-G.GDP + 26 EF-Tu.GDP + 26 RF2_mono_inact + 26 RF3_mono.GDP_inact + 26 Rrf_mono_inact + 26 ala1_tRNA + 26 b3168_aa + 1 b3168_mRNA_2 + 26 gdp + 78 h + 78 pi + 26 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.08E+01	3.08E+01	0	5.28E+01	52.82823	0	1.89E+00	1.889231
tl_term_b3168_52_rib1	Translation termination 1 b3168 52 ribosome(s), (RF1_mono)	52 RF1_mono + 52 RF3_mono.GDP + 52 Rrf_mono + 1 rib_70_elo2_b3168_52_cplx <==> 1 tl_term_b3168_52_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.08E+01	3.08E+01	0	3.90E+01	39.00161	0	2.14E+00	2.14
tl_term_b3168_52_rib2	Translation termination 2 b3168 52 ribosome(s), (RF1_mono)	52 gtp + 104 h2o + 1 tl_term_b3168_52_rib_cplx --> 52 EF-G.GDP + 52 EF-Tu.GDP + 52 RF1_mono_inact + 52 RF3_mono.GDP_inact + 52 Rrf_mono_inact + 52 ala1_tRNA + 52 b3168_aa + 1 b3168_mRNA_2 + 52 gdp + 156 h + 156 pi + 52 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.08E+01	3.08E+01	0	3.90E+01	39.00161	0	2.14E+00	2.14

tl_term_b3168_52_rib_RF2_1	Translation termination 1 b3168 52 ribosome(s), RF2_mono	52 RF2_mono + 52 RF3_mono.GDP + 52 Rrf_mono + 1 rib_70_elo2_b3168_52_cplx <==> 1 tl_term_b3168_52_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.08E+01	3.08E+01	0	3.90E+01	39.00161	0	2.14E+00	2.14
tl_term_b3168_52_rib_RF2_2	Translation termination 2 b3168 52 ribosome(s), RF2	52 gtp + 104 h2o + 1 tl_term_b3168_52_rib_cplx2 --> 52 EF-G.GDP + 52 EF-Tu.GDP + 52 RF2_mono_inact + 52 RF3_mono.GDP_inact + 52 Rrf_mono_inact + 52 ala1_tRNA + 52 b3168_aa + 1 b3168_mRNA_2 + 52 gdp + 156 h + 156 pi + 52 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.08E+01	3.08E+01	0	3.90E+01	39.00161	0	2.14E+00	2.14
tl_term_b3169_14_rib1	Translation termination 1 b3169 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b3169_14_cplx <==> 1 tl_term_b3169_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_term_b3169_14_rib2	Translation termination 2 b3169 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b3169_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 ala1_tRNA + 14 b3169_aa + 1 b3169_mRNA_2 + 14 gdp + 42 h + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_term_b3169_14_rib_RF2_1	Translation termination 1 b3169 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b3169_14_cplx <==> 1 tl_term_b3169_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_term_b3169_14_rib_RF2_2	Translation termination 2 b3169 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b3169_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 ala1_tRNA + 14 b3169_aa + 1 b3169_mRNA_2 + 14 gdp + 42 h + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_term_b3169_1_rib1	Translation termination 1 b3169 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3169_1_cplx <==> 1 tl_term_b3169_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_term_b3169_1_rib2	Translation termination 2 b3169 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3169_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3169_aa + 1 b3169_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_term_b3169_1_rib_RF2_1	Translation termination 1 b3169 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3169_1_cplx <==> 1 tl_term_b3169_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_term_b3169_1_rib_RF2_2	Translation termination 2 b3169 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3169_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3169_aa + 1 b3169_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_term_b3169_29_rib1	Translation termination 1 b3169 29 ribosome(s), (RF1_mono)	29 RF1_mono + 29 RF3_mono.GDP + 29 Rrf_mono + 1 rib_70_elo2_b3169_29_cplx <==> 1 tl_term_b3169_29_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_term_b3169_29_rib2	Translation termination 2 b3169 29 ribosome(s), (RF1_mono)	29 gtp + 58 h2o + 1 tl_term_b3169_29_rib_cplx --> 29 EF-G.GDP + 29 EF-Tu.GDP + 29 RF1_mono_inact + 29 RF3_mono.GDP_inact + 29 Rrf_mono_inact + 29 ala1_tRNA + 29 b3169_aa + 1 b3169_mRNA_2 + 29 gdp + 87 h + 87 pi + 29 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_term_b3169_29_rib_RF2_1	Translation termination 1 b3169 29 ribosome(s), RF2_mono	29 RF2_mono + 29 RF3_mono.GDP + 29 Rrf_mono + 1 rib_70_elo2_b3169_29_cplx <==> 1 tl_term_b3169_29_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_term_b3169_29_rib_RF2_2	Translation termination 2 b3169 29 ribosome(s), RF2	29 gtp + 58 h2o + 1 tl_term_b3169_29_rib_cplx2 --> 29 EF-G.GDP + 29 EF-Tu.GDP + 29 RF2_mono_inact + 29 RF3_mono.GDP_inact + 29 Rrf_mono_inact + 29 ala1_tRNA + 29 b3169_aa + 1 b3169_mRNA_2 + 29 gdp + 87 h + 87 pi + 29 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.14E+01	3.14E+01	0	5.35E+01	53.47823	0	2.79E+00	2.79
tl_term_b3170_1_rib1	Translation termination 1 b3170 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3170_1_cplx <==> 1 tl_term_b3170_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_term_b3170_1_rib2	Translation termination 2 b3170 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3170_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3170_aa + 1 b3170_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_term_b3170_1_rib_RF2_1	Translation termination 1 b3170 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3170_1_cplx <==> 1 tl_term_b3170_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_term_b3170_1_rib_RF2_2	Translation termination 2 b3170 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3170_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3170_aa + 1 b3170_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_term_b3170_4_rib1	Translation termination 1 b3170 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3170_4_cplx <==> 1 tl_term_b3170_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_term_b3170_4_rib2	Translation termination 2 b3170 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3170_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3170_aa + 1 b3170_mRNA_2 + 4 gdp + 12 h + 4 phe1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_term_b3170_4_rib_RF2_1	Translation termination 1 b3170 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3170_4_cplx <==> 1 tl_term_b3170_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_term_b3170_4_rib_RF2_2	Translation termination 2 b3170 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3170_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3170_aa + 1 b3170_mRNA_2 + 4 gdp + 12 h + 4 phe1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_term_b3170_8_rib1	Translation termination 1 b3170 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3170_8_cplx <==> 1 tl_term_b3170_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_term_b3170_8_rib2	Translation termination 2 b3170 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3170_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3170_aa + 1 b3170_mRNA_2 + 8 gdp + 24 h + 8 phe1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_term_b3170_8_rib_RF2_1	Translation termination 1 b3170 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3170_8_cplx <==> 1 tl_term_b3170_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_term_b3170_8_rib_RF2_2	Translation termination 2 b3170 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b3170_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3170_aa + 1 b3170_mRNA_2 + 8 gdp + 24 h + 8 phe1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.87E+01	3.87E+01	0	6.08E+01	60.78823	0	1.01E+01	10.1
tl_term_b3178_18_rib1	Translation termination 1 b3178 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b3178_18_cplx <==> 1 tl_term_b3178_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_term_b3178_18_rib2	Translation termination 2 b3178 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b3178_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b3178_aa + 1 b3178_mRNA_2 + 18 gdp + 54 h + 18 lys1_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_term_b3178_18_rib_RF2_1	Translation termination 1 b3178 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b3178_18_cplx <==> 1 tl_term_b3178_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_term_b3178_18_rib_RF2_2	Translation termination 2 b3178 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b3178_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b3178_aa + 1 b3178_mRNA_2 + 18 gdp + 54 h + 18 lys1_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_term_b3178_1_rib1	Translation termination 1 b3178 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3178_1_cplx <==> 1 tl_term_b3178_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565

tl_term_b3178_1_rib2	Translation termination 2 b3178 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3178_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3178_aa + 1 b3178_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_term_b3178_1_rib_RF2_1	Translation termination 1 b3178 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3178_1_cplx <==> 1 tl_term_b3178_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_term_b3178_1_rib_RF2_2	Translation termination 2 b3178 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3178_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3178_aa + 1 b3178_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_term_b3178_37_rib1	Translation termination 1 b3178 37 ribosome(s), (RF1_mono)	37 RF1_mono + 37 RF3_mono.GDP + 37 Rrf_mono + 1 rib_70_elo2_b3178_37_cplx <==> 1 tl_term_b3178_37_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_term_b3178_37_rib2	Translation termination 2 b3178 37 ribosome(s), (RF1_mono)	37 gtp + 74 h2o + 1 tl_term_b3178_37_rib_cplx --> 37 EF-G.GDP + 37 EF-Tu.GDP + 37 RF1_mono_inact + 37 RF3_mono.GDP_inact + 37 Rrf_mono_inact + 37 b3178_aa + 1 b3178_mRNA_2 + 37 gdp + 111 h + 37 lys1_tRNA + 111 pi + 37 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_term_b3178_37_rib_RF2_1	Translation termination 1 b3178 37 ribosome(s), RF2_mono	37 RF2_mono + 37 RF3_mono.GDP + 37 Rrf_mono + 1 rib_70_elo2_b3178_37_cplx <==> 1 tl_term_b3178_37_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_term_b3178_37_rib_RF2_2	Translation termination 2 b3178 37 ribosome(s), RF2	37 gtp + 74 h2o + 1 tl_term_b3178_37_rib_cplx2 --> 37 EF-G.GDP + 37 EF-Tu.GDP + 37 RF2_mono_inact + 37 RF3_mono.GDP_inact + 37 Rrf_mono_inact + 37 b3178_aa + 1 b3178_mRNA_2 + 37 gdp + 111 h + 37 lys1_tRNA + 111 pi + 37 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.32E+01	5.32E+01	0	9.21E+01	92.09642	0	2.57E+00	2.565
tl_term_b3179_12_rib1	Translation termination 1 b3179 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3179_12_cplx <==> 1 tl_term_b3179_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_term_b3179_12_rib2	Translation termination 2 b3179 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b3179_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b3179_aa + 1 b3179_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 proL_tRNA + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_term_b3179_12_rib_RF2_1	Translation termination 1 b3179 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3179_12_cplx <==> 1 tl_term_b3179_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_term_b3179_12_rib_RF2_2	Translation termination 2 b3179 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b3179_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b3179_aa + 1 b3179_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 proL_tRNA + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_term_b3179_1_rib1	Translation termination 1 b3179 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3179_1_cplx <==> 1 tl_term_b3179_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_term_b3179_1_rib2	Translation termination 2 b3179 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3179_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3179_aa + 1 b3179_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 proL_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_term_b3179_1_rib_RF2_1	Translation termination 1 b3179 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3179_1_cplx <==> 1 tl_term_b3179_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_term_b3179_1_rib_RF2_2	Translation termination 2 b3179 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3179_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3179_aa + 1 b3179_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 proL_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_term_b3179_6_rib1	Translation termination 1 b3179 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3179_6_cplx <==> 1 tl_term_b3179_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_term_b3179_6_rib2	Translation termination 2 b3179 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3179_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3179_aa + 1 b3179_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 proL_tRNA + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_term_b3179_6_rib_RF2_1	Translation termination 1 b3179 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3179_6_cplx <==> 1 tl_term_b3179_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_term_b3179_6_rib_RF2_2	Translation termination 2 b3179 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b3179_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3179_aa + 1 b3179_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 proL_tRNA + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.02E+01	6.02E+01	0	9.91E+01	99.14642	0	9.62E+00	9.615
tl_term_b3181_1_rib1	Translation termination 1 b3181 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3181_1_cplx <==> 1 tl_term_b3181_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_term_b3181_1_rib2	Translation termination 2 b3181 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3181_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3181_aa + 1 b3181_mRNA_2 + 1 gdp + 3 h + 1 leu1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_term_b3181_1_rib_RF2_1	Translation termination 1 b3181 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3181_1_cplx <==> 1 tl_term_b3181_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_term_b3181_1_rib_RF2_2	Translation termination 2 b3181 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3181_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3181_aa + 1 b3181_mRNA_2 + 1 gdp + 3 h + 1 leu1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_term_b3181_4_rib1	Translation termination 1 b3181 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3181_4_cplx <==> 1 tl_term_b3181_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_term_b3181_4_rib2	Translation termination 2 b3181 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3181_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3181_aa + 1 b3181_mRNA_2 + 4 gdp + 12 h + 4 leu1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_term_b3181_4_rib_RF2_1	Translation termination 1 b3181 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3181_4_cplx <==> 1 tl_term_b3181_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_term_b3181_4_rib_RF2_2	Translation termination 2 b3181 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3181_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3181_aa + 1 b3181_mRNA_2 + 4 gdp + 12 h + 4 leu1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_term_b3181_9_rib1	Translation termination 1 b3181 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3181_9_cplx <==> 1 tl_term_b3181_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_term_b3181_9_rib2	Translation termination 2 b3181 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b3181_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b3181_aa + 1 b3181_mRNA_2 + 9 gdp + 27 h + 9 leu1_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_term_b3181_9_rib_RF2_1	Translation termination 1 b3181 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3181_9_cplx <==> 1 tl_term_b3181_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245
tl_term_b3181_9_rib_RF2_2	Translation termination 2 b3181 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b3181_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b3181_aa + 1 b3181_mRNA_2 + 9 gdp + 27 h + 9 leu1_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.17E+02	3.17E+02	0	5.52E+02	552.1115	0	1.02E+01	10.245

tl_term_b3185_1_rib1	Translation termination 1 b3185 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3185_1_cplx <==> 1 tl_term_b3185_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	2.63E+01	26.25875
tl_term_b3185_1_rib2	Translation termination 2 b3185 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3185_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3185_aa + 1 b3185_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	2.63E+01	26.25875
tl_term_b3185_1_rib_RF2_1	Translation termination 1 b3185 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3185_1_cplx <==> 1 tl_term_b3185_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	2.63E+01	26.25875
tl_term_b3185_1_rib_RF2_2	Translation termination 2 b3185 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3185_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3185_aa + 1 b3185_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	2.63E+01	26.25875
tl_term_b3185_2_rib1	Translation termination 1 b3185 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3185_2_cplx <==> 1 tl_term_b3185_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.51E+01	5.51E+01	0	4.14E+01	41.44	0	3.34E+01	33.439
tl_term_b3185_2_rib2	Translation termination 2 b3185 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3185_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3185_aa + 1 b3185_mRNA_2 + 2 gdp + 2 glu1_tRNA + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.51E+01	5.51E+01	0	4.14E+01	41.44	0	3.34E+01	33.439
tl_term_b3185_2_rib_RF2_1	Translation termination 1 b3185 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3185_2_cplx <==> 1 tl_term_b3185_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.51E+01	5.51E+01	0	4.14E+01	41.44	0	3.34E+01	33.439
tl_term_b3185_2_rib_RF2_2	Translation termination 2 b3185 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b3185_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3185_aa + 1 b3185_mRNA_2 + 2 gdp + 2 glu1_tRNA + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.51E+01	5.51E+01	0	4.14E+01	41.44	0	3.34E+01	33.439
tl_term_b3185_5_rib1	Translation termination 1 b3185 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3185_5_cplx <==> 1 tl_term_b3185_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3185_5_rib2	Translation termination 2 b3185 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3185_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3185_aa + 1 b3185_mRNA_2 + 5 gdp + 5 glu1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3185_5_rib_RF2_1	Translation termination 1 b3185 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3185_5_cplx <==> 1 tl_term_b3185_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3185_5_rib_RF2_2	Translation termination 2 b3185 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3185_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3185_aa + 1 b3185_mRNA_2 + 5 gdp + 5 glu1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3186_1_rib1	Translation termination 1 b3186 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3186_1_cplx <==> 1 tl_term_b3186_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	3.71E+01	37.0548
tl_term_b3186_1_rib2	Translation termination 2 b3186 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3186_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala2_tRNA + 1 b3186_aa + 1 b3186_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	3.71E+01	37.0548
tl_term_b3186_1_rib_RF2_1	Translation termination 1 b3186 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3186_1_cplx <==> 1 tl_term_b3186_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	3.71E+01	37.0548
tl_term_b3186_1_rib_RF2_2	Translation termination 2 b3186 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3186_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala2_tRNA + 1 b3186_aa + 1 b3186_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	3.71E+01	37.0548
tl_term_b3186_3_rib1	Translation termination 1 b3186 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3186_3_cplx <==> 1 tl_term_b3186_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3186_3_rib2	Translation termination 2 b3186 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3186_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 ala2_tRNA + 3 b3186_aa + 1 b3186_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3186_3_rib_RF2_1	Translation termination 1 b3186 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3186_3_cplx <==> 1 tl_term_b3186_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3186_3_rib_RF2_2	Translation termination 2 b3186 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3186_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 ala2_tRNA + 3 b3186_aa + 1 b3186_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3186_6_rib1	Translation termination 1 b3186 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3186_6_cplx <==> 1 tl_term_b3186_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3186_6_rib2	Translation termination 2 b3186 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3186_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 ala2_tRNA + 6 b3186_aa + 1 b3186_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3186_6_rib_RF2_1	Translation termination 1 b3186 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3186_6_cplx <==> 1 tl_term_b3186_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3186_6_rib_RF2_2	Translation termination 2 b3186 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b3186_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 ala2_tRNA + 6 b3186_aa + 1 b3186_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3201_14_rib1	Translation termination 1 b3201 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b3201_14_cplx <==> 1 tl_term_b3201_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007
tl_term_b3201_14_rib2	Translation termination 2 b3201 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b3201_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b3201_aa + 1 b3201_mRNA_2 + 14 gdp + 42 h + 14 leuU_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007
tl_term_b3201_1_rib1	Translation termination 1 b3201 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3201_1_cplx <==> 1 tl_term_b3201_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007
tl_term_b3201_1_rib2	Translation termination 2 b3201 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3201_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3201_aa + 1 b3201_mRNA_2 + 1 gdp + 3 h + 1 leuU_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007
tl_term_b3201_7_rib1	Translation termination 1 b3201 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3201_7_cplx <==> 1 tl_term_b3201_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007
tl_term_b3201_7_rib2	Translation termination 2 b3201 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3201_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3201_aa + 1 b3201_mRNA_2 + 7 gdp + 21 h + 7 leuU_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.62E+01	3.62E+01	0	5.95E+01	59.54604	0	6.01E+00	6.007
tl_term_b3202_14_rib1	Translation termination 1 b3202 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b3202_14_cplx <==> 1 tl_term_b3202_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917
tl_term_b3202_14_rib2	Translation termination 2 b3202 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b3202_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b3202_aa + 1 b3202_mRNA_2 + 14 gdp + 42 h + 42 pi + 14 rib_70 + 14 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917

tl_term_b3202_1_rib1	Translation termination 1 b3202 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3202_1_cplx <==> 1 tl_term_b3202_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917
tl_term_b3202_1_rib2	Translation termination 2 b3202 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3202_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3202_aa + 1 b3202_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917
tl_term_b3202_28_rib1	Translation termination 1 b3202 28 ribosome(s), (RF1_mono)	28 RF1_mono + 28 RF3_mono.GDP + 28 Rrf_mono + 1 rib_70_elo2_b3202_28_cplx <==> 1 tl_term_b3202_28_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917
tl_term_b3202_28_rib2	Translation termination 2 b3202 28 ribosome(s), (RF1_mono)	28 gtp + 56 h2o + 1 tl_term_b3202_28_rib_cplx --> 28 EF-G.GDP + 28 EF-Tu.GDP + 28 RF1_mono_inact + 28 RF3_mono.GDP_inact + 28 Rrf_mono_inact + 28 b3202_aa + 1 b3202_mRNA_2 + 28 gdp + 84 h + 84 pi + 28 rib_70 + 28 val3_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.51E+02	151.3006	0	3.92E+00	3.917
tl_term_b3203_1_rib1	Translation termination 1 b3203 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3203_1_cplx <==> 1 tl_term_b3203_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_term_b3203_1_rib2	Translation termination 2 b3203 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3203_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3203_aa + 1 b3203_mRNA_2 + 1 gdp + 3 h + 1 hisR_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_term_b3203_1_rib_RF2_1	Translation termination 1 b3203 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3203_1_cplx <==> 1 tl_term_b3203_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_term_b3203_1_rib_RF2_2	Translation termination 2 b3203 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3203_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3203_aa + 1 b3203_mRNA_2 + 1 gdp + 3 h + 1 hisR_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_term_b3203_2_rib1	Translation termination 1 b3203 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3203_2_cplx <==> 1 tl_term_b3203_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_term_b3203_2_rib2	Translation termination 2 b3203 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3203_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3203_aa + 1 b3203_mRNA_2 + 2 gdp + 6 h + 2 hisR_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_term_b3203_2_rib_RF2_1	Translation termination 1 b3203 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3203_2_cplx <==> 1 tl_term_b3203_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_term_b3203_2_rib_RF2_2	Translation termination 2 b3203 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b3203_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3203_aa + 1 b3203_mRNA_2 + 2 gdp + 6 h + 2 hisR_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_term_b3203_5_rib1	Translation termination 1 b3203 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3203_5_cplx <==> 1 tl_term_b3203_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_term_b3203_5_rib2	Translation termination 2 b3203 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3203_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3203_aa + 1 b3203_mRNA_2 + 5 gdp + 15 h + 5 hisR_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_term_b3203_5_rib_RF2_1	Translation termination 1 b3203 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3203_5_cplx <==> 1 tl_term_b3203_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_term_b3203_5_rib_RF2_2	Translation termination 2 b3203 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3203_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3203_aa + 1 b3203_mRNA_2 + 5 gdp + 15 h + 5 hisR_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	9.56E+01	95.56052	0	3.36E+01	33.607
tl_term_b3204_1_rib1	Translation termination 1 b3204 1 ribosome(s), (RF2_mono)	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3204_1_cplx <==> 1 tl_term_b3204_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607
tl_term_b3204_1_rib2	Translation termination 2 b3204 1 ribosome(s), (RF2_mono)	1 gtp + 2 h2o + 1 tl_term_b3204_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3204_aa + 1 b3204_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607
tl_term_b3204_4_rib1	Translation termination 1 b3204 4 ribosome(s), (RF2_mono)	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3204_4_cplx <==> 1 tl_term_b3204_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607
tl_term_b3204_4_rib2	Translation termination 2 b3204 4 ribosome(s), (RF2_mono)	4 gtp + 8 h2o + 1 tl_term_b3204_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 ala1_tRNA + 4 b3204_aa + 1 b3204_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607
tl_term_b3204_9_rib1	Translation termination 1 b3204 9 ribosome(s), (RF2_mono)	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3204_9_cplx <==> 1 tl_term_b3204_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607
tl_term_b3204_9_rib2	Translation termination 2 b3204 9 ribosome(s), (RF2_mono)	9 gtp + 18 h2o + 1 tl_term_b3204_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 ala1_tRNA + 9 b3204_aa + 1 b3204_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.06E+01	5.06E+01	0	7.76E+01	77.56052	0	1.56E+01	15.607
tl_term_b3205_16_rib1	Translation termination 1 b3205 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b3205_16_cplx <==> 1 tl_term_b3205_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087
tl_term_b3205_16_rib2	Translation termination 2 b3205 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b3205_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b3205_aa + 1 b3205_mRNA_2 + 16 gdp + 48 h + 48 pi + 16 proM_tRNA + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087
tl_term_b3205_1_rib1	Translation termination 1 b3205 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3205_1_cplx <==> 1 tl_term_b3205_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087
tl_term_b3205_1_rib2	Translation termination 2 b3205 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3205_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3205_aa + 1 b3205_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 proM_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087
tl_term_b3205_8_rib1	Translation termination 1 b3205 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3205_8_cplx <==> 1 tl_term_b3205_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087
tl_term_b3205_8_rib2	Translation termination 2 b3205 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3205_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3205_aa + 1 b3205_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 proM_tRNA + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.00E+01	70.04052	0	8.09E+00	8.087
tl_term_b3206_1_rib1	Translation termination 1 b3206 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3206_1_cplx <==> 1 tl_term_b3206_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_term_b3206_1_rib2	Translation termination 2 b3206 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3206_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b3206_aa + 1 b3206_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_term_b3206_1_rib_RF2_1	Translation termination 1 b3206 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3206_1_cplx <==> 1 tl_term_b3206_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_term_b3206_1_rib_RF2_2	Translation termination 2 b3206 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3206_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b3206_aa + 1 b3206_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007

tl_term_b3206_2_rib1	Translation termination 1 b3206 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3206_2_cplx <==> 1 tl_term_b3206_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_term_b3206_2_rib2	Translation termination 2 b3206 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3206_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 asp1_tRNA + 2 b3206_aa + 1 b3206_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_term_b3206_2_rib_RF2_1	Translation termination 1 b3206 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3206_2_cplx <==> 1 tl_term_b3206_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_term_b3206_2_rib_RF2_2	Translation termination 2 b3206 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b3206_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 asp1_tRNA + 2 b3206_aa + 1 b3206_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_term_b3206_5_rib1	Translation termination 1 b3206 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3206_5_cplx <==> 1 tl_term_b3206_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_term_b3206_5_rib2	Translation termination 2 b3206 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3206_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 asp1_tRNA + 5 b3206_aa + 1 b3206_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_term_b3206_5_rib_RF2_1	Translation termination 1 b3206 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3206_5_cplx <==> 1 tl_term_b3206_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_term_b3206_5_rib_RF2_2	Translation termination 2 b3206 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3206_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 asp1_tRNA + 5 b3206_aa + 1 b3206_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.70E+01	5.70E+01	0	8.40E+01	83.96052	0	2.20E+01	22.007
tl_term_b3230_1_rib1	Translation termination 1 b3230 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3230_1_cplx <==> 1 tl_term_b3230_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.88E+01	9.88E+01	0	8.29E+01	82.88	0	1.95E+01	19.46933
tl_term_b3230_1_rib2	Translation termination 2 b3230 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3230_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b3230_aa + 1 b3230_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.88E+01	9.88E+01	0	8.29E+01	82.88	0	1.95E+01	19.46933
tl_term_b3230_1_rib_RF2_1	Translation termination 1 b3230 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3230_1_cplx <==> 1 tl_term_b3230_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.88E+01	9.88E+01	0	8.29E+01	82.88	0	1.95E+01	19.46933
tl_term_b3230_1_rib_RF2_2	Translation termination 2 b3230 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3230_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b3230_aa + 1 b3230_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.88E+01	9.88E+01	0	8.29E+01	82.88	0	1.95E+01	19.46933
tl_term_b3230_3_rib1	Translation termination 1 b3230 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3230_3_cplx <==> 1 tl_term_b3230_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.68E+01	3.68E+01	0	2.76E+01	27.62667	0	2.56E+01	25.568
tl_term_b3230_3_rib2	Translation termination 2 b3230 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3230_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 arg1_tRNA + 3 b3230_aa + 1 b3230_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.68E+01	3.68E+01	0	2.76E+01	27.62667	0	2.56E+01	25.568
tl_term_b3230_3_rib_RF2_1	Translation termination 1 b3230 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3230_3_cplx <==> 1 tl_term_b3230_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.68E+01	3.68E+01	0	2.76E+01	27.62667	0	2.56E+01	25.568
tl_term_b3230_3_rib_RF2_2	Translation termination 2 b3230 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3230_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 arg1_tRNA + 3 b3230_aa + 1 b3230_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.68E+01	3.68E+01	0	2.76E+01	27.62667	0	2.56E+01	25.568
tl_term_b3230_7_rib1	Translation termination 1 b3230 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3230_7_cplx <==> 1 tl_term_b3230_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3230_7_rib2	Translation termination 2 b3230 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3230_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 arg1_tRNA + 7 b3230_aa + 1 b3230_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3230_7_rib_RF2_1	Translation termination 1 b3230 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3230_7_cplx <==> 1 tl_term_b3230_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3230_7_rib_RF2_2	Translation termination 2 b3230 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b3230_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 arg1_tRNA + 7 b3230_aa + 1 b3230_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3231_1_rib1	Translation termination 1 b3231 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3231_1_cplx <==> 1 tl_term_b3231_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.07E+01	60.68343
tl_term_b3231_1_rib2	Translation termination 2 b3231 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3231_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3231_aa + 1 b3231_mRNA_2 + 1 gdp + 3 h + 1 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.07E+01	60.68343
tl_term_b3231_1_rib_RF2_1	Translation termination 1 b3231 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3231_1_cplx <==> 1 tl_term_b3231_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.07E+01	60.68343
tl_term_b3231_1_rib_RF2_2	Translation termination 2 b3231 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3231_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3231_aa + 1 b3231_mRNA_2 + 1 gdp + 3 h + 1 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.07E+01	60.68343
tl_term_b3231_4_rib1	Translation termination 1 b3231 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3231_4_cplx <==> 1 tl_term_b3231_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3231_4_rib2	Translation termination 2 b3231 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3231_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3231_aa + 1 b3231_mRNA_2 + 4 gdp + 12 h + 4 ile1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3231_4_rib_RF2_1	Translation termination 1 b3231 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3231_4_cplx <==> 1 tl_term_b3231_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3231_4_rib_RF2_2	Translation termination 2 b3231 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3231_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3231_aa + 1 b3231_mRNA_2 + 4 gdp + 12 h + 4 ile1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3231_8_rib1	Translation termination 1 b3231 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3231_8_cplx <==> 1 tl_term_b3231_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3231_8_rib2	Translation termination 2 b3231 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3231_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3231_aa + 1 b3231_mRNA_2 + 8 gdp + 24 h + 8 ile1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3231_8_rib_RF2_1	Translation termination 1 b3231 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3231_8_cplx <==> 1 tl_term_b3231_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3231_8_rib_RF2_2	Translation termination 2 b3231 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b3231_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3231_aa + 1 b3231_mRNA_2 + 8 gdp + 24 h + 8 ile1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3247_14_rib1	Translation termination 1 b3247 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b3247_14_cplx <==> 1 tl_term_b3247_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774

tl_term_b3247_14_rib2	Translation termination 2 b3247 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b3247_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b3247_aa + 1 b3247_mRNA_2 + 14 gdp + 42 h + 14 met1_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_term_b3247_14_rib_RF2_1	Translation termination 1 b3247 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b3247_14_cplx <==> 1 tl_term_b3247_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_term_b3247_14_rib_RF2_2	Translation termination 2 b3247 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b3247_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b3247_aa + 1 b3247_mRNA_2 + 14 gdp + 42 h + 14 met1_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_term_b3247_1_rib1	Translation termination 1 b3247 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3247_1_cplx <==> 1 tl_term_b3247_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_term_b3247_1_rib2	Translation termination 2 b3247 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3247_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3247_aa + 1 b3247_mRNA_2 + 1 gdp + 3 h + 1 met1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_term_b3247_1_rib_RF2_1	Translation termination 1 b3247 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3247_1_cplx <==> 1 tl_term_b3247_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_term_b3247_1_rib_RF2_2	Translation termination 2 b3247 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3247_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3247_aa + 1 b3247_mRNA_2 + 1 gdp + 3 h + 1 met1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_term_b3247_28_rib1	Translation termination 1 b3247 28 ribosome(s), (RF1_mono)	28 RF1_mono + 28 RF3_mono.GDP + 28 Rrf_mono + 1 rib_70_elo2_b3247_28_cplx <==> 1 tl_term_b3247_28_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_term_b3247_28_rib2	Translation termination 2 b3247 28 ribosome(s), (RF1_mono)	28 gtp + 56 h2o + 1 tl_term_b3247_28_rib_cplx --> 28 EF-G.GDP + 28 EF-Tu.GDP + 28 RF1_mono_inact + 28 RF3_mono.GDP_inact + 28 Rrf_mono_inact + 28 b3247_aa + 1 b3247_mRNA_2 + 28 gdp + 84 h + 28 met1_tRNA + 84 pi + 28 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_term_b3247_28_rib_RF2_1	Translation termination 1 b3247 28 ribosome(s), RF2_mono	28 RF2_mono + 28 RF3_mono.GDP + 28 Rrf_mono + 1 rib_70_elo2_b3247_28_cplx <==> 1 tl_term_b3247_28_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_term_b3247_28_rib_RF2_2	Translation termination 2 b3247 28 ribosome(s), RF2	28 gtp + 56 h2o + 1 tl_term_b3247_28_rib_cplx2 --> 28 EF-G.GDP + 28 EF-Tu.GDP + 28 RF2_mono_inact + 28 RF3_mono.GDP_inact + 28 Rrf_mono_inact + 28 b3247_aa + 1 b3247_mRNA_2 + 28 gdp + 84 h + 28 met1_tRNA + 84 pi + 28 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.02E+01	3.02E+01	0	5.14E+01	51.35704	0	2.77E+00	2.774
tl_term_b3248_11_rib1	Translation termination 1 b3248 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b3248_11_cplx <==> 1 tl_term_b3248_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734
tl_term_b3248_11_rib2	Translation termination 2 b3248 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b3248_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b3248_aa + 1 b3248_mRNA_2 + 11 gdp + 11 gly1_tRNA + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734
tl_term_b3248_1_rib1	Translation termination 1 b3248 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3248_1_cplx <==> 1 tl_term_b3248_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734
tl_term_b3248_1_rib2	Translation termination 2 b3248 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3248_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3248_aa + 1 b3248_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734
tl_term_b3248_5_rib1	Translation termination 1 b3248 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3248_5_cplx <==> 1 tl_term_b3248_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734
tl_term_b3248_5_rib2	Translation termination 2 b3248 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3248_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3248_aa + 1 b3248_mRNA_2 + 5 gdp + 5 gly1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	5.53E+01	55.31704	0	6.73E+00	6.734
tl_term_b3249_1_rib1	Translation termination 1 b3249 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3249_1_cplx <==> 1 tl_term_b3249_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_term_b3249_1_rib2	Translation termination 2 b3249 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3249_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3249_aa + 1 b3249_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_term_b3249_1_rib_RF2_1	Translation termination 1 b3249 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3249_1_cplx <==> 1 tl_term_b3249_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_term_b3249_1_rib_RF2_2	Translation termination 2 b3249 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3249_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3249_aa + 1 b3249_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_term_b3249_4_rib1	Translation termination 1 b3249 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3249_4_cplx <==> 1 tl_term_b3249_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_term_b3249_4_rib2	Translation termination 2 b3249 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3249_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3249_aa + 1 b3249_mRNA_2 + 4 gdp + 4 gln2_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_term_b3249_4_rib_RF2_1	Translation termination 1 b3249 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3249_4_cplx <==> 1 tl_term_b3249_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_term_b3249_4_rib_RF2_2	Translation termination 2 b3249 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3249_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3249_aa + 1 b3249_mRNA_2 + 4 gdp + 4 gln2_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_term_b3249_9_rib1	Translation termination 1 b3249 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3249_9_cplx <==> 1 tl_term_b3249_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_term_b3249_9_rib2	Translation termination 2 b3249 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b3249_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b3249_aa + 1 b3249_mRNA_2 + 9 gdp + 9 gln2_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_term_b3249_9_rib_RF2_1	Translation termination 1 b3249 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3249_9_cplx <==> 1 tl_term_b3249_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_term_b3249_9_rib_RF2_2	Translation termination 2 b3249 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b3249_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b3249_aa + 1 b3249_mRNA_2 + 9 gdp + 9 gln2_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.74E+01	3.74E+01	0	5.85E+01	58.47704	0	9.89E+00	9.894
tl_term_b3250_10_rib1	Translation termination 1 b3250 10 ribosome(s), (RF2_mono)	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3250_10_cplx <==> 1 tl_term_b3250_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404
tl_term_b3250_10_rib2	Translation termination 2 b3250 10 ribosome(s), (RF2_mono)	10 gtp + 20 h2o + 1 tl_term_b3250_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b3250_aa + 1 b3250_mRNA_2 + 10 gdp + 10 gln2_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404

tl_term_b3250_1_rib1	Translation termination 1 b3250 1 ribosome(s), (RF2_mono)	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3250_1_cplx <==> 1 tl_term_b3250_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404
tl_term_b3250_1_rib2	Translation termination 2 b3250 1 ribosome(s), (RF2_mono)	1 gtp + 2 h2o + 1 tl_term_b3250_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3250_aa + 1 b3250_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404
tl_term_b3250_21_rib1	Translation termination 1 b3250 21 ribosome(s), (RF2_mono)	21 RF2_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b3250_21_cplx <==> 1 tl_term_b3250_21_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404
tl_term_b3250_21_rib2	Translation termination 2 b3250 21 ribosome(s), (RF2_mono)	21 gtp + 42 h2o + 1 tl_term_b3250_21_rib_cplx --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF2_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 b3250_aa + 1 b3250_mRNA_2 + 21 gdp + 21 gln2_tRNA + 63 h + 63 pi + 21 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.09E+01	3.09E+01	0	5.20E+01	51.98704	0	3.40E+00	3.404
tl_term_b3251_10_rib1	Translation termination 1 b3251 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3251_10_cplx <==> 1 tl_term_b3251_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_term_b3251_10_rib2	Translation termination 2 b3251 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b3251_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b3251_aa + 1 b3251_mRNA_2 + 10 gdp + 10 glu1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_term_b3251_10_rib_RF2_1	Translation termination 1 b3251 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3251_10_cplx <==> 1 tl_term_b3251_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_term_b3251_10_rib_RF2_2	Translation termination 2 b3251 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b3251_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b3251_aa + 1 b3251_mRNA_2 + 10 gdp + 10 glu1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_term_b3251_1_rib1	Translation termination 1 b3251 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3251_1_cplx <==> 1 tl_term_b3251_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_term_b3251_1_rib2	Translation termination 2 b3251 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3251_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3251_aa + 1 b3251_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_term_b3251_1_rib_RF2_1	Translation termination 1 b3251 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3251_1_cplx <==> 1 tl_term_b3251_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_term_b3251_1_rib_RF2_2	Translation termination 2 b3251 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3251_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3251_aa + 1 b3251_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_term_b3251_20_rib1	Translation termination 1 b3251 20 ribosome(s), (RF1_mono)	20 RF1_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b3251_20_cplx <==> 1 tl_term_b3251_20_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_term_b3251_20_rib2	Translation termination 2 b3251 20 ribosome(s), (RF1_mono)	20 gtp + 40 h2o + 1 tl_term_b3251_20_rib_cplx --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF1_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 b3251_aa + 1 b3251_mRNA_2 + 20 gdp + 20 glu1_tRNA + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_term_b3251_20_rib_RF2_1	Translation termination 1 b3251 20 ribosome(s), RF2_mono	20 RF2_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b3251_20_cplx <==> 1 tl_term_b3251_20_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_term_b3251_20_rib_RF2_2	Translation termination 2 b3251 20 ribosome(s), RF2	20 gtp + 40 h2o + 1 tl_term_b3251_20_rib_cplx2 --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF2_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 b3251_aa + 1 b3251_mRNA_2 + 20 gdp + 20 glu1_tRNA + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.32E+01	3.32E+01	0	5.43E+01	54.32704	0	5.74E+00	5.744
tl_term_b3257_1_rib1	Translation termination 1 b3257 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3257_1_cplx <==> 1 tl_term_b3257_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996
tl_term_b3257_1_rib2	Translation termination 2 b3257 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3257_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3257_aa + 1 b3257_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996
tl_term_b3257_2_rib1	Translation termination 1 b3257 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3257_2_cplx <==> 1 tl_term_b3257_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996
tl_term_b3257_2_rib2	Translation termination 2 b3257 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3257_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 ala1_tRNA + 2 b3257_aa + 1 b3257_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996
tl_term_b3257_4_rib1	Translation termination 1 b3257 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3257_4_cplx <==> 1 tl_term_b3257_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996
tl_term_b3257_4_rib2	Translation termination 2 b3257 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3257_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 ala1_tRNA + 4 b3257_aa + 1 b3257_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.86E+01	6.86E+01	0	1.06E+02	105.8757	0	2.00E+01	19.996
tl_term_b3258_14_rib1	Translation termination 1 b3258 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b3258_14_cplx <==> 1 tl_term_b3258_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_term_b3258_14_rib2	Translation termination 2 b3258 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b3258_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b3258_aa + 1 b3258_mRNA_2 + 14 gdp + 42 h + 14 lys1_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_term_b3258_14_rib_RF2_1	Translation termination 1 b3258 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b3258_14_cplx <==> 1 tl_term_b3258_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_term_b3258_14_rib_RF2_2	Translation termination 2 b3258 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b3258_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b3258_aa + 1 b3258_mRNA_2 + 14 gdp + 42 h + 14 lys1_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_term_b3258_1_rib1	Translation termination 1 b3258 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3258_1_cplx <==> 1 tl_term_b3258_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_term_b3258_1_rib2	Translation termination 2 b3258 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3258_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3258_aa + 1 b3258_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_term_b3258_1_rib_RF2_1	Translation termination 1 b3258 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3258_1_cplx <==> 1 tl_term_b3258_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_term_b3258_1_rib_RF2_2	Translation termination 2 b3258 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3258_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3258_aa + 1 b3258_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_term_b3258_28_rib1	Translation termination 1 b3258 28 ribosome(s), (RF1_mono)	28 RF1_mono + 28 RF3_mono.GDP + 28 Rrf_mono + 1 rib_70_elo2_b3258_28_cplx <==> 1 tl_term_b3258_28_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476

tl_term_b3258_28_rib2	Translation termination 2 b3258 28 ribosome(s), (RF1_mono)	28 gtp + 56 h2o + 1 tl_term_b3258_28_rib_cplx --> 28 EF-G.GDP + 28 EF-Tu.GDP + 28 RF1_mono_inact + 28 RF3_mono.GDP_inact + 28 Rrf_mono_inact + 28 b3258_aa + 1 b3258_mRNA_2 + 28 gdp + 84 h + 28 lys1_tRNA + 84 pi + 28 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_term_b3258_28_rib_RF2_1	Translation termination 1 b3258 28 ribosome(s), RF2_mono	28 RF2_mono + 28 RF3_mono.GDP + 28 Rrf_mono + 1 rib_70_elo2_b3258_28_cplx <==> 1 tl_term_b3258_28_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_term_b3258_28_rib_RF2_2	Translation termination 2 b3258 28 ribosome(s), RF2	28 gtp + 56 h2o + 1 tl_term_b3258_28_rib_cplx2 --> 28 EF-G.GDP + 28 EF-Tu.GDP + 28 RF2_mono_inact + 28 RF3_mono.GDP_inact + 28 Rrf_mono_inact + 28 b3258_aa + 1 b3258_mRNA_2 + 28 gdp + 84 h + 28 lys1_tRNA + 84 pi + 28 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.20E+01	5.20E+01	0	8.94E+01	89.35572	0	3.48E+00	3.476
tl_term_b3259_17_rib1	Translation termination 1 b3259 17 ribosome(s), (RF1_mono)	17 RF1_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b3259_17_cplx <==> 1 tl_term_b3259_17_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_term_b3259_17_rib2	Translation termination 2 b3259 17 ribosome(s), (RF1_mono)	17 gtp + 34 h2o + 1 tl_term_b3259_17_rib_cplx --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF1_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 asn1_tRNA + 17 b3259_aa + 1 b3259_mRNA_2 + 17 gdp + 51 h + 51 pi + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_term_b3259_17_rib_RF2_1	Translation termination 1 b3259 17 ribosome(s), RF2_mono	17 RF2_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b3259_17_cplx <==> 1 tl_term_b3259_17_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_term_b3259_17_rib_RF2_2	Translation termination 2 b3259 17 ribosome(s), RF2	17 gtp + 34 h2o + 1 tl_term_b3259_17_rib_cplx2 --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF2_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 asn1_tRNA + 17 b3259_aa + 1 b3259_mRNA_2 + 17 gdp + 51 h + 51 pi + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_term_b3259_1_rib1	Translation termination 1 b3259 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3259_1_cplx <==> 1 tl_term_b3259_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_term_b3259_1_rib2	Translation termination 2 b3259 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3259_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b3259_aa + 1 b3259_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_term_b3259_1_rib_RF2_1	Translation termination 1 b3259 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3259_1_cplx <==> 1 tl_term_b3259_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_term_b3259_1_rib_RF2_2	Translation termination 2 b3259 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3259_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b3259_aa + 1 b3259_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_term_b3259_8_rib1	Translation termination 1 b3259 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3259_8_cplx <==> 1 tl_term_b3259_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_term_b3259_8_rib2	Translation termination 2 b3259 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3259_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 asn1_tRNA + 8 b3259_aa + 1 b3259_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_term_b3259_8_rib_RF2_1	Translation termination 1 b3259 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3259_8_cplx <==> 1 tl_term_b3259_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_term_b3259_8_rib_RF2_2	Translation termination 2 b3259 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b3259_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 asn1_tRNA + 8 b3259_aa + 1 b3259_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.42E+01	5.42E+01	0	9.15E+01	91.48572	0	5.61E+00	5.606
tl_term_b3260_18_rib1	Translation termination 1 b3260 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b3260_18_cplx <==> 1 tl_term_b3260_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_term_b3260_18_rib2	Translation termination 2 b3260 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b3260_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 ala1_tRNA + 18 b3260_aa + 1 b3260_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_term_b3260_18_rib_RF2_1	Translation termination 1 b3260 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b3260_18_cplx <==> 1 tl_term_b3260_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_term_b3260_18_rib_RF2_2	Translation termination 2 b3260 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b3260_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 ala1_tRNA + 18 b3260_aa + 1 b3260_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_term_b3260_1_rib1	Translation termination 1 b3260 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3260_1_cplx <==> 1 tl_term_b3260_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_term_b3260_1_rib2	Translation termination 2 b3260 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3260_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3260_aa + 1 b3260_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_term_b3260_1_rib_RF2_1	Translation termination 1 b3260 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3260_1_cplx <==> 1 tl_term_b3260_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_term_b3260_1_rib_RF2_2	Translation termination 2 b3260 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3260_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3260_aa + 1 b3260_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_term_b3260_9_rib1	Translation termination 1 b3260 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3260_9_cplx <==> 1 tl_term_b3260_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_term_b3260_9_rib2	Translation termination 2 b3260 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b3260_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 ala1_tRNA + 9 b3260_aa + 1 b3260_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_term_b3260_9_rib_RF2_1	Translation termination 1 b3260 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3260_9_cplx <==> 1 tl_term_b3260_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_term_b3260_9_rib_RF2_2	Translation termination 2 b3260 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b3260_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 ala1_tRNA + 9 b3260_aa + 1 b3260_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.84E+02	183.6165	0	3.62E+00	3.618
tl_term_b3261_1_rib1	Translation termination 1 b3261 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3261_1_cplx <==> 1 tl_term_b3261_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_term_b3261_1_rib2	Translation termination 2 b3261 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3261_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b3261_aa + 1 b3261_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_term_b3261_1_rib_RF2_1	Translation termination 1 b3261 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3261_1_cplx <==> 1 tl_term_b3261_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_term_b3261_1_rib_RF2_2	Translation termination 2 b3261 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3261_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b3261_aa + 1 b3261_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828

tl_term_b3261_2_rib1	Translation termination 1 b3261 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3261_2_cplx <==> 1 tl_term_b3261_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_term_b3261_2_rib2	Translation termination 2 b3261 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3261_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 asn1_tRNA + 2 b3261_aa + 1 b3261_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_term_b3261_2_rib_RF2_1	Translation termination 1 b3261 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3261_2_cplx <==> 1 tl_term_b3261_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_term_b3261_2_rib_RF2_2	Translation termination 2 b3261 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b3261_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 asn1_tRNA + 2 b3261_aa + 1 b3261_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_term_b3261_5_rib1	Translation termination 1 b3261 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3261_5_cplx <==> 1 tl_term_b3261_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_term_b3261_5_rib2	Translation termination 2 b3261 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3261_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 asn1_tRNA + 5 b3261_aa + 1 b3261_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_term_b3261_5_rib_RF2_1	Translation termination 1 b3261 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3261_5_cplx <==> 1 tl_term_b3261_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_term_b3261_5_rib_RF2_2	Translation termination 2 b3261 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3261_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 asn1_tRNA + 5 b3261_aa + 1 b3261_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.27E+02	1.27E+02	0	2.05E+02	204.8265	0	2.48E+01	24.828
tl_term_b3280_1_rib1	Translation termination 1 b3280 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3280_1_cplx <==> 1 tl_term_b3280_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_term_b3280_1_rib2	Translation termination 2 b3280 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3280_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3280_aa + 1 b3280_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 proL_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_term_b3280_2_rib1	Translation termination 1 b3280 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3280_2_cplx <==> 1 tl_term_b3280_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_term_b3280_2_rib2	Translation termination 2 b3280 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3280_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3280_aa + 1 b3280_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 proL_tRNA + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_term_b3280_5_rib1	Translation termination 1 b3280 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3280_5_cplx <==> 1 tl_term_b3280_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_term_b3280_5_rib2	Translation termination 2 b3280 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3280_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3280_aa + 1 b3280_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 proL_tRNA + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.14E+01	8.14E+01	0	1.29E+02	129.4654	0	1.88E+01	18.822
tl_term_b3281_16_rib1	Translation termination 1 b3281 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b3281_16_cplx <==> 1 tl_term_b3281_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582
tl_term_b3281_16_rib2	Translation termination 2 b3281 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b3281_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 ala1_tRNA + 16 b3281_aa + 1 b3281_mRNA_2 + 16 gdp + 48 h + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582
tl_term_b3281_1_rib1	Translation termination 1 b3281 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3281_1_cplx <==> 1 tl_term_b3281_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582
tl_term_b3281_1_rib2	Translation termination 2 b3281 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3281_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3281_aa + 1 b3281_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582
tl_term_b3281_8_rib1	Translation termination 1 b3281 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3281_8_cplx <==> 1 tl_term_b3281_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582
tl_term_b3281_8_rib2	Translation termination 2 b3281 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3281_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 ala1_tRNA + 8 b3281_aa + 1 b3281_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.72E+01	6.72E+01	0	1.15E+02	115.2254	0	4.58E+00	4.582
tl_term_b3282_11_rib1	Translation termination 1 b3282 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b3282_11_cplx <==> 1 tl_term_b3282_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_term_b3282_11_rib2	Translation termination 2 b3282 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b3282_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b3282_aa + 1 b3282_mRNA_2 + 11 gdp + 11 glyU_tRNA + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_term_b3282_11_rib_RF2_1	Translation termination 1 b3282 11 ribosome(s), RF2_mono	11 RF2_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b3282_11_cplx <==> 1 tl_term_b3282_11_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_term_b3282_11_rib_RF2_2	Translation termination 2 b3282 11 ribosome(s), RF2	11 gtp + 22 h2o + 1 tl_term_b3282_11_rib_cplx2 --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF2_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b3282_aa + 1 b3282_mRNA_2 + 11 gdp + 11 glyU_tRNA + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_term_b3282_1_rib1	Translation termination 1 b3282 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3282_1_cplx <==> 1 tl_term_b3282_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_term_b3282_1_rib2	Translation termination 2 b3282 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3282_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3282_aa + 1 b3282_mRNA_2 + 1 gdp + 1 glyU_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_term_b3282_1_rib_RF2_1	Translation termination 1 b3282 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3282_1_cplx <==> 1 tl_term_b3282_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_term_b3282_1_rib_RF2_2	Translation termination 2 b3282 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3282_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3282_aa + 1 b3282_mRNA_2 + 1 gdp + 1 glyU_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_term_b3282_5_rib1	Translation termination 1 b3282 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3282_5_cplx <==> 1 tl_term_b3282_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_term_b3282_5_rib2	Translation termination 2 b3282 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3282_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3282_aa + 1 b3282_mRNA_2 + 5 gdp + 5 glyU_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_term_b3282_5_rib_RF2_1	Translation termination 1 b3282 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3282_5_cplx <==> 1 tl_term_b3282_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462
tl_term_b3282_5_rib_RF2_2	Translation termination 2 b3282 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3282_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3282_aa + 1 b3282_mRNA_2 + 5 gdp + 5 glyU_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.11E+01	7.11E+01	0	1.19E+02	119.1054	0	8.46E+00	8.462

tl_term_b3283_10_rib1	Translation termination 1 b3283 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3283_10_cplx <==> 1 tl_term_b3283_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_term_b3283_10_rib2	Translation termination 2 b3283 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b3283_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b3283_aa + 1 b3283_mRNA_2 + 10 gdp + 10 glu1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_term_b3283_10_rib_RF2_1	Translation termination 1 b3283 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3283_10_cplx <==> 1 tl_term_b3283_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_term_b3283_10_rib_RF2_2	Translation termination 2 b3283 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b3283_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b3283_aa + 1 b3283_mRNA_2 + 10 gdp + 10 glu1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_term_b3283_1_rib1	Translation termination 1 b3283 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3283_1_cplx <==> 1 tl_term_b3283_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_term_b3283_1_rib2	Translation termination 2 b3283 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3283_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3283_aa + 1 b3283_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_term_b3283_1_rib_RF2_1	Translation termination 1 b3283 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3283_1_cplx <==> 1 tl_term_b3283_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_term_b3283_1_rib_RF2_2	Translation termination 2 b3283 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3283_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3283_aa + 1 b3283_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_term_b3283_5_rib1	Translation termination 1 b3283 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3283_5_cplx <==> 1 tl_term_b3283_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_term_b3283_5_rib2	Translation termination 2 b3283 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3283_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3283_aa + 1 b3283_mRNA_2 + 5 gdp + 5 glu1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_term_b3283_5_rib_RF2_1	Translation termination 1 b3283 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3283_5_cplx <==> 1 tl_term_b3283_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_term_b3283_5_rib_RF2_2	Translation termination 2 b3283 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3283_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3283_aa + 1 b3283_mRNA_2 + 5 gdp + 5 glu1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.10E+01	7.10E+01	0	1.19E+02	119.0554	0	8.41E+00	8.412
tl_term_b3287_1_rib1	Translation termination 1 b3287 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3287_1_cplx <==> 1 tl_term_b3287_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_term_b3287_1_rib2	Translation termination 2 b3287 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3287_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3287_aa + 1 b3287_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_term_b3287_1_rib_RF2_1	Translation termination 1 b3287 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3287_1_cplx <==> 1 tl_term_b3287_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_term_b3287_1_rib_RF2_2	Translation termination 2 b3287 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3287_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3287_aa + 1 b3287_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_term_b3287_4_rib1	Translation termination 1 b3287 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3287_4_cplx <==> 1 tl_term_b3287_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_term_b3287_4_rib2	Translation termination 2 b3287 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3287_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 ala1_tRNA + 4 b3287_aa + 1 b3287_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_term_b3287_4_rib_RF2_1	Translation termination 1 b3287 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3287_4_cplx <==> 1 tl_term_b3287_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_term_b3287_4_rib_RF2_2	Translation termination 2 b3287 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3287_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 ala1_tRNA + 4 b3287_aa + 1 b3287_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_term_b3287_9_rib1	Translation termination 1 b3287 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3287_9_cplx <==> 1 tl_term_b3287_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_term_b3287_9_rib2	Translation termination 2 b3287 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b3287_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 ala1_tRNA + 9 b3287_aa + 1 b3287_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_term_b3287_9_rib_RF2_1	Translation termination 1 b3287 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3287_9_cplx <==> 1 tl_term_b3287_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_term_b3287_9_rib_RF2_2	Translation termination 2 b3287 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b3287_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 ala1_tRNA + 9 b3287_aa + 1 b3287_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	1.72E+02	172.2693	0	1.24E+01	12.384
tl_term_b3288_18_rib1	Translation termination 1 b3288 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b3288_18_cplx <==> 1 tl_term_b3288_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724
tl_term_b3288_18_rib2	Translation termination 2 b3288 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b3288_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b3288_aa + 1 b3288_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70 + 18 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724
tl_term_b3288_1_rib1	Translation termination 1 b3288 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3288_1_cplx <==> 1 tl_term_b3288_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724
tl_term_b3288_1_rib2	Translation termination 2 b3288 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3288_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3288_aa + 1 b3288_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724
tl_term_b3288_9_rib1	Translation termination 1 b3288 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3288_9_cplx <==> 1 tl_term_b3288_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724
tl_term_b3288_9_rib2	Translation termination 2 b3288 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b3288_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b3288_aa + 1 b3288_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70 + 9 val2_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.52E+01	9.52E+01	0	1.65E+02	164.6093	0	4.72E+00	4.724
tl_term_b3289_12_rib1	Translation termination 1 b3289 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3289_12_cplx <==> 1 tl_term_b3289_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147

tl_term_b3289_12_rib2	Translation termination 2 b3289 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b3289_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b3289_aa + 1 b3289_mRNA_2 + 12 gdp + 36 h + 12 lys1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147
tl_term_b3289_1_rib1	Translation termination 1 b3289 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3289_1_cplx <==> 1 tl_term_b3289_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147
tl_term_b3289_1_rib2	Translation termination 2 b3289 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3289_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3289_aa + 1 b3289_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147
tl_term_b3289_25_rib1	Translation termination 1 b3289 25 ribosome(s), (RF1_mono)	25 RF1_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b3289_25_cplx <==> 1 tl_term_b3289_25_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147
tl_term_b3289_25_rib2	Translation termination 2 b3289 25 ribosome(s), (RF1_mono)	25 gtp + 50 h2o + 1 tl_term_b3289_25_rib_cplx --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF1_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 b3289_aa + 1 b3289_mRNA_2 + 25 gdp + 75 h + 25 lys1_tRNA + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.81E+02	180.6836	0	3.15E+00	3.147
tl_term_b3294_1_rib1	Translation termination 1 b3294 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3294_1_cplx <==> 1 tl_term_b3294_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.08E+01	8.08E+01	0	8.24E+01	82.41571	0	3.12E+01	31.17567
tl_term_b3294_1_rib2	Translation termination 2 b3294 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3294_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3294_aa + 1 b3294_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.08E+01	8.08E+01	0	8.24E+01	82.41571	0	3.12E+01	31.17567
tl_term_b3294_1_rib_RF2_1	Translation termination 1 b3294 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3294_1_cplx <==> 1 tl_term_b3294_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.08E+01	8.08E+01	0	8.24E+01	82.41571	0	3.12E+01	31.17567
tl_term_b3294_1_rib_RF2_2	Translation termination 2 b3294 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3294_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3294_aa + 1 b3294_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.08E+01	8.08E+01	0	8.24E+01	82.41571	0	3.12E+01	31.17567
tl_term_b3294_3_rib1	Translation termination 1 b3294 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3294_3_cplx <==> 1 tl_term_b3294_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.71E+01	3.71E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3294_3_rib2	Translation termination 2 b3294 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3294_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3294_aa + 1 b3294_mRNA_2 + 3 gdp + 3 glu1_tRNA + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3294_3_rib_RF2_1	Translation termination 1 b3294 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3294_3_cplx <==> 1 tl_term_b3294_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.71E+01	3.71E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3294_3_rib_RF2_2	Translation termination 2 b3294 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3294_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3294_aa + 1 b3294_mRNA_2 + 3 gdp + 3 glu1_tRNA + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.71E+01	3.71E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3294_7_rib1	Translation termination 1 b3294 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3294_7_cplx <==> 1 tl_term_b3294_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3294_7_rib2	Translation termination 2 b3294 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3294_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3294_aa + 1 b3294_mRNA_2 + 7 gdp + 7 glu1_tRNA + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3294_7_rib_RF2_1	Translation termination 1 b3294 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3294_7_cplx <==> 1 tl_term_b3294_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3294_7_rib_RF2_2	Translation termination 2 b3294 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b3294_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3294_aa + 1 b3294_mRNA_2 + 7 gdp + 7 glu1_tRNA + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3295_19_rib1	Translation termination 1 b3295 19 ribosome(s), (RF1_mono)	19 RF1_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b3295_19_cplx <==> 1 tl_term_b3295_19_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.08E+01	5.08E+01	0	6.85E+01	68.48818	0	1.08E+01	10.78084
tl_term_b3295_19_rib2	Translation termination 2 b3295 19 ribosome(s), (RF1_mono)	19 gtp + 38 h2o + 1 tl_term_b3295_19_rib_cplx --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF1_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b3295_aa + 1 b3295_mRNA_2 + 19 gdp + 19 glu1_tRNA + 57 h + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.08E+01	5.08E+01	0	6.85E+01	68.48818	0	1.08E+01	10.78084
tl_term_b3295_19_rib_RF2_1	Translation termination 1 b3295 19 ribosome(s), RF2_mono	19 RF2_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b3295_19_cplx <==> 1 tl_term_b3295_19_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.08E+01	5.08E+01	0	6.85E+01	68.48818	0	1.08E+01	10.78084
tl_term_b3295_19_rib_RF2_2	Translation termination 2 b3295 19 ribosome(s), RF2	19 gtp + 38 h2o + 1 tl_term_b3295_19_rib_cplx2 --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF2_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b3295_aa + 1 b3295_mRNA_2 + 19 gdp + 19 glu1_tRNA + 57 h + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.08E+01	5.08E+01	0	6.85E+01	68.48818	0	1.08E+01	10.78084
tl_term_b3295_1_rib1	Translation termination 1 b3295 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3295_1_cplx <==> 1 tl_term_b3295_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.57E+01	6.57E+01	0	8.90E+01	89.02961	0	2.00E+01	20.002
tl_term_b3295_1_rib2	Translation termination 2 b3295 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3295_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3295_aa + 1 b3295_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.57E+01	6.57E+01	0	8.90E+01	89.02961	0	2.00E+01	20.002
tl_term_b3295_1_rib_RF2_1	Translation termination 1 b3295 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3295_1_cplx <==> 1 tl_term_b3295_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.57E+01	6.57E+01	0	8.90E+01	89.02961	0	2.00E+01	20.002
tl_term_b3295_1_rib_RF2_2	Translation termination 2 b3295 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3295_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3295_aa + 1 b3295_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.57E+01	6.57E+01	0	8.90E+01	89.02961	0	2.00E+01	20.002
tl_term_b3295_9_rib1	Translation termination 1 b3295 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3295_9_cplx <==> 1 tl_term_b3295_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.90E+01	5.90E+01	0	8.48E+01	84.82002	0	2.00E+01	20.002
tl_term_b3295_9_rib2	Translation termination 2 b3295 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b3295_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b3295_aa + 1 b3295_mRNA_2 + 9 gdp + 9 glu1_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.90E+01	5.90E+01	0	8.48E+01	84.82002	0	2.00E+01	20.002
tl_term_b3295_9_rib_RF2_1	Translation termination 1 b3295 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3295_9_cplx <==> 1 tl_term_b3295_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.90E+01	5.90E+01	0	8.48E+01	84.82002	0	2.00E+01	20.002
tl_term_b3295_9_rib_RF2_2	Translation termination 2 b3295 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b3295_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b3295_aa + 1 b3295_mRNA_2 + 9 gdp + 9 glu1_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.90E+01	5.90E+01	0	8.48E+01	84.82002	0	2.00E+01	20.002
tl_term_b3296_12_rib1	Translation termination 1 b3296 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3296_12_cplx <==> 1 tl_term_b3296_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.38E+00	9.38E+00	0	6.91E+00	6.906667	0	6.91E+00	6.906667
tl_term_b3296_12_rib2	Translation termination 2 b3296 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b3296_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b3296_aa + 1 b3296_mRNA_2 + 12 gdp + 36 h + 12 lys1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.38E+00	9.38E+00	0	6.91E+00	6.906667	0	6.91E+00	6.906667

tl_term_b3296_12_rib_RF2_1	Translation termination 1 b3296 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3296_12_cplx <==> 1 tl_term_b3296_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.38E+00	9.38E+00	0	6.91E+00	6.906667	0	6.91E+00	6.906667
tl_term_b3296_12_rib_RF2_2	Translation termination 2 b3296 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b3296_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b3296_aa + 1 b3296_mRNA_2 + 12 gdp + 36 h + 12 lys1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.38E+00	9.38E+00	0	6.91E+00	6.906667	0	6.91E+00	6.906667
tl_term_b3296_1_rib1	Translation termination 1 b3296 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3296_1_cplx <==> 1 tl_term_b3296_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.91E+01	7.91E+01	0	8.18E+01	81.79139	0	3.13E+01	31.33309
tl_term_b3296_1_rib2	Translation termination 2 b3296 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3296_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3296_aa + 1 b3296_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	8.18E+01	81.79139	0	3.13E+01	31.33309
tl_term_b3296_1_rib_RF2_1	Translation termination 1 b3296 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3296_1_cplx <==> 1 tl_term_b3296_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.91E+01	7.91E+01	0	8.18E+01	81.79139	0	3.13E+01	31.33309
tl_term_b3296_1_rib_RF2_2	Translation termination 2 b3296 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3296_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3296_aa + 1 b3296_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.91E+01	7.91E+01	0	8.18E+01	81.79139	0	3.13E+01	31.33309
tl_term_b3296_6_rib1	Translation termination 1 b3296 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3296_6_cplx <==> 1 tl_term_b3296_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3296_6_rib2	Translation termination 2 b3296 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3296_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3296_aa + 1 b3296_mRNA_2 + 6 gdp + 18 h + 6 lys1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3296_6_rib_RF2_1	Translation termination 1 b3296 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3296_6_cplx <==> 1 tl_term_b3296_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3296_6_rib_RF2_2	Translation termination 2 b3296 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b3296_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3296_aa + 1 b3296_mRNA_2 + 6 gdp + 18 h + 6 lys1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3297_1_rib1	Translation termination 1 b3297 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3297_1_cplx <==> 1 tl_term_b3297_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.47E+01	8.47E+01	0	8.29E+01	82.88	0	3.56E+01	35.609
tl_term_b3297_1_rib2	Translation termination 2 b3297 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3297_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3297_aa + 1 b3297_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.47E+01	8.47E+01	0	8.29E+01	82.88	0	3.56E+01	35.609
tl_term_b3297_1_rib_RF2_1	Translation termination 1 b3297 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3297_1_cplx <==> 1 tl_term_b3297_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.47E+01	8.47E+01	0	8.29E+01	82.88	0	3.56E+01	35.609
tl_term_b3297_1_rib_RF2_2	Translation termination 2 b3297 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3297_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3297_aa + 1 b3297_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.47E+01	8.47E+01	0	8.29E+01	82.88	0	3.56E+01	35.609
tl_term_b3297_3_rib1	Translation termination 1 b3297 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3297_3_cplx <==> 1 tl_term_b3297_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3297_3_rib2	Translation termination 2 b3297 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3297_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3297_aa + 1 b3297_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70 + 3 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3297_3_rib_RF2_1	Translation termination 1 b3297 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3297_3_cplx <==> 1 tl_term_b3297_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3297_3_rib_RF2_2	Translation termination 2 b3297 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3297_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3297_aa + 1 b3297_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70 + 3 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3297_7_rib1	Translation termination 1 b3297 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3297_7_cplx <==> 1 tl_term_b3297_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3297_7_rib2	Translation termination 2 b3297 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3297_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3297_aa + 1 b3297_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70 + 7 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3297_7_rib_RF2_1	Translation termination 1 b3297 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3297_7_cplx <==> 1 tl_term_b3297_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3297_7_rib_RF2_2	Translation termination 2 b3297 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b3297_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3297_aa + 1 b3297_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70 + 7 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3298_1_rib1	Translation termination 1 b3298 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3298_1_cplx <==> 1 tl_term_b3298_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3298_1_rib2	Translation termination 2 b3298 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3298_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3298_aa + 1 b3298_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3298_1_rib_RF2_1	Translation termination 1 b3298 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3298_1_cplx <==> 1 tl_term_b3298_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3298_1_rib_RF2_2	Translation termination 2 b3298 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3298_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3298_aa + 1 b3298_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3298_3_rib1	Translation termination 1 b3298 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3298_3_cplx <==> 1 tl_term_b3298_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3298_3_rib2	Translation termination 2 b3298 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3298_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3298_aa + 1 b3298_mRNA_2 + 3 gdp + 9 h + 3 lys1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3298_3_rib_RF2_1	Translation termination 1 b3298 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3298_3_cplx <==> 1 tl_term_b3298_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3298_3_rib_RF2_2	Translation termination 2 b3298 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3298_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3298_aa + 1 b3298_mRNA_2 + 3 gdp + 9 h + 3 lys1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3298_6_rib1	Translation termination 1 b3298 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3298_6_cplx <==> 1 tl_term_b3298_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3298_6_rib2	Translation termination 2 b3298 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3298_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3298_aa + 1 b3298_mRNA_2 + 6 gdp + 18 h + 6 lys1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333

tl_term_b3298_6_rib_RF2_1	Translation termination 1 b3298 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3298_6_cplx <==> 1 tl_term_b3298_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3298_6_rib_RF2_2	Translation termination 2 b3298 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b3298_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3298_aa + 1 b3298_mRNA_2 + 6 gdp + 18 h + 6 lys1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3299_1_rib1	Translation termination 1 b3299 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3299_1_cplx <==> 1 tl_term_b3299_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3299_1_rib2	Translation termination 2 b3299 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3299_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3299_aa + 1 b3299_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3299_2_rib1	Translation termination 1 b3299 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3299_2_cplx <==> 1 tl_term_b3299_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3299_2_rib2	Translation termination 2 b3299 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3299_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3299_aa + 1 b3299_mRNA_2 + 2 gdp + 2 gly1_tRNA + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3300_13_rib1	Translation termination 1 b3300 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3300_13_cplx <==> 1 tl_term_b3300_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_term_b3300_13_rib2	Translation termination 2 b3300 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b3300_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 arg1_tRNA + 13 b3300_aa + 1 b3300_mRNA_2 + 13 gdp + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_term_b3300_13_rib_RF2_1	Translation termination 1 b3300 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3300_13_cplx <==> 1 tl_term_b3300_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_term_b3300_13_rib_RF2_2	Translation termination 2 b3300 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b3300_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 arg1_tRNA + 13 b3300_aa + 1 b3300_mRNA_2 + 13 gdp + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_term_b3300_1_rib1	Translation termination 1 b3300 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3300_1_cplx <==> 1 tl_term_b3300_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_term_b3300_1_rib2	Translation termination 2 b3300 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3300_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b3300_aa + 1 b3300_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_term_b3300_1_rib_RF2_1	Translation termination 1 b3300 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3300_1_cplx <==> 1 tl_term_b3300_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_term_b3300_1_rib_RF2_2	Translation termination 2 b3300 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3300_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b3300_aa + 1 b3300_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_term_b3300_26_rib1	Translation termination 1 b3300 26 ribosome(s), (RF1_mono)	26 RF1_mono + 26 RF3_mono.GDP + 26 Rrf_mono + 1 rib_70_elo2_b3300_26_cplx <==> 1 tl_term_b3300_26_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_term_b3300_26_rib2	Translation termination 2 b3300 26 ribosome(s), (RF1_mono)	26 gtp + 52 h2o + 1 tl_term_b3300_26_rib_cplx --> 26 EF-G.GDP + 26 EF-Tu.GDP + 26 RF1_mono_inact + 26 RF3_mono.GDP_inact + 26 Rrf_mono_inact + 26 arg1_tRNA + 26 b3300_aa + 1 b3300_mRNA_2 + 26 gdp + 78 h + 78 pi + 26 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_term_b3300_26_rib_RF2_1	Translation termination 1 b3300 26 ribosome(s), RF2_mono	26 RF2_mono + 26 RF3_mono.GDP + 26 Rrf_mono + 1 rib_70_elo2_b3300_26_cplx <==> 1 tl_term_b3300_26_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_term_b3300_26_rib_RF2_2	Translation termination 2 b3300 26 ribosome(s), RF2	26 gtp + 52 h2o + 1 tl_term_b3300_26_rib_cplx2 --> 26 EF-G.GDP + 26 EF-Tu.GDP + 26 RF2_mono_inact + 26 RF3_mono.GDP_inact + 26 Rrf_mono_inact + 26 arg1_tRNA + 26 b3300_aa + 1 b3300_mRNA_2 + 26 gdp + 78 h + 78 pi + 26 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.18E+01	3.18E+01	0	5.06E+01	50.59574	0	7.31E+00	7.306
tl_term_b3301_1_rib1	Translation termination 1 b3301 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3301_1_cplx <==> 1 tl_term_b3301_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.20E+01	4.20E+01	0	6.43E+01	64.27959	0	1.72E+01	17.22971
tl_term_b3301_1_rib2	Translation termination 2 b3301 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3301_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3301_aa + 1 b3301_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.20E+01	4.20E+01	0	6.43E+01	64.27959	0	1.72E+01	17.22971
tl_term_b3301_1_rib_RF2_1	Translation termination 1 b3301 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3301_1_cplx <==> 1 tl_term_b3301_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.20E+01	4.20E+01	0	6.43E+01	64.27959	0	1.72E+01	17.22971
tl_term_b3301_1_rib_RF2_2	Translation termination 2 b3301 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3301_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3301_aa + 1 b3301_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.20E+01	4.20E+01	0	6.43E+01	64.27959	0	1.72E+01	17.22971
tl_term_b3301_4_rib1	Translation termination 1 b3301 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3301_4_cplx <==> 1 tl_term_b3301_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3301_4_rib2	Translation termination 2 b3301 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3301_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3301_aa + 1 b3301_mRNA_2 + 4 gdp + 4 glu1_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3301_4_rib_RF2_1	Translation termination 1 b3301 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3301_4_cplx <==> 1 tl_term_b3301_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3301_4_rib_RF2_2	Translation termination 2 b3301 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3301_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3301_aa + 1 b3301_mRNA_2 + 4 gdp + 4 glu1_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3301_8_rib1	Translation termination 1 b3301 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3301_8_cplx <==> 1 tl_term_b3301_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3301_8_rib2	Translation termination 2 b3301 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3301_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3301_aa + 1 b3301_mRNA_2 + 8 gdp + 8 glu1_tRNA + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3301_8_rib_RF2_1	Translation termination 1 b3301 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3301_8_cplx <==> 1 tl_term_b3301_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3301_8_rib_RF2_2	Translation termination 2 b3301 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b3301_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3301_aa + 1 b3301_mRNA_2 + 8 gdp + 8 glu1_tRNA + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3302_1_rib1	Translation termination 1 b3302 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3302_1_cplx <==> 1 tl_term_b3302_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.81E+01	9.81E+01	0	8.29E+01	82.88	0	8.29E+01	82.88

tl_term_b3302_1_rib2	Translation termination 2 b3302 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3302_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3302_aa + 1 b3302_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.81E+01	9.81E+01	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3302_1_rib_RF2_1	Translation termination 1 b3302 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3302_1_cplx <==> 1 tl_term_b3302_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.81E+01	9.81E+01	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3302_1_rib_RF2_2	Translation termination 2 b3302 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3302_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3302_aa + 1 b3302_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.81E+01	9.81E+01	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3302_3_rib1	Translation termination 1 b3302 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3302_3_cplx <==> 1 tl_term_b3302_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3302_3_rib2	Translation termination 2 b3302 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3302_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3302_aa + 1 b3302_mRNA_2 + 3 gdp + 3 glu1_tRNA + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3302_3_rib_RF2_1	Translation termination 1 b3302 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3302_3_cplx <==> 1 tl_term_b3302_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3302_3_rib_RF2_2	Translation termination 2 b3302 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3302_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3302_aa + 1 b3302_mRNA_2 + 3 gdp + 3 glu1_tRNA + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3303_1_rib1	Translation termination 1 b3303 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3303_1_cplx <==> 1 tl_term_b3303_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.48E+01	4.48E+01	0	6.53E+01	65.2924	0	2.01E+01	20.06925
tl_term_b3303_1_rib2	Translation termination 2 b3303 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3303_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3303_aa + 1 b3303_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.48E+01	4.48E+01	0	6.53E+01	65.2924	0	2.01E+01	20.06925
tl_term_b3303_1_rib_RF2_1	Translation termination 1 b3303 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3303_1_cplx <==> 1 tl_term_b3303_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.48E+01	4.48E+01	0	6.53E+01	65.2924	0	2.01E+01	20.06925
tl_term_b3303_1_rib_RF2_2	Translation termination 2 b3303 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3303_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3303_aa + 1 b3303_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.48E+01	4.48E+01	0	6.53E+01	65.2924	0	2.01E+01	20.06925
tl_term_b3303_4_rib1	Translation termination 1 b3303 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3303_4_cplx <==> 1 tl_term_b3303_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.74E+01	2.74E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3303_4_rib2	Translation termination 2 b3303 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3303_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3303_aa + 1 b3303_mRNA_2 + 4 gdp + 12 h + 4 lys1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.74E+01	2.74E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3303_4_rib_RF2_1	Translation termination 1 b3303 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3303_4_cplx <==> 1 tl_term_b3303_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.74E+01	2.74E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3303_4_rib_RF2_2	Translation termination 2 b3303 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3303_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3303_aa + 1 b3303_mRNA_2 + 4 gdp + 12 h + 4 lys1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.74E+01	2.74E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3303_9_rib1	Translation termination 1 b3303 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3303_9_cplx <==> 1 tl_term_b3303_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.25E+01	1.25E+01	0	9.21E+00	9.208889	0	9.21E+00	9.208889
tl_term_b3303_9_rib2	Translation termination 2 b3303 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b3303_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b3303_aa + 1 b3303_mRNA_2 + 9 gdp + 27 h + 9 lys1_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.25E+01	1.25E+01	0	9.21E+00	9.208889	0	9.21E+00	9.208889
tl_term_b3303_9_rib_RF2_1	Translation termination 1 b3303 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3303_9_cplx <==> 1 tl_term_b3303_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.25E+01	1.25E+01	0	9.21E+00	9.208889	0	9.21E+00	9.208889
tl_term_b3303_9_rib_RF2_2	Translation termination 2 b3303 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b3303_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b3303_aa + 1 b3303_mRNA_2 + 9 gdp + 27 h + 9 lys1_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.25E+01	1.25E+01	0	9.21E+00	9.208889	0	9.21E+00	9.208889
tl_term_b3304_1_rib1	Translation termination 1 b3304 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3304_1_cplx <==> 1 tl_term_b3304_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.34E+01	9.34E+01	0	8.29E+01	82.88	0	7.66E+01	76.646
tl_term_b3304_1_rib2	Translation termination 2 b3304 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3304_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3304_aa + 1 b3304_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.34E+01	9.34E+01	0	8.29E+01	82.88	0	7.66E+01	76.646
tl_term_b3304_1_rib_RF2_1	Translation termination 1 b3304 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3304_1_cplx <==> 1 tl_term_b3304_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.34E+01	9.34E+01	0	8.29E+01	82.88	0	7.66E+01	76.646
tl_term_b3304_1_rib_RF2_2	Translation termination 2 b3304 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3304_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3304_aa + 1 b3304_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.34E+01	9.34E+01	0	8.29E+01	82.88	0	7.66E+01	76.646
tl_term_b3304_3_rib1	Translation termination 1 b3304 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3304_3_cplx <==> 1 tl_term_b3304_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3304_3_rib2	Translation termination 2 b3304 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3304_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3304_aa + 1 b3304_mRNA_2 + 3 gdp + 9 h + 3 phe1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3304_3_rib_RF2_1	Translation termination 1 b3304 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3304_3_cplx <==> 1 tl_term_b3304_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3304_3_rib_RF2_2	Translation termination 2 b3304 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3304_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3304_aa + 1 b3304_mRNA_2 + 3 gdp + 9 h + 3 phe1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3304_6_rib1	Translation termination 1 b3304 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3304_6_cplx <==> 1 tl_term_b3304_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3304_6_rib2	Translation termination 2 b3304 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3304_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3304_aa + 1 b3304_mRNA_2 + 6 gdp + 18 h + 6 phe1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3304_6_rib_RF2_1	Translation termination 1 b3304 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3304_6_cplx <==> 1 tl_term_b3304_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3304_6_rib_RF2_2	Translation termination 2 b3304 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b3304_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3304_aa + 1 b3304_mRNA_2 + 6 gdp + 18 h + 6 phe1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3305_10_rib1	Translation termination 1 b3305 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3305_10_cplx <==> 1 tl_term_b3305_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288

tl_term_b3305_10_rib2	Translation termination 2 b3305 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b3305_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b3305_aa + 1 b3305_mRNA_2 + 10 gdp + 30 h + 10 lys1_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_term_b3305_10_rib_RF2_1	Translation termination 1 b3305 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3305_10_cplx <==> 1 tl_term_b3305_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_term_b3305_10_rib_RF2_2	Translation termination 2 b3305 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b3305_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b3305_aa + 1 b3305_mRNA_2 + 10 gdp + 30 h + 10 lys1_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_term_b3305_1_rib1	Translation termination 1 b3305 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3305_1_cplx <==> 1 tl_term_b3305_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.48E+01	4.48E+01	0	6.51E+01	65.07918	0	2.01E+01	20.14445
tl_term_b3305_1_rib2	Translation termination 2 b3305 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3305_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3305_aa + 1 b3305_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.48E+01	4.48E+01	0	6.51E+01	65.07918	0	2.01E+01	20.14445
tl_term_b3305_1_rib_RF2_1	Translation termination 1 b3305 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3305_1_cplx <==> 1 tl_term_b3305_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.48E+01	4.48E+01	0	6.51E+01	65.07918	0	2.01E+01	20.14445
tl_term_b3305_1_rib_RF2_2	Translation termination 2 b3305 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3305_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3305_aa + 1 b3305_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.48E+01	4.48E+01	0	6.51E+01	65.07918	0	2.01E+01	20.14445
tl_term_b3305_5_rib1	Translation termination 1 b3305 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3305_5_cplx <==> 1 tl_term_b3305_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3305_5_rib2	Translation termination 2 b3305 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3305_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3305_aa + 1 b3305_mRNA_2 + 5 gdp + 15 h + 5 lys1_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3305_5_rib_RF2_1	Translation termination 1 b3305 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3305_5_cplx <==> 1 tl_term_b3305_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3305_5_rib_RF2_2	Translation termination 2 b3305 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3305_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3305_aa + 1 b3305_mRNA_2 + 5 gdp + 15 h + 5 lys1_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3306_1_rib1	Translation termination 1 b3306 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3306_1_cplx <==> 1 tl_term_b3306_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3306_1_rib2	Translation termination 2 b3306 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3306_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala2_tRNA + 1 b3306_aa + 1 b3306_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3306_1_rib_RF2_1	Translation termination 1 b3306 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3306_1_cplx <==> 1 tl_term_b3306_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3306_1_rib_RF2_2	Translation termination 2 b3306 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3306_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala2_tRNA + 1 b3306_aa + 1 b3306_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3306_3_rib1	Translation termination 1 b3306 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3306_3_cplx <==> 1 tl_term_b3306_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3306_3_rib2	Translation termination 2 b3306 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3306_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 ala2_tRNA + 3 b3306_aa + 1 b3306_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3306_3_rib_RF2_1	Translation termination 1 b3306 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3306_3_cplx <==> 1 tl_term_b3306_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3306_3_rib_RF2_2	Translation termination 2 b3306 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3306_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 ala2_tRNA + 3 b3306_aa + 1 b3306_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3306_7_rib1	Translation termination 1 b3306 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3306_7_cplx <==> 1 tl_term_b3306_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3306_7_rib2	Translation termination 2 b3306 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3306_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 ala2_tRNA + 7 b3306_aa + 1 b3306_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3306_7_rib_RF2_1	Translation termination 1 b3306 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3306_7_cplx <==> 1 tl_term_b3306_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3306_7_rib_RF2_2	Translation termination 2 b3306 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b3306_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 ala2_tRNA + 7 b3306_aa + 1 b3306_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3307_1_rib1	Translation termination 1 b3307 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3307_1_cplx <==> 1 tl_term_b3307_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3307_1_rib2	Translation termination 2 b3307 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3307_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3307_aa + 1 b3307_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3307_1_rib_RF2_1	Translation termination 1 b3307 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3307_1_cplx <==> 1 tl_term_b3307_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3307_1_rib_RF2_2	Translation termination 2 b3307 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3307_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3307_aa + 1 b3307_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3307_2_rib1	Translation termination 1 b3307 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3307_2_cplx <==> 1 tl_term_b3307_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3307_2_rib2	Translation termination 2 b3307 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3307_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3307_aa + 1 b3307_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70 + 2 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3307_2_rib_RF2_1	Translation termination 1 b3307 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3307_2_cplx <==> 1 tl_term_b3307_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3307_2_rib_RF2_2	Translation termination 2 b3307 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b3307_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3307_aa + 1 b3307_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70 + 2 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3307_5_rib1	Translation termination 1 b3307 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3307_5_cplx <==> 1 tl_term_b3307_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576

tl_term_b3307_5_rib2	Translation termination 2 b3307 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3307_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3307_aa + 1 b3307_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70 + 5 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3307_5_rib_RF2_1	Translation termination 1 b3307 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3307_5_cplx <==> 1 tl_term_b3307_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3307_5_rib_RF2_2	Translation termination 2 b3307 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3307_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3307_aa + 1 b3307_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70 + 5 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3308_10_rib1	Translation termination 1 b3308 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3308_10_cplx <==> 1 tl_term_b3308_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_term_b3308_10_rib2	Translation termination 2 b3308 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b3308_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b3308_aa + 1 b3308_mRNA_2 + 10 gdp + 30 h + 10 lys1_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_term_b3308_10_rib_RF2_1	Translation termination 1 b3308 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3308_10_cplx <==> 1 tl_term_b3308_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_term_b3308_10_rib_RF2_2	Translation termination 2 b3308 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b3308_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b3308_aa + 1 b3308_mRNA_2 + 10 gdp + 30 h + 10 lys1_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_term_b3308_1_rib1	Translation termination 1 b3308 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3308_1_cplx <==> 1 tl_term_b3308_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.43E+01	6.43E+01	0	7.43E+01	74.33847	0	3.96E+01	39.58889
tl_term_b3308_1_rib2	Translation termination 2 b3308 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3308_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3308_aa + 1 b3308_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	7.43E+01	74.33847	0	3.96E+01	39.58889
tl_term_b3308_1_rib_RF2_1	Translation termination 1 b3308 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3308_1_cplx <==> 1 tl_term_b3308_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.43E+01	6.43E+01	0	7.43E+01	74.33847	0	3.96E+01	39.58889
tl_term_b3308_1_rib_RF2_2	Translation termination 2 b3308 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3308_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3308_aa + 1 b3308_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	7.43E+01	74.33847	0	3.96E+01	39.58889
tl_term_b3308_5_rib1	Translation termination 1 b3308 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3308_5_cplx <==> 1 tl_term_b3308_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3308_5_rib2	Translation termination 2 b3308 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3308_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3308_aa + 1 b3308_mRNA_2 + 5 gdp + 15 h + 5 lys1_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3308_5_rib_RF2_1	Translation termination 1 b3308 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3308_5_cplx <==> 1 tl_term_b3308_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3308_5_rib_RF2_2	Translation termination 2 b3308 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3308_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3308_aa + 1 b3308_mRNA_2 + 5 gdp + 15 h + 5 lys1_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3309_1_rib1	Translation termination 1 b3309 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3309_1_cplx <==> 1 tl_term_b3309_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3309_1_rib2	Translation termination 2 b3309 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3309_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3309_aa + 1 b3309_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3309_1_rib_RF2_1	Translation termination 1 b3309 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3309_1_cplx <==> 1 tl_term_b3309_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3309_1_rib_RF2_2	Translation termination 2 b3309 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3309_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3309_aa + 1 b3309_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3309_3_rib1	Translation termination 1 b3309 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3309_3_cplx <==> 1 tl_term_b3309_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3309_3_rib2	Translation termination 2 b3309 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3309_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3309_aa + 1 b3309_mRNA_2 + 3 gdp + 9 h + 3 lys1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3309_3_rib_RF2_1	Translation termination 1 b3309 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3309_3_cplx <==> 1 tl_term_b3309_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3309_3_rib_RF2_2	Translation termination 2 b3309 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3309_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3309_aa + 1 b3309_mRNA_2 + 3 gdp + 9 h + 3 lys1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3309_6_rib1	Translation termination 1 b3309 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3309_6_cplx <==> 1 tl_term_b3309_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3309_6_rib2	Translation termination 2 b3309 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3309_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3309_aa + 1 b3309_mRNA_2 + 6 gdp + 18 h + 6 lys1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3309_6_rib_RF2_1	Translation termination 1 b3309 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3309_6_cplx <==> 1 tl_term_b3309_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3309_6_rib_RF2_2	Translation termination 2 b3309 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b3309_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3309_aa + 1 b3309_mRNA_2 + 6 gdp + 18 h + 6 lys1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3310_1_rib1	Translation termination 1 b3310 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3310_1_cplx <==> 1 tl_term_b3310_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.49E+01	8.49E+01	0	8.29E+01	82.88	0	6.06E+01	60.627
tl_term_b3310_1_rib2	Translation termination 2 b3310 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3310_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3310_aa + 1 b3310_mRNA_2 + 1 gdp + 3 h + 1 leuU_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.49E+01	8.49E+01	0	8.29E+01	82.88	0	6.06E+01	60.627
tl_term_b3310_1_rib_RF2_1	Translation termination 1 b3310 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3310_1_cplx <==> 1 tl_term_b3310_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.49E+01	8.49E+01	0	8.29E+01	82.88	0	6.06E+01	60.627
tl_term_b3310_1_rib_RF2_2	Translation termination 2 b3310 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3310_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3310_aa + 1 b3310_mRNA_2 + 1 gdp + 3 h + 1 leuU_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.49E+01	8.49E+01	0	8.29E+01	82.88	0	6.06E+01	60.627
tl_term_b3310_3_rib1	Translation termination 1 b3310 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3310_3_cplx <==> 1 tl_term_b3310_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667

tl_term_b3310_3_rib2	Translation termination 2 b3310 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3310_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3310_aa + 1 b3310_mRNA_2 + 3 gdp + 9 h + 3 leuU_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3310_3_rib_RF2_1	Translation termination 1 b3310 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3310_3_cplx <==> 1 tl_term_b3310_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3310_3_rib_RF2_2	Translation termination 2 b3310 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3310_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3310_aa + 1 b3310_mRNA_2 + 3 gdp + 9 h + 3 leuU_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3310_7_rib1	Translation termination 1 b3310 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3310_7_cplx <==> 1 tl_term_b3310_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3310_7_rib2	Translation termination 2 b3310 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3310_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3310_aa + 1 b3310_mRNA_2 + 7 gdp + 21 h + 7 leuU_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3310_7_rib_RF2_1	Translation termination 1 b3310 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3310_7_cplx <==> 1 tl_term_b3310_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3310_7_rib_RF2_2	Translation termination 2 b3310 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b3310_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3310_aa + 1 b3310_mRNA_2 + 7 gdp + 21 h + 7 leuU_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3311_1_rib1	Translation termination 1 b3311 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3311_1_cplx <==> 1 tl_term_b3311_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.74E+01	8.74E+01	0	8.29E+01	82.88	0	6.35E+01	63.472
tl_term_b3311_1_rib2	Translation termination 2 b3311 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3311_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3311_aa + 1 b3311_mRNA_2 + 1 gdp + 3 h + 1 leu1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.74E+01	8.74E+01	0	8.29E+01	82.88	0	6.35E+01	63.472
tl_term_b3311_1_rib_RF2_1	Translation termination 1 b3311 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3311_1_cplx <==> 1 tl_term_b3311_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.74E+01	8.74E+01	0	8.29E+01	82.88	0	6.35E+01	63.472
tl_term_b3311_1_rib_RF2_2	Translation termination 2 b3311 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3311_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3311_aa + 1 b3311_mRNA_2 + 1 gdp + 3 h + 1 leu1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.74E+01	8.74E+01	0	8.29E+01	82.88	0	6.35E+01	63.472
tl_term_b3311_2_rib1	Translation termination 1 b3311 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3311_2_cplx <==> 1 tl_term_b3311_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3311_2_rib2	Translation termination 2 b3311 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3311_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3311_aa + 1 b3311_mRNA_2 + 2 gdp + 6 h + 2 leu1_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3311_2_rib_RF2_1	Translation termination 1 b3311 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3311_2_cplx <==> 1 tl_term_b3311_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3311_2_rib_RF2_2	Translation termination 2 b3311 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b3311_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3311_aa + 1 b3311_mRNA_2 + 2 gdp + 6 h + 2 leu1_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3311_4_rib1	Translation termination 1 b3311 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3311_4_cplx <==> 1 tl_term_b3311_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3311_4_rib2	Translation termination 2 b3311 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3311_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3311_aa + 1 b3311_mRNA_2 + 4 gdp + 12 h + 4 leu1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3311_4_rib_RF2_1	Translation termination 1 b3311 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3311_4_cplx <==> 1 tl_term_b3311_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3311_4_rib_RF2_2	Translation termination 2 b3311 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3311_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3311_aa + 1 b3311_mRNA_2 + 4 gdp + 12 h + 4 leu1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3312_1_rib1	Translation termination 1 b3312 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3312_1_cplx <==> 1 tl_term_b3312_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3312_1_rib2	Translation termination 2 b3312 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3312_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3312_aa + 1 b3312_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3312_1_rib_RF2_1	Translation termination 1 b3312 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3312_1_cplx <==> 1 tl_term_b3312_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3312_1_rib_RF2_2	Translation termination 2 b3312 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3312_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3312_aa + 1 b3312_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3312_3_rib1	Translation termination 1 b3312 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3312_3_cplx <==> 1 tl_term_b3312_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3312_3_rib2	Translation termination 2 b3312 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3312_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 ala1_tRNA + 3 b3312_aa + 1 b3312_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3312_3_rib_RF2_1	Translation termination 1 b3312 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3312_3_cplx <==> 1 tl_term_b3312_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3312_3_rib_RF2_2	Translation termination 2 b3312 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3312_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 ala1_tRNA + 3 b3312_aa + 1 b3312_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3313_1_rib1	Translation termination 1 b3313 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3313_1_cplx <==> 1 tl_term_b3313_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.45E+01	4.45E+01	0	6.62E+01	66.1957	0	1.71E+01	17.14514
tl_term_b3313_1_rib2	Translation termination 2 b3313 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3313_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3313_aa + 1 b3313_mRNA_2 + 1 gdp + 3 h + 1 met1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.45E+01	4.45E+01	0	6.62E+01	66.1957	0	1.71E+01	17.14514
tl_term_b3313_1_rib_RF2_1	Translation termination 1 b3313 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3313_1_cplx <==> 1 tl_term_b3313_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.45E+01	4.45E+01	0	6.62E+01	66.1957	0	1.71E+01	17.14514
tl_term_b3313_1_rib_RF2_2	Translation termination 2 b3313 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3313_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3313_aa + 1 b3313_mRNA_2 + 1 gdp + 3 h + 1 met1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.45E+01	4.45E+01	0	6.62E+01	66.1957	0	1.71E+01	17.14514
tl_term_b3313_4_rib1	Translation termination 1 b3313 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3313_4_cplx <==> 1 tl_term_b3313_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.70E+01	2.70E+01	0	2.07E+01	20.72	0	2.07E+01	20.72

tl_term_b3313_4_rib2	Translation termination 2 b3313 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3313_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3313_aa + 1 b3313_mRNA_2 + 4 gdp + 12 h + 4 met1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3313_4_rib_RF2_1	Translation termination 1 b3313 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3313_4_cplx <==> 1 tl_term_b3313_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.70E+01	2.70E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3313_4_rib_RF2_2	Translation termination 2 b3313 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3313_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3313_aa + 1 b3313_mRNA_2 + 4 gdp + 12 h + 4 met1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3313_8_rib1	Translation termination 1 b3313 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3313_8_cplx <==> 1 tl_term_b3313_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3313_8_rib2	Translation termination 2 b3313 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3313_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3313_aa + 1 b3313_mRNA_2 + 8 gdp + 24 h + 8 met1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3313_8_rib_RF2_1	Translation termination 1 b3313 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3313_8_cplx <==> 1 tl_term_b3313_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3313_8_rib_RF2_2	Translation termination 2 b3313 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b3313_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3313_aa + 1 b3313_mRNA_2 + 8 gdp + 24 h + 8 met1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3314_13_rib1	Translation termination 1 b3314 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3314_13_cplx <==> 1 tl_term_b3314_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.66E+00	8.66E+00	0	6.38E+00	6.375385	0	6.38E+00	6.375385
tl_term_b3314_13_rib2	Translation termination 2 b3314 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b3314_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b3314_aa + 1 b3314_mRNA_2 + 13 gdp + 39 h + 13 lys1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.66E+00	8.66E+00	0	6.38E+00	6.375385	0	6.38E+00	6.375385
tl_term_b3314_13_rib_RF2_1	Translation termination 1 b3314 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3314_13_cplx <==> 1 tl_term_b3314_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.66E+00	8.66E+00	0	6.38E+00	6.375385	0	6.38E+00	6.375385
tl_term_b3314_13_rib_RF2_2	Translation termination 2 b3314 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b3314_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b3314_aa + 1 b3314_mRNA_2 + 13 gdp + 39 h + 13 lys1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.66E+00	8.66E+00	0	6.38E+00	6.375385	0	6.38E+00	6.375385
tl_term_b3314_1_rib1	Translation termination 1 b3314 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3314_1_cplx <==> 1 tl_term_b3314_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.73E+01	3.73E+01	0	6.14E+01	61.39904	0	1.02E+01	10.173
tl_term_b3314_1_rib2	Translation termination 2 b3314 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3314_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3314_aa + 1 b3314_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.73E+01	3.73E+01	0	6.14E+01	61.39904	0	1.02E+01	10.173
tl_term_b3314_1_rib_RF2_1	Translation termination 1 b3314 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3314_1_cplx <==> 1 tl_term_b3314_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.73E+01	3.73E+01	0	6.14E+01	61.39904	0	1.02E+01	10.173
tl_term_b3314_1_rib_RF2_2	Translation termination 2 b3314 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3314_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3314_aa + 1 b3314_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.73E+01	3.73E+01	0	6.14E+01	61.39904	0	1.02E+01	10.173
tl_term_b3314_6_rib1	Translation termination 1 b3314 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3314_6_cplx <==> 1 tl_term_b3314_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.81E+01	1.81E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3314_6_rib2	Translation termination 2 b3314 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3314_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3314_aa + 1 b3314_mRNA_2 + 6 gdp + 18 h + 6 lys1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3314_6_rib_RF2_1	Translation termination 1 b3314 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3314_6_cplx <==> 1 tl_term_b3314_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.81E+01	1.81E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3314_6_rib_RF2_2	Translation termination 2 b3314 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b3314_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3314_aa + 1 b3314_mRNA_2 + 6 gdp + 18 h + 6 lys1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.81E+01	1.81E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3315_1_rib1	Translation termination 1 b3315 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3315_1_cplx <==> 1 tl_term_b3315_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.01E+01	6.01E+01	0	7.37E+01	73.65124	0	3.25E+01	32.5344
tl_term_b3315_1_rib2	Translation termination 2 b3315 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3315_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b3315_aa + 1 b3315_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.01E+01	6.01E+01	0	7.37E+01	73.65124	0	3.25E+01	32.5344
tl_term_b3315_3_rib1	Translation termination 1 b3315 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3315_3_cplx <==> 1 tl_term_b3315_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3315_3_rib2	Translation termination 2 b3315 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3315_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 arg1_tRNA + 3 b3315_aa + 1 b3315_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3315_6_rib1	Translation termination 1 b3315 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3315_6_cplx <==> 1 tl_term_b3315_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3315_6_rib2	Translation termination 2 b3315 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3315_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 arg1_tRNA + 6 b3315_aa + 1 b3315_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3316_1_rib1	Translation termination 1 b3316 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3316_1_cplx <==> 1 tl_term_b3316_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3316_1_rib2	Translation termination 2 b3316 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3316_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3316_aa + 1 b3316_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3316_1_rib_RF2_1	Translation termination 1 b3316 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3316_1_cplx <==> 1 tl_term_b3316_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3316_1_rib_RF2_2	Translation termination 2 b3316 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3316_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3316_aa + 1 b3316_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3316_2_rib1	Translation termination 1 b3316 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3316_2_cplx <==> 1 tl_term_b3316_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3316_2_rib2	Translation termination 2 b3316 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3316_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3316_aa + 1 b3316_mRNA_2 + 2 gdp + 6 h + 2 lys1_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3316_2_rib_RF2_1	Translation termination 1 b3316 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3316_2_cplx <==> 1 tl_term_b3316_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44

tl_term_b3316_2_rib_RF2_2	Translation termination 2 b3316 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b3316_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3316_aa + 1 b3316_mRNA_2 + 2 gdp + 6 h + 2 lys1_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3316_5_rib1	Translation termination 1 b3316 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3316_5_cplx <==> 1 tl_term_b3316_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3316_5_rib2	Translation termination 2 b3316 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3316_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3316_aa + 1 b3316_mRNA_2 + 5 gdp + 15 h + 5 lys1_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3316_5_rib_RF2_1	Translation termination 1 b3316 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3316_5_cplx <==> 1 tl_term_b3316_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3316_5_rib_RF2_2	Translation termination 2 b3316 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3316_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3316_aa + 1 b3316_mRNA_2 + 5 gdp + 15 h + 5 lys1_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3317_16_rib1	Translation termination 1 b3317 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b3317_16_cplx <==> 1 tl_term_b3317_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.04E+00	7.04E+00	0	5.18E+00	5.18	0	5.18E+00	5.18
tl_term_b3317_16_rib2	Translation termination 2 b3317 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b3317_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b3317_aa + 1 b3317_mRNA_2 + 16 gdp + 48 h + 16 lys1_tRNA + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+00	7.04E+00	0	5.18E+00	5.18	0	5.18E+00	5.18
tl_term_b3317_16_rib_RF2_1	Translation termination 1 b3317 16 ribosome(s), RF2_mono	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b3317_16_cplx <==> 1 tl_term_b3317_16_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.04E+00	7.04E+00	0	5.18E+00	5.18	0	5.18E+00	5.18
tl_term_b3317_16_rib_RF2_2	Translation termination 2 b3317 16 ribosome(s), RF2	16 gtp + 32 h2o + 1 tl_term_b3317_16_rib_cplx2 --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b3317_aa + 1 b3317_mRNA_2 + 16 gdp + 48 h + 16 lys1_tRNA + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.04E+00	7.04E+00	0	5.18E+00	5.18	0	5.18E+00	5.18
tl_term_b3317_1_rib1	Translation termination 1 b3317 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3317_1_cplx <==> 1 tl_term_b3317_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.04E+01	5.04E+01	0	6.77E+01	67.7286	0	2.33E+01	23.34613
tl_term_b3317_1_rib2	Translation termination 2 b3317 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3317_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3317_aa + 1 b3317_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.04E+01	5.04E+01	0	6.77E+01	67.7286	0	2.33E+01	23.34613
tl_term_b3317_1_rib_RF2_1	Translation termination 1 b3317 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3317_1_cplx <==> 1 tl_term_b3317_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.04E+01	5.04E+01	0	6.77E+01	67.7286	0	2.33E+01	23.34613
tl_term_b3317_1_rib_RF2_2	Translation termination 2 b3317 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3317_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3317_aa + 1 b3317_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.04E+01	5.04E+01	0	6.77E+01	67.7286	0	2.33E+01	23.34613
tl_term_b3317_8_rib1	Translation termination 1 b3317 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3317_8_cplx <==> 1 tl_term_b3317_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3317_8_rib2	Translation termination 2 b3317 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3317_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3317_aa + 1 b3317_mRNA_2 + 8 gdp + 24 h + 8 lys1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3317_8_rib_RF2_1	Translation termination 1 b3317 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3317_8_cplx <==> 1 tl_term_b3317_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3317_8_rib_RF2_2	Translation termination 2 b3317 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b3317_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3317_aa + 1 b3317_mRNA_2 + 8 gdp + 24 h + 8 lys1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3318_1_rib1	Translation termination 1 b3318 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3318_1_cplx <==> 1 tl_term_b3318_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3318_1_rib2	Translation termination 2 b3318 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3318_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3318_aa + 1 b3318_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3318_1_rib_RF2_1	Translation termination 1 b3318 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3318_1_cplx <==> 1 tl_term_b3318_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3318_1_rib_RF2_2	Translation termination 2 b3318 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3318_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3318_aa + 1 b3318_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3318_2_rib1	Translation termination 1 b3318 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3318_2_cplx <==> 1 tl_term_b3318_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3318_2_rib2	Translation termination 2 b3318 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3318_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3318_aa + 1 b3318_mRNA_2 + 2 gdp + 2 glu1_tRNA + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3318_2_rib_RF2_1	Translation termination 1 b3318 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3318_2_cplx <==> 1 tl_term_b3318_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3318_2_rib_RF2_2	Translation termination 2 b3318 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b3318_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3318_aa + 1 b3318_mRNA_2 + 2 gdp + 2 glu1_tRNA + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3318_5_rib1	Translation termination 1 b3318 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3318_5_cplx <==> 1 tl_term_b3318_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3318_5_rib2	Translation termination 2 b3318 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3318_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3318_aa + 1 b3318_mRNA_2 + 5 gdp + 5 glu1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3318_5_rib_RF2_1	Translation termination 1 b3318 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3318_5_cplx <==> 1 tl_term_b3318_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3318_5_rib_RF2_2	Translation termination 2 b3318 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3318_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3318_aa + 1 b3318_mRNA_2 + 5 gdp + 5 glu1_tRNA + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3319_11_rib1	Translation termination 1 b3319 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b3319_11_cplx <==> 1 tl_term_b3319_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.02E+01	1.02E+01	0	7.53E+00	7.534545	0	7.53E+00	7.534545
tl_term_b3319_11_rib2	Translation termination 2 b3319 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b3319_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 ala1_tRNA + 11 b3319_aa + 1 b3319_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.02E+01	1.02E+01	0	7.53E+00	7.534545	0	7.53E+00	7.534545
tl_term_b3319_1_rib1	Translation termination 1 b3319 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3319_1_cplx <==> 1 tl_term_b3319_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.85E+01	3.85E+01	0	6.27E+01	62.72106	0	1.14E+01	11.3532

tl_term_b3319_1_rib2	Translation termination 2 b3319 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3319_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3319_aa + 1 b3319_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.85E+01	3.85E+01	0	6.27E+01	62.72106	0	1.14E+01	11.3532
tl_term_b3319_5_rib1	Translation termination 1 b3319 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3319_5_cplx <==> 1 tl_term_b3319_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.14E+01	2.14E+01	0	1.66E+01	16.576	0	1.60E+01	15.972
tl_term_b3319_5_rib2	Translation termination 2 b3319 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3319_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 ala1_tRNA + 5 b3319_aa + 1 b3319_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	1.66E+01	16.576	0	1.60E+01	15.972
tl_term_b3320_12_rib1	Translation termination 1 b3320 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3320_12_cplx <==> 1 tl_term_b3320_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.38E+00	9.38E+00	0	6.91E+00	6.906667	0	6.91E+00	6.906667
tl_term_b3320_12_rib2	Translation termination 2 b3320 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b3320_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 ala1_tRNA + 12 b3320_aa + 1 b3320_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.38E+00	9.38E+00	0	6.91E+00	6.906667	0	6.91E+00	6.906667
tl_term_b3320_12_rib_RF2_1	Translation termination 1 b3320 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3320_12_cplx <==> 1 tl_term_b3320_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.38E+00	9.38E+00	0	6.91E+00	6.906667	0	6.91E+00	6.906667
tl_term_b3320_12_rib_RF2_2	Translation termination 2 b3320 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b3320_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 ala1_tRNA + 12 b3320_aa + 1 b3320_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.38E+00	9.38E+00	0	6.91E+00	6.906667	0	6.91E+00	6.906667
tl_term_b3320_1_rib1	Translation termination 1 b3320 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3320_1_cplx <==> 1 tl_term_b3320_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.19E+01	5.19E+01	0	6.88E+01	68.80163	0	2.48E+01	24.75491
tl_term_b3320_1_rib2	Translation termination 2 b3320 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3320_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3320_aa + 1 b3320_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	6.88E+01	68.80163	0	2.48E+01	24.75491
tl_term_b3320_1_rib_RF2_1	Translation termination 1 b3320 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3320_1_cplx <==> 1 tl_term_b3320_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.19E+01	5.19E+01	0	6.88E+01	68.80163	0	2.48E+01	24.75491
tl_term_b3320_1_rib_RF2_2	Translation termination 2 b3320 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3320_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3320_aa + 1 b3320_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.19E+01	5.19E+01	0	6.88E+01	68.80163	0	2.48E+01	24.75491
tl_term_b3320_6_rib1	Translation termination 1 b3320 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3320_6_cplx <==> 1 tl_term_b3320_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3320_6_rib2	Translation termination 2 b3320 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3320_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 ala1_tRNA + 6 b3320_aa + 1 b3320_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3320_6_rib_RF2_1	Translation termination 1 b3320 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3320_6_cplx <==> 1 tl_term_b3320_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3320_6_rib_RF2_2	Translation termination 2 b3320 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b3320_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 ala1_tRNA + 6 b3320_aa + 1 b3320_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3321_1_rib1	Translation termination 1 b3321 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3321_1_cplx <==> 1 tl_term_b3321_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3321_1_rib2	Translation termination 2 b3321 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3321_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3321_aa + 1 b3321_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3321_1_rib_RF2_1	Translation termination 1 b3321 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3321_1_cplx <==> 1 tl_term_b3321_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3321_1_rib_RF2_2	Translation termination 2 b3321 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3321_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3321_aa + 1 b3321_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3321_3_rib1	Translation termination 1 b3321 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3321_3_cplx <==> 1 tl_term_b3321_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3321_3_rib2	Translation termination 2 b3321 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3321_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3321_aa + 1 b3321_mRNA_2 + 3 gdp + 3 gly1_tRNA + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3321_3_rib_RF2_1	Translation termination 1 b3321 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3321_3_cplx <==> 1 tl_term_b3321_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3321_3_rib_RF2_2	Translation termination 2 b3321 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3321_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3321_aa + 1 b3321_mRNA_2 + 3 gdp + 3 gly1_tRNA + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3321_6_rib1	Translation termination 1 b3321 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3321_6_cplx <==> 1 tl_term_b3321_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3321_6_rib2	Translation termination 2 b3321 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3321_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3321_aa + 1 b3321_mRNA_2 + 6 gdp + 6 gly1_tRNA + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3321_6_rib_RF2_1	Translation termination 1 b3321 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3321_6_cplx <==> 1 tl_term_b3321_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3321_6_rib_RF2_2	Translation termination 2 b3321 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b3321_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3321_aa + 1 b3321_mRNA_2 + 6 gdp + 6 gly1_tRNA + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.88E+01	1.88E+01	0	1.38E+01	13.81333	0	1.38E+01	13.81333
tl_term_b3339_11_rib1	Translation termination 1 b3339 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b3339_11_cplx <==> 1 tl_term_b3339_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_term_b3339_11_rib2	Translation termination 2 b3339 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b3339_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b3339_aa + 1 b3339_mRNA_2 + 11 gdp + 11 gly1_tRNA + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_term_b3339_11_rib_RF2_1	Translation termination 1 b3339 11 ribosome(s), RF2_mono	11 RF2_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b3339_11_cplx <==> 1 tl_term_b3339_11_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_term_b3339_11_rib_RF2_2	Translation termination 2 b3339 11 ribosome(s), RF2	11 gtp + 22 h2o + 1 tl_term_b3339_11_rib_cplx2 --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF2_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b3339_aa + 1 b3339_mRNA_2 + 11 gdp + 11 gly1_tRNA + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158

tl_term_b3339_1_rib1	Translation termination 1 b3339 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3339_1_cplx <==> 1 tl_term_b3339_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_term_b3339_1_rib2	Translation termination 2 b3339 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3339_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3339_aa + 1 b3339_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_term_b3339_1_rib_RF2_1	Translation termination 1 b3339 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3339_1_cplx <==> 1 tl_term_b3339_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_term_b3339_1_rib_RF2_2	Translation termination 2 b3339 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3339_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3339_aa + 1 b3339_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_term_b3339_23_rib1	Translation termination 1 b3339 23 ribosome(s), (RF1_mono)	23 RF1_mono + 23 RF3_mono.GDP + 23 Rrf_mono + 1 rib_70_elo2_b3339_23_cplx <==> 1 tl_term_b3339_23_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_term_b3339_23_rib2	Translation termination 2 b3339 23 ribosome(s), (RF1_mono)	23 gtp + 46 h2o + 1 tl_term_b3339_23_rib_cplx --> 23 EF-G.GDP + 23 EF-Tu.GDP + 23 RF1_mono_inact + 23 RF3_mono.GDP_inact + 23 Rrf_mono_inact + 23 b3339_aa + 1 b3339_mRNA_2 + 23 gdp + 23 gly1_tRNA + 69 h + 69 pi + 23 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_term_b3339_23_rib_RF2_1	Translation termination 1 b3339 23 ribosome(s), RF2_mono	23 RF2_mono + 23 RF3_mono.GDP + 23 Rrf_mono + 1 rib_70_elo2_b3339_23_cplx <==> 1 tl_term_b3339_23_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_term_b3339_23_rib_RF2_2	Translation termination 2 b3339 23 ribosome(s), RF2	23 gtp + 46 h2o + 1 tl_term_b3339_23_rib_cplx2 --> 23 EF-G.GDP + 23 EF-Tu.GDP + 23 RF2_mono_inact + 23 RF3_mono.GDP_inact + 23 Rrf_mono_inact + 23 b3339_aa + 1 b3339_mRNA_2 + 23 gdp + 23 gly1_tRNA + 69 h + 69 pi + 23 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.26E+01	9.26E+01	0	1.22E+02	121.7591	0	5.52E+01	55.158
tl_term_b3340_1_rib1	Translation termination 1 b3340 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3340_1_cplx <==> 1 tl_term_b3340_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.99E+01	4.99E+01	0	7.91E+01	79.05913	0	1.25E+01	12.458
tl_term_b3340_1_rib2	Translation termination 2 b3340 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3340_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3340_aa + 1 b3340_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.91E+01	79.05913	0	1.25E+01	12.458
tl_term_b3340_1_rib_RF2_1	Translation termination 1 b3340 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3340_1_cplx <==> 1 tl_term_b3340_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.99E+01	4.99E+01	0	7.91E+01	79.05913	0	1.25E+01	12.458
tl_term_b3340_1_rib_RF2_2	Translation termination 2 b3340 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3340_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3340_aa + 1 b3340_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.91E+01	79.05913	0	1.25E+01	12.458
tl_term_b3340_20_rib1	Translation termination 1 b3340 20 ribosome(s), (RF1_mono)	20 RF1_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b3340_20_cplx <==> 1 tl_term_b3340_20_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.99E+01	4.99E+01	0	7.91E+01	79.05913	0	1.25E+01	12.458
tl_term_b3340_20_rib2	Translation termination 2 b3340 20 ribosome(s), (RF1_mono)	20 gtp + 40 h2o + 1 tl_term_b3340_20_rib_cplx --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF1_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 b3340_aa + 1 b3340_mRNA_2 + 20 gdp + 60 h + 20 lys1_tRNA + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.91E+01	79.05913	0	1.25E+01	12.458
tl_term_b3340_20_rib_RF2_1	Translation termination 1 b3340 20 ribosome(s), RF2_mono	20 RF2_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b3340_20_cplx <==> 1 tl_term_b3340_20_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.99E+01	4.99E+01	0	7.91E+01	79.05913	0	1.25E+01	12.458
tl_term_b3340_20_rib_RF2_2	Translation termination 2 b3340 20 ribosome(s), RF2	20 gtp + 40 h2o + 1 tl_term_b3340_20_rib_cplx2 --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF2_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 b3340_aa + 1 b3340_mRNA_2 + 20 gdp + 60 h + 20 lys1_tRNA + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.91E+01	79.05913	0	1.25E+01	12.458
tl_term_b3340_41_rib1	Translation termination 1 b3340 41 ribosome(s), (RF1_mono)	41 RF1_mono + 41 RF3_mono.GDP + 41 Rrf_mono + 1 rib_70_elo2_b3340_41_cplx <==> 1 tl_term_b3340_41_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.99E+01	4.99E+01	0	7.66E+01	76.60959	0	1.25E+01	12.458
tl_term_b3340_41_rib2	Translation termination 2 b3340 41 ribosome(s), (RF1_mono)	41 gtp + 82 h2o + 1 tl_term_b3340_41_rib_cplx --> 41 EF-G.GDP + 41 EF-Tu.GDP + 41 RF1_mono_inact + 41 RF3_mono.GDP_inact + 41 Rrf_mono_inact + 41 b3340_aa + 1 b3340_mRNA_2 + 41 gdp + 123 h + 41 lys1_tRNA + 123 pi + 41 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.66E+01	76.60959	0	1.25E+01	12.458
tl_term_b3340_41_rib_RF2_1	Translation termination 1 b3340 41 ribosome(s), RF2_mono	41 RF2_mono + 41 RF3_mono.GDP + 41 Rrf_mono + 1 rib_70_elo2_b3340_41_cplx <==> 1 tl_term_b3340_41_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.99E+01	4.99E+01	0	7.66E+01	76.60959	0	1.25E+01	12.458
tl_term_b3340_41_rib_RF2_2	Translation termination 2 b3340 41 ribosome(s), RF2	41 gtp + 82 h2o + 1 tl_term_b3340_41_rib_cplx2 --> 41 EF-G.GDP + 41 EF-Tu.GDP + 41 RF2_mono_inact + 41 RF3_mono.GDP_inact + 41 Rrf_mono_inact + 41 b3340_aa + 1 b3340_mRNA_2 + 41 gdp + 123 h + 41 lys1_tRNA + 123 pi + 41 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.99E+01	4.99E+01	0	7.66E+01	76.60959	0	1.25E+01	12.458
tl_term_b3341_10_rib1	Translation termination 1 b3341 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3341_10_cplx <==> 1 tl_term_b3341_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_term_b3341_10_rib2	Translation termination 2 b3341 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b3341_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 asn1_tRNA + 10 b3341_aa + 1 b3341_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+01	1.13E+01	0	8.29E+00	8.288	0	8.29E+00	8.288
tl_term_b3341_1_rib1	Translation termination 1 b3341 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3341_1_cplx <==> 1 tl_term_b3341_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.67E+01	5.67E+01	0	7.18E+01	71.82262	0	2.73E+01	27.27889
tl_term_b3341_1_rib2	Translation termination 2 b3341 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3341_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b3341_aa + 1 b3341_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.67E+01	5.67E+01	0	7.18E+01	71.82262	0	2.73E+01	27.27889
tl_term_b3341_5_rib1	Translation termination 1 b3341 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3341_5_cplx <==> 1 tl_term_b3341_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3341_5_rib2	Translation termination 2 b3341 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3341_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 asn1_tRNA + 5 b3341_aa + 1 b3341_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	1.66E+01	16.576	0	1.66E+01	16.576
tl_term_b3342_1_rib1	Translation termination 1 b3342 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3342_1_cplx <==> 1 tl_term_b3342_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.32E+01	9.32E+01	0	8.29E+01	82.88	0	7.36E+01	73.567
tl_term_b3342_1_rib2	Translation termination 2 b3342 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3342_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3342_aa + 1 b3342_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.32E+01	9.32E+01	0	8.29E+01	82.88	0	7.36E+01	73.567
tl_term_b3342_1_rib_RF2_1	Translation termination 1 b3342 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3342_1_cplx <==> 1 tl_term_b3342_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.32E+01	9.32E+01	0	8.29E+01	82.88	0	7.36E+01	73.567
tl_term_b3342_1_rib_RF2_2	Translation termination 2 b3342 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3342_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3342_aa + 1 b3342_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.32E+01	9.32E+01	0	8.29E+01	82.88	0	7.36E+01	73.567
tl_term_b3342_3_rib1	Translation termination 1 b3342 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3342_3_cplx <==> 1 tl_term_b3342_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667

tl_term_b3342_3_rib2	Translation termination 2 b3342 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3342_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 ala1_tRNA + 3 b3342_aa + 1 b3342_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3342_3_rib_RF2_1	Translation termination 1 b3342 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3342_3_cplx <==> 1 tl_term_b3342_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3342_3_rib_RF2_2	Translation termination 2 b3342 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3342_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 ala1_tRNA + 3 b3342_aa + 1 b3342_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3342_7_rib1	Translation termination 1 b3342 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3342_7_cplx <==> 1 tl_term_b3342_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3342_7_rib2	Translation termination 2 b3342 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3342_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 ala1_tRNA + 7 b3342_aa + 1 b3342_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3342_7_rib_RF2_1	Translation termination 1 b3342 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3342_7_cplx <==> 1 tl_term_b3342_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3342_7_rib_RF2_2	Translation termination 2 b3342 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b3342_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 ala1_tRNA + 7 b3342_aa + 1 b3342_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b3343_1_rib1	Translation termination 1 b3343 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3343_1_cplx <==> 1 tl_term_b3343_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.48E+01	14.812
tl_term_b3343_1_rib2	Translation termination 2 b3343 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3343_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3343_aa + 1 b3343_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.48E+01	14.812
tl_term_b3343_2_rib1	Translation termination 1 b3343 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3343_2_cplx <==> 1 tl_term_b3343_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.48E+01	14.812
tl_term_b3343_2_rib2	Translation termination 2 b3343 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3343_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3343_aa + 1 b3343_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70 + 2 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.48E+01	14.812
tl_term_b3343_5_rib1	Translation termination 1 b3343 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3343_5_cplx <==> 1 tl_term_b3343_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.34E+01	13.4148
tl_term_b3343_5_rib2	Translation termination 2 b3343 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3343_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3343_aa + 1 b3343_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70 + 5 trpT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	8.90E+01	8.90E+01	0	1.46E+02	145.8153	0	1.34E+01	13.4148
tl_term_b3344_1_rib1	Translation termination 1 b3344 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3344_1_cplx <==> 1 tl_term_b3344_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.76E+01	8.76E+01	0	1.44E+02	144.4153	0	1.34E+01	13.412
tl_term_b3344_1_rib2	Translation termination 2 b3344 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3344_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3344_aa + 1 b3344_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.76E+01	8.76E+01	0	1.44E+02	144.4153	0	1.34E+01	13.412
tl_term_b3344_3_rib1	Translation termination 1 b3344 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3344_3_cplx <==> 1 tl_term_b3344_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.76E+01	8.76E+01	0	1.44E+02	144.4153	0	1.34E+01	13.412
tl_term_b3344_3_rib2	Translation termination 2 b3344 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3344_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3344_aa + 1 b3344_mRNA_2 + 3 gdp + 9 h + 3 phe1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.76E+01	8.76E+01	0	1.44E+02	144.4153	0	1.34E+01	13.412
tl_term_b3344_7_rib1	Translation termination 1 b3344 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3344_7_cplx <==> 1 tl_term_b3344_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.18E+01	6.18E+01	0	9.97E+01	99.66022	0	9.58E+00	9.582
tl_term_b3344_7_rib2	Translation termination 2 b3344 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3344_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3344_aa + 1 b3344_mRNA_2 + 7 gdp + 21 h + 7 phe1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	9.97E+01	99.66022	0	9.58E+00	9.582
tl_term_b3345_1_rib1	Translation termination 1 b3345 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3345_1_cplx <==> 1 tl_term_b3345_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.37E+01	8.37E+01	0	1.41E+02	140.5853	0	9.58E+00	9.582
tl_term_b3345_1_rib2	Translation termination 2 b3345 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3345_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3345_aa + 1 b3345_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.37E+01	8.37E+01	0	1.41E+02	140.5853	0	9.58E+00	9.582
tl_term_b3345_3_rib1	Translation termination 1 b3345 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3345_3_cplx <==> 1 tl_term_b3345_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.37E+01	8.37E+01	0	1.41E+02	140.5853	0	9.58E+00	9.582
tl_term_b3345_3_rib2	Translation termination 2 b3345 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3345_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3345_aa + 1 b3345_mRNA_2 + 3 gdp + 9 h + 3 phe1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.37E+01	8.37E+01	0	1.41E+02	140.5853	0	9.58E+00	9.582
tl_term_b3345_7_rib1	Translation termination 1 b3345 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3345_7_cplx <==> 1 tl_term_b3345_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.18E+01	6.18E+01	0	9.97E+01	99.66022	0	9.58E+00	9.582
tl_term_b3345_7_rib2	Translation termination 2 b3345 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3345_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3345_aa + 1 b3345_mRNA_2 + 7 gdp + 21 h + 7 phe1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+01	6.18E+01	0	9.97E+01	99.66022	0	9.58E+00	9.582
tl_term_b3346_14_rib1	Translation termination 1 b3346 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b3346_14_cplx <==> 1 tl_term_b3346_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_term_b3346_14_rib2	Translation termination 2 b3346 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b3346_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b3346_aa + 1 b3346_mRNA_2 + 14 gdp + 42 h + 14 lys1_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_term_b3346_14_rib_RF2_1	Translation termination 1 b3346 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b3346_14_cplx <==> 1 tl_term_b3346_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_term_b3346_14_rib_RF2_2	Translation termination 2 b3346 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b3346_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b3346_aa + 1 b3346_mRNA_2 + 14 gdp + 42 h + 14 lys1_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_term_b3346_1_rib1	Translation termination 1 b3346 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3346_1_cplx <==> 1 tl_term_b3346_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_term_b3346_1_rib2	Translation termination 2 b3346 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3346_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3346_aa + 1 b3346_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_term_b3346_1_rib_RF2_1	Translation termination 1 b3346 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3346_1_cplx <==> 1 tl_term_b3346_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942

tl_term_b3346_1_rib_RF2_2	Translation termination 2 b3346 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3346_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3346_aa + 1 b3346_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_term_b3346_7_rib1	Translation termination 1 b3346 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3346_7_cplx <==> 1 tl_term_b3346_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_term_b3346_7_rib2	Translation termination 2 b3346 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3346_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3346_aa + 1 b3346_mRNA_2 + 7 gdp + 21 h + 7 lys1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_term_b3346_7_rib_RF2_1	Translation termination 1 b3346 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3346_7_cplx <==> 1 tl_term_b3346_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_term_b3346_7_rib_RF2_2	Translation termination 2 b3346 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b3346_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3346_aa + 1 b3346_mRNA_2 + 7 gdp + 21 h + 7 lys1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.01E+01	8.01E+01	0	1.37E+02	136.9453	0	5.94E+00	5.942
tl_term_b3384_19_rib1	Translation termination 1 b3384 19 ribosome(s), (RF1_mono)	19 RF1_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b3384_19_cplx <==> 1 tl_term_b3384_19_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_term_b3384_19_rib2	Translation termination 2 b3384 19 ribosome(s), (RF1_mono)	19 gtp + 38 h2o + 1 tl_term_b3384_19_rib_cplx --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF1_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b3384_aa + 1 b3384_mRNA_2 + 19 gdp + 57 h + 57 pi + 19 pro1_tRNA + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_term_b3384_19_rib_RF2_1	Translation termination 1 b3384 19 ribosome(s), RF2_mono	19 RF2_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b3384_19_cplx <==> 1 tl_term_b3384_19_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_term_b3384_19_rib_RF2_2	Translation termination 2 b3384 19 ribosome(s), RF2	19 gtp + 38 h2o + 1 tl_term_b3384_19_rib_cplx2 --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF2_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b3384_aa + 1 b3384_mRNA_2 + 19 gdp + 57 h + 57 pi + 19 pro1_tRNA + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_term_b3384_1_rib1	Translation termination 1 b3384 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3384_1_cplx <==> 1 tl_term_b3384_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_term_b3384_1_rib2	Translation termination 2 b3384 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3384_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3384_aa + 1 b3384_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 pro1_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_term_b3384_1_rib_RF2_1	Translation termination 1 b3384 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3384_1_cplx <==> 1 tl_term_b3384_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_term_b3384_1_rib_RF2_2	Translation termination 2 b3384 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3384_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3384_aa + 1 b3384_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 pro1_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_term_b3384_9_rib1	Translation termination 1 b3384 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3384_9_cplx <==> 1 tl_term_b3384_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_term_b3384_9_rib2	Translation termination 2 b3384 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b3384_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b3384_aa + 1 b3384_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 pro1_tRNA + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_term_b3384_9_rib_RF2_1	Translation termination 1 b3384 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3384_9_cplx <==> 1 tl_term_b3384_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_term_b3384_9_rib_RF2_2	Translation termination 2 b3384 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b3384_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b3384_aa + 1 b3384_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 pro1_tRNA + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.36E+02	1.36E+02	0	2.36E+02	236.2608	0	6.33E+00	6.329
tl_term_b3385_14_rib1	Translation termination 1 b3385 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b3385_14_cplx <==> 1 tl_term_b3385_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_term_b3385_14_rib2	Translation termination 2 b3385 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b3385_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 asp1_tRNA + 14 b3385_aa + 1 b3385_mRNA_2 + 14 gdp + 42 h + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_term_b3385_14_rib_RF2_1	Translation termination 1 b3385 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b3385_14_cplx <==> 1 tl_term_b3385_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_term_b3385_14_rib_RF2_2	Translation termination 2 b3385 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b3385_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 asp1_tRNA + 14 b3385_aa + 1 b3385_mRNA_2 + 14 gdp + 42 h + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_term_b3385_1_rib1	Translation termination 1 b3385 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3385_1_cplx <==> 1 tl_term_b3385_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_term_b3385_1_rib2	Translation termination 2 b3385 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3385_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b3385_aa + 1 b3385_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_term_b3385_1_rib_RF2_1	Translation termination 1 b3385 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3385_1_cplx <==> 1 tl_term_b3385_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_term_b3385_1_rib_RF2_2	Translation termination 2 b3385 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3385_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b3385_aa + 1 b3385_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_term_b3385_7_rib1	Translation termination 1 b3385 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3385_7_cplx <==> 1 tl_term_b3385_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_term_b3385_7_rib2	Translation termination 2 b3385 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3385_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3385_aa + 1 b3385_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_term_b3385_7_rib_RF2_1	Translation termination 1 b3385 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3385_7_cplx <==> 1 tl_term_b3385_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_term_b3385_7_rib_RF2_2	Translation termination 2 b3385 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b3385_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3385_aa + 1 b3385_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.95E+01	5.95E+01	0	1.01E+02	100.5166	0	6.11E+00	6.109
tl_term_b3386_13_rib1	Translation termination 1 b3386 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3386_13_cplx <==> 1 tl_term_b3386_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_term_b3386_13_rib2	Translation termination 2 b3386 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b3386_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b3386_aa + 1 b3386_mRNA_2 + 13 gdp + 13 glu1_tRNA + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719

tl_term_b3386_13_rib_RF2_1	Translation termination 1 b3386 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3386_13_cplx <==> 1 tl_term_b3386_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_term_b3386_13_rib_RF2_2	Translation termination 2 b3386 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b3386_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b3386_aa + 1 b3386_mRNA_2 + 13 gdp + 13 glu1_tRNA + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_term_b3386_1_rib1	Translation termination 1 b3386 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3386_1_cplx <==> 1 tl_term_b3386_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_term_b3386_1_rib2	Translation termination 2 b3386 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3386_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3386_aa + 1 b3386_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_term_b3386_1_rib_RF2_1	Translation termination 1 b3386 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3386_1_cplx <==> 1 tl_term_b3386_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_term_b3386_1_rib_RF2_2	Translation termination 2 b3386 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3386_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3386_aa + 1 b3386_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_term_b3386_6_rib1	Translation termination 1 b3386 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3386_6_cplx <==> 1 tl_term_b3386_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_term_b3386_6_rib2	Translation termination 2 b3386 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3386_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3386_aa + 1 b3386_mRNA_2 + 6 gdp + 6 glu1_tRNA + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_term_b3386_6_rib_RF2_1	Translation termination 1 b3386 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3386_6_cplx <==> 1 tl_term_b3386_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_term_b3386_6_rib_RF2_2	Translation termination 2 b3386 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b3386_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3386_aa + 1 b3386_mRNA_2 + 6 gdp + 6 glu1_tRNA + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.31E+01	6.31E+01	0	1.04E+02	104.1266	0	9.72E+00	9.719
tl_term_b3387_16_rib1	Translation termination 1 b3387 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b3387_16_cplx <==> 1 tl_term_b3387_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_term_b3387_16_rib2	Translation termination 2 b3387 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b3387_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b3387_aa + 1 b3387_mRNA_2 + 16 gdp + 48 h + 16 lys1_tRNA + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_term_b3387_16_rib_RF2_1	Translation termination 1 b3387 16 ribosome(s), RF2_mono	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b3387_16_cplx <==> 1 tl_term_b3387_16_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_term_b3387_16_rib_RF2_2	Translation termination 2 b3387 16 ribosome(s), RF2	16 gtp + 32 h2o + 1 tl_term_b3387_16_rib_cplx2 --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b3387_aa + 1 b3387_mRNA_2 + 16 gdp + 48 h + 16 lys1_tRNA + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_term_b3387_1_rib1	Translation termination 1 b3387 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3387_1_cplx <==> 1 tl_term_b3387_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_term_b3387_1_rib2	Translation termination 2 b3387 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3387_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3387_aa + 1 b3387_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_term_b3387_1_rib_RF2_1	Translation termination 1 b3387 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3387_1_cplx <==> 1 tl_term_b3387_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_term_b3387_1_rib_RF2_2	Translation termination 2 b3387 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3387_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3387_aa + 1 b3387_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_term_b3387_8_rib1	Translation termination 1 b3387 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3387_8_cplx <==> 1 tl_term_b3387_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_term_b3387_8_rib2	Translation termination 2 b3387 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3387_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3387_aa + 1 b3387_mRNA_2 + 8 gdp + 24 h + 8 lys1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_term_b3387_8_rib_RF2_1	Translation termination 1 b3387 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3387_8_cplx <==> 1 tl_term_b3387_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_term_b3387_8_rib_RF2_2	Translation termination 2 b3387 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b3387_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3387_aa + 1 b3387_mRNA_2 + 8 gdp + 24 h + 8 lys1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.41E+01	4.41E+01	0	7.46E+01	74.5712	0	4.53E+00	4.534
tl_term_b3388_12_rib1	Translation termination 1 b3388 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3388_12_cplx <==> 1 tl_term_b3388_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_term_b3388_12_rib2	Translation termination 2 b3388 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b3388_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b3388_aa + 1 b3388_mRNA_2 + 12 gdp + 36 h + 12 lys1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_term_b3388_12_rib_RF2_1	Translation termination 1 b3388 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3388_12_cplx <==> 1 tl_term_b3388_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_term_b3388_12_rib_RF2_2	Translation termination 2 b3388 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b3388_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b3388_aa + 1 b3388_mRNA_2 + 12 gdp + 36 h + 12 lys1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_term_b3388_1_rib1	Translation termination 1 b3388 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3388_1_cplx <==> 1 tl_term_b3388_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_term_b3388_1_rib2	Translation termination 2 b3388 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3388_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3388_aa + 1 b3388_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_term_b3388_1_rib_RF2_1	Translation termination 1 b3388 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3388_1_cplx <==> 1 tl_term_b3388_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_term_b3388_1_rib_RF2_2	Translation termination 2 b3388 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3388_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3388_aa + 1 b3388_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_term_b3388_25_rib1	Translation termination 1 b3388 25 ribosome(s), (RF1_mono)	25 RF1_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b3388_25_cplx <==> 1 tl_term_b3388_25_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004

tl_term_b3388_25_rib2	Translation termination 2 b3388 25 ribosome(s), (RF1_mono)	25 gtp + 50 h2o + 1 tl_term_b3388_25_rib_cplx --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF1_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 b3388_aa + 1 b3388_mRNA_2 + 25 gdp + 75 h + 25 lys1_tRNA + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_term_b3388_25_rib_RF2_1	Translation termination 1 b3388 25 ribosome(s), RF2_mono	25 RF2_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b3388_25_cplx <==> 1 tl_term_b3388_25_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_term_b3388_25_rib_RF2_2	Translation termination 2 b3388 25 ribosome(s), RF2	25 gtp + 50 h2o + 1 tl_term_b3388_25_rib_cplx2 --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF2_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 b3388_aa + 1 b3388_mRNA_2 + 25 gdp + 75 h + 25 lys1_tRNA + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+01	2.99E+01	0	5.06E+01	50.64984	0	3.00E+00	3.004
tl_term_b3389_10_rib1	Translation termination 1 b3389 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3389_10_cplx <==> 1 tl_term_b3389_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_term_b3389_10_rib2	Translation termination 2 b3389 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b3389_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 ala1_tRNA + 10 b3389_aa + 1 b3389_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_term_b3389_10_rib_RF2_1	Translation termination 1 b3389 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3389_10_cplx <==> 1 tl_term_b3389_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_term_b3389_10_rib_RF2_2	Translation termination 2 b3389 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b3389_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 ala1_tRNA + 10 b3389_aa + 1 b3389_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_term_b3389_1_rib1	Translation termination 1 b3389 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3389_1_cplx <==> 1 tl_term_b3389_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_term_b3389_1_rib2	Translation termination 2 b3389 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3389_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3389_aa + 1 b3389_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_term_b3389_1_rib_RF2_1	Translation termination 1 b3389 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3389_1_cplx <==> 1 tl_term_b3389_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_term_b3389_1_rib_RF2_2	Translation termination 2 b3389 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3389_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3389_aa + 1 b3389_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_term_b3389_21_rib1	Translation termination 1 b3389 21 ribosome(s), (RF1_mono)	21 RF1_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b3389_21_cplx <==> 1 tl_term_b3389_21_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_term_b3389_21_rib2	Translation termination 2 b3389 21 ribosome(s), (RF1_mono)	21 gtp + 42 h2o + 1 tl_term_b3389_21_rib_cplx --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF1_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 ala1_tRNA + 21 b3389_aa + 1 b3389_mRNA_2 + 21 gdp + 63 h + 63 pi + 21 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_term_b3389_21_rib_RF2_1	Translation termination 1 b3389 21 ribosome(s), RF2_mono	21 RF2_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b3389_21_cplx <==> 1 tl_term_b3389_21_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_term_b3389_21_rib_RF2_2	Translation termination 2 b3389 21 ribosome(s), RF2	21 gtp + 42 h2o + 1 tl_term_b3389_21_rib_cplx2 --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF2_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 ala1_tRNA + 21 b3389_aa + 1 b3389_mRNA_2 + 21 gdp + 63 h + 63 pi + 21 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.38E+01	2.38E+01	0	3.92E+01	39.18072	0	3.71E+00	3.714
tl_term_b3390_10_rib1	Translation termination 1 b3390 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3390_10_cplx <==> 1 tl_term_b3390_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_term_b3390_10_rib2	Translation termination 2 b3390 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b3390_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 asn1_tRNA + 10 b3390_aa + 1 b3390_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_term_b3390_10_rib_RF2_1	Translation termination 1 b3390 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3390_10_cplx <==> 1 tl_term_b3390_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_term_b3390_10_rib_RF2_2	Translation termination 2 b3390 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b3390_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 asn1_tRNA + 10 b3390_aa + 1 b3390_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_term_b3390_1_rib1	Translation termination 1 b3390 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3390_1_cplx <==> 1 tl_term_b3390_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_term_b3390_1_rib2	Translation termination 2 b3390 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3390_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b3390_aa + 1 b3390_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_term_b3390_1_rib_RF2_1	Translation termination 1 b3390 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3390_1_cplx <==> 1 tl_term_b3390_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_term_b3390_1_rib_RF2_2	Translation termination 2 b3390 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3390_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b3390_aa + 1 b3390_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_term_b3390_5_rib1	Translation termination 1 b3390 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3390_5_cplx <==> 1 tl_term_b3390_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_term_b3390_5_rib2	Translation termination 2 b3390 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3390_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 asn1_tRNA + 5 b3390_aa + 1 b3390_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_term_b3390_5_rib_RF2_1	Translation termination 1 b3390 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3390_5_cplx <==> 1 tl_term_b3390_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_term_b3390_5_rib_RF2_2	Translation termination 2 b3390 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3390_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 asn1_tRNA + 5 b3390_aa + 1 b3390_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.77E+01	2.77E+01	0	4.31E+01	43.12072	0	7.65E+00	7.654
tl_term_b3406_1_rib1	Translation termination 1 b3406 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3406_1_cplx <==> 1 tl_term_b3406_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_term_b3406_1_rib2	Translation termination 2 b3406 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3406_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3406_aa + 1 b3406_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 pro1_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_term_b3406_1_rib_RF2_1	Translation termination 1 b3406 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3406_1_cplx <==> 1 tl_term_b3406_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545

tl_term_b3406_1_rib_RF2_2	Translation termination 2 b3406 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3406_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3406_aa + 1 b3406_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 pro1_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_term_b3406_4_rib1	Translation termination 1 b3406 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3406_4_cplx <==> 1 tl_term_b3406_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_term_b3406_4_rib2	Translation termination 2 b3406 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3406_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3406_aa + 1 b3406_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 pro1_tRNA + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_term_b3406_4_rib_RF2_1	Translation termination 1 b3406 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3406_4_cplx <==> 1 tl_term_b3406_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_term_b3406_4_rib_RF2_2	Translation termination 2 b3406 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3406_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3406_aa + 1 b3406_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 pro1_tRNA + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_term_b3406_9_rib1	Translation termination 1 b3406 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3406_9_cplx <==> 1 tl_term_b3406_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_term_b3406_9_rib2	Translation termination 2 b3406 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b3406_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b3406_aa + 1 b3406_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 pro1_tRNA + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_term_b3406_9_rib_RF2_1	Translation termination 1 b3406 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3406_9_cplx <==> 1 tl_term_b3406_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_term_b3406_9_rib_RF2_2	Translation termination 2 b3406 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b3406_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b3406_aa + 1 b3406_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 pro1_tRNA + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.99E+02	2.99E+02	0	5.21E+02	520.8018	0	8.35E+00	8.3545
tl_term_b3461_16_rib1	Translation termination 1 b3461 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b3461_16_cplx <==> 1 tl_term_b3461_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_term_b3461_16_rib2	Translation termination 2 b3461 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b3461_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 ala1_tRNA + 16 b3461_aa + 1 b3461_mRNA_2 + 16 gdp + 48 h + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_term_b3461_16_rib_RF2_1	Translation termination 1 b3461 16 ribosome(s), RF2_mono	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b3461_16_cplx <==> 1 tl_term_b3461_16_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_term_b3461_16_rib_RF2_2	Translation termination 2 b3461 16 ribosome(s), RF2	16 gtp + 32 h2o + 1 tl_term_b3461_16_rib_cplx2 --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 ala1_tRNA + 16 b3461_aa + 1 b3461_mRNA_2 + 16 gdp + 48 h + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_term_b3461_1_rib1	Translation termination 1 b3461 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3461_1_cplx <==> 1 tl_term_b3461_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_term_b3461_1_rib2	Translation termination 2 b3461 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3461_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3461_aa + 1 b3461_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_term_b3461_1_rib_RF2_1	Translation termination 1 b3461 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3461_1_cplx <==> 1 tl_term_b3461_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_term_b3461_1_rib_RF2_2	Translation termination 2 b3461 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3461_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3461_aa + 1 b3461_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_term_b3461_8_rib1	Translation termination 1 b3461 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3461_8_cplx <==> 1 tl_term_b3461_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_term_b3461_8_rib2	Translation termination 2 b3461 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3461_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 ala1_tRNA + 8 b3461_aa + 1 b3461_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_term_b3461_8_rib_RF2_1	Translation termination 1 b3461 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3461_8_cplx <==> 1 tl_term_b3461_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_term_b3461_8_rib_RF2_2	Translation termination 2 b3461 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b3461_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 ala1_tRNA + 8 b3461_aa + 1 b3461_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.66E+02	265.7238	0	6.21E+00	6.209
tl_term_b3470_1_rib1	Translation termination 1 b3470 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3470_1_cplx <==> 1 tl_term_b3470_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9
tl_term_b3470_1_rib2	Translation termination 2 b3470 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3470_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3470_aa + 1 b3470_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9
tl_term_b3470_2_rib1	Translation termination 1 b3470 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3470_2_cplx <==> 1 tl_term_b3470_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9
tl_term_b3470_2_rib2	Translation termination 2 b3470 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3470_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3470_aa + 1 b3470_mRNA_2 + 2 gdp + 2 gly1_tRNA + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9
tl_term_b3470_4_rib1	Translation termination 1 b3470 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3470_4_cplx <==> 1 tl_term_b3470_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9
tl_term_b3470_4_rib2	Translation termination 2 b3470 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3470_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3470_aa + 1 b3470_mRNA_2 + 4 gdp + 4 gly1_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.62E+02	862.1865	0	2.09E+01	20.9
tl_term_b3559_1_rib1	Translation termination 1 b3559 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3559_1_cplx <==> 1 tl_term_b3559_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.18E+01	4.18E+01	0	7.26E+01	72.62705	0	1.83E+00	1.827
tl_term_b3559_1_rib2	Translation termination 2 b3559 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3559_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3559_aa + 1 b3559_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.18E+01	4.18E+01	0	7.26E+01	72.62705	0	1.83E+00	1.827
tl_term_b3559_1_rib_RF2_1	Translation termination 1 b3559 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3559_1_cplx <==> 1 tl_term_b3559_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.18E+01	4.18E+01	0	7.26E+01	72.62705	0	1.83E+00	1.827
tl_term_b3559_1_rib_RF2_2	Translation termination 2 b3559 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3559_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3559_aa + 1 b3559_mRNA_2 + 1 gdp + 1 gln2_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.18E+01	4.18E+01	0	7.26E+01	72.62705	0	1.83E+00	1.827
tl_term_b3559_20_rib1	Translation termination 1 b3559 20 ribosome(s), (RF1_mono)	20 RF1_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b3559_20_cplx <==> 1 tl_term_b3559_20_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	6.34E+01	63.37435	0	1.83E+00	1.827

tl_term_b3559_20_rib2	Translation termination 2 b3559 20 ribosome(s), (RF1_mono)	20 gtp + 40 h2o + 1 tl_term_b3559_20_rib_cplx --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF1_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 b3559_aa + 1 b3559_mRNA_2 + 20 gdp + 20 gln2_tRNA + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	6.34E+01	63.37435	0	1.83E+00	1.827
tl_term_b3559_20_rib_RF2_1	Translation termination 1 b3559 20 ribosome(s), RF2_mono	20 RF2_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b3559_20_cplx <==> 1 tl_term_b3559_20_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	6.34E+01	63.37435	0	1.83E+00	1.827
tl_term_b3559_20_rib_RF2_2	Translation termination 2 b3559 20 ribosome(s), RF2	20 gtp + 40 h2o + 1 tl_term_b3559_20_rib_cplx2 --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF2_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 b3559_aa + 1 b3559_mRNA_2 + 20 gdp + 20 gln2_tRNA + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	6.34E+01	63.37435	0	1.83E+00	1.827
tl_term_b3559_40_rib1	Translation termination 1 b3559 40 ribosome(s), (RF1_mono)	40 RF1_mono + 40 RF3_mono.GDP + 40 Rrf_mono + 1 rib_70_elo2_b3559_40_cplx <==> 1 tl_term_b3559_40_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.82E+01	1.82E+01	0	3.09E+01	30.87469	0	1.79E+00	1.787975
tl_term_b3559_40_rib2	Translation termination 2 b3559 40 ribosome(s), (RF1_mono)	40 gtp + 80 h2o + 1 tl_term_b3559_40_rib_cplx --> 40 EF-G.GDP + 40 EF-Tu.GDP + 40 RF1_mono_inact + 40 RF3_mono.GDP_inact + 40 Rrf_mono_inact + 40 b3559_aa + 1 b3559_mRNA_2 + 40 gdp + 40 gln2_tRNA + 120 h + 120 pi + 40 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.82E+01	1.82E+01	0	3.09E+01	30.87469	0	1.79E+00	1.787975
tl_term_b3559_40_rib_RF2_1	Translation termination 1 b3559 40 ribosome(s), RF2_mono	40 RF2_mono + 40 RF3_mono.GDP + 40 Rrf_mono + 1 rib_70_elo2_b3559_40_cplx <==> 1 tl_term_b3559_40_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.82E+01	1.82E+01	0	3.09E+01	30.87469	0	1.79E+00	1.787975
tl_term_b3559_40_rib_RF2_2	Translation termination 2 b3559 40 ribosome(s), RF2	40 gtp + 80 h2o + 1 tl_term_b3559_40_rib_cplx2 --> 40 EF-G.GDP + 40 EF-Tu.GDP + 40 RF2_mono_inact + 40 RF3_mono.GDP_inact + 40 Rrf_mono_inact + 40 b3559_aa + 1 b3559_mRNA_2 + 40 gdp + 40 gln2_tRNA + 120 h + 120 pi + 40 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.82E+01	1.82E+01	0	3.09E+01	30.87469	0	1.79E+00	1.787975
tl_term_b3560_17_rib1	Translation termination 1 b3560 17 ribosome(s), (RF1_mono)	17 RF1_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b3560_17_cplx <==> 1 tl_term_b3560_17_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_term_b3560_17_rib2	Translation termination 2 b3560 17 ribosome(s), (RF1_mono)	17 gtp + 34 h2o + 1 tl_term_b3560_17_rib_cplx --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF1_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 b3560_aa + 1 b3560_mRNA_2 + 17 gdp + 51 h + 17 lys1_tRNA + 51 pi + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_term_b3560_17_rib_RF2_1	Translation termination 1 b3560 17 ribosome(s), RF2_mono	17 RF2_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b3560_17_cplx <==> 1 tl_term_b3560_17_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_term_b3560_17_rib_RF2_2	Translation termination 2 b3560 17 ribosome(s), RF2	17 gtp + 34 h2o + 1 tl_term_b3560_17_rib_cplx2 --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF2_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 b3560_aa + 1 b3560_mRNA_2 + 17 gdp + 51 h + 17 lys1_tRNA + 51 pi + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_term_b3560_1_rib1	Translation termination 1 b3560 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3560_1_cplx <==> 1 tl_term_b3560_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_term_b3560_1_rib2	Translation termination 2 b3560 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3560_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3560_aa + 1 b3560_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_term_b3560_1_rib_RF2_1	Translation termination 1 b3560 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3560_1_cplx <==> 1 tl_term_b3560_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_term_b3560_1_rib_RF2_2	Translation termination 2 b3560 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3560_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3560_aa + 1 b3560_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_term_b3560_8_rib1	Translation termination 1 b3560 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3560_8_cplx <==> 1 tl_term_b3560_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_term_b3560_8_rib2	Translation termination 2 b3560 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3560_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3560_aa + 1 b3560_mRNA_2 + 8 gdp + 24 h + 8 lys1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_term_b3560_8_rib_RF2_1	Translation termination 1 b3560 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3560_8_cplx <==> 1 tl_term_b3560_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_term_b3560_8_rib_RF2_2	Translation termination 2 b3560 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b3560_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3560_aa + 1 b3560_mRNA_2 + 8 gdp + 24 h + 8 lys1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	7.50E+01	75.00705	0	4.21E+00	4.207
tl_term_b3590_18_rib1	Translation termination 1 b3590 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b3590_18_cplx <==> 1 tl_term_b3590_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	7.61E-01	0.7611111	0	7.61E-01	0.7611111
tl_term_b3590_18_rib2	Translation termination 2 b3590 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b3590_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b3590_aa + 1 b3590_mRNA_2 + 18 gdp + 54 h + 18 lys1_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	7.61E-01	0.7611111	0	7.61E-01	0.7611111
tl_term_b3590_18_rib_RF2_1	Translation termination 1 b3590 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b3590_18_cplx <==> 1 tl_term_b3590_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	7.61E-01	0.7611111	0	7.61E-01	0.7611111
tl_term_b3590_18_rib_RF2_2	Translation termination 2 b3590 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b3590_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b3590_aa + 1 b3590_mRNA_2 + 18 gdp + 54 h + 18 lys1_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	7.61E-01	0.7611111	0	7.61E-01	0.7611111
tl_term_b3590_1_rib1	Translation termination 1 b3590 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3590_1_cplx <==> 1 tl_term_b3590_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.86E+01	3.86E+01	0	1.37E+01	13.7	0	1.86E+00	1.856
tl_term_b3590_1_rib2	Translation termination 2 b3590 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3590_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3590_aa + 1 b3590_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.86E+01	3.86E+01	0	1.37E+01	13.7	0	1.86E+00	1.856
tl_term_b3590_1_rib_RF2_1	Translation termination 1 b3590 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3590_1_cplx <==> 1 tl_term_b3590_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.86E+01	3.86E+01	0	1.37E+01	13.7	0	1.86E+00	1.856
tl_term_b3590_1_rib_RF2_2	Translation termination 2 b3590 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3590_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3590_aa + 1 b3590_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.86E+01	3.86E+01	0	1.37E+01	13.7	0	1.86E+00	1.856
tl_term_b3590_36_rib1	Translation termination 1 b3590 36 ribosome(s), (RF1_mono)	36 RF1_mono + 36 RF3_mono.GDP + 36 Rrf_mono + 1 rib_70_elo2_b3590_36_cplx <==> 1 tl_term_b3590_36_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.77E+01	1.77E+01	0	3.81E-01	0.3805556	0	3.81E-01	0.3805556
tl_term_b3590_36_rib2	Translation termination 2 b3590 36 ribosome(s), (RF1_mono)	36 gtp + 72 h2o + 1 tl_term_b3590_36_rib_cplx --> 36 EF-G.GDP + 36 EF-Tu.GDP + 36 RF1_mono_inact + 36 RF3_mono.GDP_inact + 36 Rrf_mono_inact + 36 b3590_aa + 1 b3590_mRNA_2 + 36 gdp + 108 h + 36 lys1_tRNA + 108 pi + 36 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.77E+01	1.77E+01	0	3.81E-01	0.3805556	0	3.81E-01	0.3805556
tl_term_b3590_36_rib_RF2_1	Translation termination 1 b3590 36 ribosome(s), RF2_mono	36 RF2_mono + 36 RF3_mono.GDP + 36 Rrf_mono + 1 rib_70_elo2_b3590_36_cplx <==> 1 tl_term_b3590_36_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.77E+01	1.77E+01	0	3.81E-01	0.3805556	0	3.81E-01	0.3805556

tl_term_b3590_36_rib_RF2_2	Translation termination 2 b3590 36 ribosome(s), RF2	36 gtp + 72 h2o + 1 tl_term_b3590_36_rib_cplx2 --> 36 EF-G.GDP + 36 EF-Tu.GDP + 36 RF2_mono_inact + 36 RF3_mono.GDP_inact + 36 Rrf_mono_inact + 36 b3590_aa + 1 b3590_mRNA_2 + 36 gdp + 108 h + 36 lys1_tRNA + 108 pi + 36 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.77E+01	1.77E+01	0	3.81E-01	0.3805556	0	3.81E-01	0.3805556
tl_term_b3591_13_rib1	Translation termination 1 b3591 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3591_13_cplx <==> 1 tl_term_b3591_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606
tl_term_b3591_13_rib2	Translation termination 2 b3591 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b3591_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b3591_aa + 1 b3591_mRNA_2 + 13 gdp + 39 h + 13 lys1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606
tl_term_b3591_1_rib1	Translation termination 1 b3591 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3591_1_cplx <==> 1 tl_term_b3591_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606
tl_term_b3591_1_rib2	Translation termination 2 b3591 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3591_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3591_aa + 1 b3591_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606
tl_term_b3591_27_rib1	Translation termination 1 b3591 27 ribosome(s), (RF1_mono)	27 RF1_mono + 27 RF3_mono.GDP + 27 Rrf_mono + 1 rib_70_elo2_b3591_27_cplx <==> 1 tl_term_b3591_27_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606
tl_term_b3591_27_rib2	Translation termination 2 b3591 27 ribosome(s), (RF1_mono)	27 gtp + 54 h2o + 1 tl_term_b3591_27_rib_cplx --> 27 EF-G.GDP + 27 EF-Tu.GDP + 27 RF1_mono_inact + 27 RF3_mono.GDP_inact + 27 Rrf_mono_inact + 27 b3591_aa + 1 b3591_mRNA_2 + 27 gdp + 81 h + 27 lys1_tRNA + 81 pi + 27 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.04E+01	4.04E+01	0	1.71E+01	17.12	0	3.61E+00	3.606
tl_term_b3635_15_rib1	Translation termination 1 b3635 15 ribosome(s), (RF1_mono)	15 RF1_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b3635_15_cplx <==> 1 tl_term_b3635_15_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_term_b3635_15_rib2	Translation termination 2 b3635 15 ribosome(s), (RF1_mono)	15 gtp + 30 h2o + 1 tl_term_b3635_15_rib_cplx --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF1_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b3635_aa + 1 b3635_mRNA_2 + 15 gdp + 45 h + 15 lys1_tRNA + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_term_b3635_15_rib_RF2_1	Translation termination 1 b3635 15 ribosome(s), RF2_mono	15 RF2_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b3635_15_cplx <==> 1 tl_term_b3635_15_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_term_b3635_15_rib_RF2_2	Translation termination 2 b3635 15 ribosome(s), RF2	15 gtp + 30 h2o + 1 tl_term_b3635_15_rib_cplx2 --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF2_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b3635_aa + 1 b3635_mRNA_2 + 15 gdp + 45 h + 15 lys1_tRNA + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_term_b3635_1_rib1	Translation termination 1 b3635 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3635_1_cplx <==> 1 tl_term_b3635_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_term_b3635_1_rib2	Translation termination 2 b3635 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3635_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3635_aa + 1 b3635_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_term_b3635_1_rib_RF2_1	Translation termination 1 b3635 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3635_1_cplx <==> 1 tl_term_b3635_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_term_b3635_1_rib_RF2_2	Translation termination 2 b3635 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3635_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3635_aa + 1 b3635_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_term_b3635_7_rib1	Translation termination 1 b3635 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3635_7_cplx <==> 1 tl_term_b3635_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_term_b3635_7_rib2	Translation termination 2 b3635 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3635_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3635_aa + 1 b3635_mRNA_2 + 7 gdp + 21 h + 7 lys1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_term_b3635_7_rib_RF2_1	Translation termination 1 b3635 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3635_7_cplx <==> 1 tl_term_b3635_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_term_b3635_7_rib_RF2_2	Translation termination 2 b3635 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b3635_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3635_aa + 1 b3635_mRNA_2 + 7 gdp + 21 h + 7 lys1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.44E+01	9.44E+01	0	8.88E+01	88.77	0	6.08E+00	6.082
tl_term_b3636_1_rib1	Translation termination 1 b3636 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3636_1_cplx <==> 1 tl_term_b3636_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	8.20E+01	82.041
tl_term_b3636_1_rib2	Translation termination 2 b3636 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3636_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3636_aa + 1 b3636_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	8.20E+01	82.041
tl_term_b3636_1_rib_RF2_1	Translation termination 1 b3636 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3636_1_cplx <==> 1 tl_term_b3636_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	8.20E+01	82.041
tl_term_b3636_1_rib_RF2_2	Translation termination 2 b3636 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3636_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3636_aa + 1 b3636_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	8.20E+01	82.041
tl_term_b3636_3_rib1	Translation termination 1 b3636 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3636_3_cplx <==> 1 tl_term_b3636_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3636_3_rib2	Translation termination 2 b3636 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3636_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3636_aa + 1 b3636_mRNA_2 + 3 gdp + 9 h + 3 lys1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3636_3_rib_RF2_1	Translation termination 1 b3636 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3636_3_cplx <==> 1 tl_term_b3636_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3636_3_rib_RF2_2	Translation termination 2 b3636 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3636_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3636_aa + 1 b3636_mRNA_2 + 3 gdp + 9 h + 3 lys1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b3637_1_rib1	Translation termination 1 b3637 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3637_1_cplx <==> 1 tl_term_b3637_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3637_1_rib2	Translation termination 2 b3637 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3637_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3637_aa + 1 b3637_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3637_1_rib_RF2_1	Translation termination 1 b3637 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3637_1_cplx <==> 1 tl_term_b3637_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3637_1_rib_RF2_2	Translation termination 2 b3637 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3637_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3637_aa + 1 b3637_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	8.29E+01	82.88	0	8.29E+01	82.88

tl_term_b3637_2_rib1	Translation termination 1 b3637 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3637_2_cplx <==> 1 tl_term_b3637_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3637_2_rib2	Translation termination 2 b3637 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3637_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3637_aa + 1 b3637_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70 + 2 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3637_2_rib_RF2_1	Translation termination 1 b3637 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3637_2_cplx <==> 1 tl_term_b3637_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3637_2_rib_RF2_2	Translation termination 2 b3637 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b3637_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3637_aa + 1 b3637_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70 + 2 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3637_4_rib1	Translation termination 1 b3637 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3637_4_cplx <==> 1 tl_term_b3637_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3637_4_rib2	Translation termination 2 b3637 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3637_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3637_aa + 1 b3637_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70 + 4 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3637_4_rib_RF2_1	Translation termination 1 b3637 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3637_4_cplx <==> 1 tl_term_b3637_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3637_4_rib_RF2_2	Translation termination 2 b3637 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3637_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3637_aa + 1 b3637_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70 + 4 tyr1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3638_13_rib1	Translation termination 1 b3638 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3638_13_cplx <==> 1 tl_term_b3638_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_term_b3638_13_rib2	Translation termination 2 b3638 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b3638_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b3638_aa + 1 b3638_mRNA_2 + 13 gdp + 39 h + 13 ile1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_term_b3638_13_rib_RF2_1	Translation termination 1 b3638 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3638_13_cplx <==> 1 tl_term_b3638_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_term_b3638_13_rib_RF2_2	Translation termination 2 b3638 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b3638_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b3638_aa + 1 b3638_mRNA_2 + 13 gdp + 39 h + 13 ile1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_term_b3638_1_rib1	Translation termination 1 b3638 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3638_1_cplx <==> 1 tl_term_b3638_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_term_b3638_1_rib2	Translation termination 2 b3638 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3638_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3638_aa + 1 b3638_mRNA_2 + 1 gdp + 3 h + 1 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_term_b3638_1_rib_RF2_1	Translation termination 1 b3638 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3638_1_cplx <==> 1 tl_term_b3638_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_term_b3638_1_rib_RF2_2	Translation termination 2 b3638 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3638_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3638_aa + 1 b3638_mRNA_2 + 1 gdp + 3 h + 1 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_term_b3638_6_rib1	Translation termination 1 b3638 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3638_6_cplx <==> 1 tl_term_b3638_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_term_b3638_6_rib2	Translation termination 2 b3638 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3638_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3638_aa + 1 b3638_mRNA_2 + 6 gdp + 18 h + 6 ile1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_term_b3638_6_rib_RF2_1	Translation termination 1 b3638 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3638_6_cplx <==> 1 tl_term_b3638_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_term_b3638_6_rib_RF2_2	Translation termination 2 b3638 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b3638_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3638_aa + 1 b3638_mRNA_2 + 6 gdp + 18 h + 6 ile1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.43E+01	9.43E+01	0	8.79E+01	87.92	0	5.14E+00	5.144
tl_term_b3649_1_rib1	Translation termination 1 b3649 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3649_1_cplx <==> 1 tl_term_b3649_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_term_b3649_1_rib2	Translation termination 2 b3649 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3649_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b3649_aa + 1 b3649_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_term_b3649_1_rib_RF2_1	Translation termination 1 b3649 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3649_1_cplx <==> 1 tl_term_b3649_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_term_b3649_1_rib_RF2_2	Translation termination 2 b3649 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3649_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b3649_aa + 1 b3649_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_term_b3649_2_rib1	Translation termination 1 b3649 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3649_2_cplx <==> 1 tl_term_b3649_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_term_b3649_2_rib2	Translation termination 2 b3649 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3649_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 arg1_tRNA + 2 b3649_aa + 1 b3649_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_term_b3649_2_rib_RF2_1	Translation termination 1 b3649 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3649_2_cplx <==> 1 tl_term_b3649_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_term_b3649_2_rib_RF2_2	Translation termination 2 b3649 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b3649_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 arg1_tRNA + 2 b3649_aa + 1 b3649_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_term_b3649_5_rib1	Translation termination 1 b3649 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3649_5_cplx <==> 1 tl_term_b3649_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_term_b3649_5_rib2	Translation termination 2 b3649 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3649_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 arg1_tRNA + 5 b3649_aa + 1 b3649_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_term_b3649_5_rib_RF2_1	Translation termination 1 b3649 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3649_5_cplx <==> 1 tl_term_b3649_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592
tl_term_b3649_5_rib_RF2_2	Translation termination 2 b3649 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3649_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 arg1_tRNA + 5 b3649_aa + 1 b3649_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.99E+01	3.99E+01	0	5.70E+01	57.0481	0	1.76E+01	17.592

tl_term_b3650_1_rib1	Translation termination 1 b3650 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3650_1_cplx <==> 1 tl_term_b3650_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_term_b3650_1_rib2	Translation termination 2 b3650 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3650_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b3650_aa + 1 b3650_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_term_b3650_1_rib_RF2_1	Translation termination 1 b3650 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3650_1_cplx <==> 1 tl_term_b3650_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_term_b3650_1_rib_RF2_2	Translation termination 2 b3650 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3650_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b3650_aa + 1 b3650_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_term_b3650_20_rib1	Translation termination 1 b3650 20 ribosome(s), (RF1_mono)	20 RF1_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b3650_20_cplx <==> 1 tl_term_b3650_20_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_term_b3650_20_rib2	Translation termination 2 b3650 20 ribosome(s), (RF1_mono)	20 gtp + 40 h2o + 1 tl_term_b3650_20_rib_cplx --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF1_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 asn1_tRNA + 20 b3650_aa + 1 b3650_mRNA_2 + 20 gdp + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_term_b3650_20_rib_RF2_1	Translation termination 1 b3650 20 ribosome(s), RF2_mono	20 RF2_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b3650_20_cplx <==> 1 tl_term_b3650_20_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_term_b3650_20_rib_RF2_2	Translation termination 2 b3650 20 ribosome(s), RF2	20 gtp + 40 h2o + 1 tl_term_b3650_20_rib_cplx2 --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF2_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 asn1_tRNA + 20 b3650_aa + 1 b3650_mRNA_2 + 20 gdp + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_term_b3650_41_rib1	Translation termination 1 b3650 41 ribosome(s), (RF1_mono)	41 RF1_mono + 41 RF3_mono.GDP + 41 Rrf_mono + 1 rib_70_elo2_b3650_41_cplx <==> 1 tl_term_b3650_41_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_term_b3650_41_rib2	Translation termination 2 b3650 41 ribosome(s), (RF1_mono)	41 gtp + 82 h2o + 1 tl_term_b3650_41_rib_cplx --> 41 EF-G.GDP + 41 EF-Tu.GDP + 41 RF1_mono_inact + 41 RF3_mono.GDP_inact + 41 Rrf_mono_inact + 41 asn1_tRNA + 41 b3650_aa + 1 b3650_mRNA_2 + 41 gdp + 123 h + 123 pi + 41 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_term_b3650_41_rib_RF2_1	Translation termination 1 b3650 41 ribosome(s), RF2_mono	41 RF2_mono + 41 RF3_mono.GDP + 41 Rrf_mono + 1 rib_70_elo2_b3650_41_cplx <==> 1 tl_term_b3650_41_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_term_b3650_41_rib_RF2_2	Translation termination 2 b3650 41 ribosome(s), RF2	41 gtp + 82 h2o + 1 tl_term_b3650_41_rib_cplx2 --> 41 EF-G.GDP + 41 EF-Tu.GDP + 41 RF2_mono_inact + 41 RF3_mono.GDP_inact + 41 Rrf_mono_inact + 41 asn1_tRNA + 41 b3650_aa + 1 b3650_mRNA_2 + 41 gdp + 123 h + 123 pi + 41 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.50E+01	2.50E+01	0	4.22E+01	42.1681	0	2.71E+00	2.712
tl_term_b3651_13_rib1	Translation termination 1 b3651 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3651_13_cplx <==> 1 tl_term_b3651_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_term_b3651_13_rib2	Translation termination 2 b3651 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b3651_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b3651_aa + 1 b3651_mRNA_2 + 13 gdp + 13 glyU_tRNA + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_term_b3651_13_rib_RF2_1	Translation termination 1 b3651 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3651_13_cplx <==> 1 tl_term_b3651_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_term_b3651_13_rib_RF2_2	Translation termination 2 b3651 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b3651_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b3651_aa + 1 b3651_mRNA_2 + 13 gdp + 13 glyU_tRNA + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_term_b3651_1_rib1	Translation termination 1 b3651 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3651_1_cplx <==> 1 tl_term_b3651_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_term_b3651_1_rib2	Translation termination 2 b3651 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3651_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3651_aa + 1 b3651_mRNA_2 + 1 gdp + 1 glyU_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_term_b3651_1_rib_RF2_1	Translation termination 1 b3651 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3651_1_cplx <==> 1 tl_term_b3651_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_term_b3651_1_rib_RF2_2	Translation termination 2 b3651 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3651_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3651_aa + 1 b3651_mRNA_2 + 1 gdp + 1 glyU_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_term_b3651_6_rib1	Translation termination 1 b3651 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3651_6_cplx <==> 1 tl_term_b3651_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_term_b3651_6_rib2	Translation termination 2 b3651 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3651_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3651_aa + 1 b3651_mRNA_2 + 6 gdp + 6 glyU_tRNA + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_term_b3651_6_rib_RF2_1	Translation termination 1 b3651 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3651_6_cplx <==> 1 tl_term_b3651_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_term_b3651_6_rib_RF2_2	Translation termination 2 b3651 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b3651_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3651_aa + 1 b3651_mRNA_2 + 6 gdp + 6 glyU_tRNA + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.82E+01	2.82E+01	0	4.53E+01	45.3481	0	5.89E+00	5.892
tl_term_b3652_1_rib1	Translation termination 1 b3652 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3652_1_cplx <==> 1 tl_term_b3652_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_term_b3652_1_rib2	Translation termination 2 b3652 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3652_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3652_aa + 1 b3652_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_term_b3652_1_rib_RF2_1	Translation termination 1 b3652 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3652_1_cplx <==> 1 tl_term_b3652_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_term_b3652_1_rib_RF2_2	Translation termination 2 b3652 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3652_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3652_aa + 1 b3652_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_term_b3652_20_rib1	Translation termination 1 b3652 20 ribosome(s), (RF1_mono)	20 RF1_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b3652_20_cplx <==> 1 tl_term_b3652_20_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_term_b3652_20_rib2	Translation termination 2 b3652 20 ribosome(s), (RF1_mono)	20 gtp + 40 h2o + 1 tl_term_b3652_20_rib_cplx --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF1_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 ala1_tRNA + 20 b3652_aa + 1 b3652_mRNA_2 + 20 gdp + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_term_b3652_20_rib_RF2_1	Translation termination 1 b3652 20 ribosome(s), RF2_mono	20 RF2_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b3652_20_cplx <==> 1 tl_term_b3652_20_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802

tl_term_b3652_20_rib_RF2_2	Translation termination 2 b3652 20 ribosome(s), RF2	20 gtp + 40 h2o + 1 tl_term_b3652_20_rib_cplx2 --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF2_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 ala1_tRNA + 20 b3652_aa + 1 b3652_mRNA_2 + 20 gdp + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_term_b3652_40_rib1	Translation termination 1 b3652 40 ribosome(s), (RF1_mono)	40 RF1_mono + 40 RF3_mono.GDP + 40 Rrf_mono + 1 rib_70_elo2_b3652_40_cplx <==> 1 tl_term_b3652_40_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_term_b3652_40_rib2	Translation termination 2 b3652 40 ribosome(s), (RF1_mono)	40 gtp + 80 h2o + 1 tl_term_b3652_40_rib_cplx --> 40 EF-G.GDP + 40 EF-Tu.GDP + 40 RF1_mono_inact + 40 RF3_mono.GDP_inact + 40 Rrf_mono_inact + 40 ala1_tRNA + 40 b3652_aa + 1 b3652_mRNA_2 + 40 gdp + 120 h + 120 pi + 40 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_term_b3652_40_rib_RF2_1	Translation termination 1 b3652 40 ribosome(s), RF2_mono	40 RF2_mono + 40 RF3_mono.GDP + 40 Rrf_mono + 1 rib_70_elo2_b3652_40_cplx <==> 1 tl_term_b3652_40_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_term_b3652_40_rib_RF2_2	Translation termination 2 b3652 40 ribosome(s), RF2	40 gtp + 80 h2o + 1 tl_term_b3652_40_rib_cplx2 --> 40 EF-G.GDP + 40 EF-Tu.GDP + 40 RF2_mono_inact + 40 RF3_mono.GDP_inact + 40 Rrf_mono_inact + 40 ala1_tRNA + 40 b3652_aa + 1 b3652_mRNA_2 + 40 gdp + 120 h + 120 pi + 40 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.41E+01	2.41E+01	0	4.13E+01	41.2581	0	1.80E+00	1.802
tl_term_b3703_1_rib1	Translation termination 1 b3703 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3703_1_cplx <==> 1 tl_term_b3703_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3703_1_rib2	Translation termination 2 b3703 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3703_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3703_aa + 1 b3703_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3703_1_rib_RF2_1	Translation termination 1 b3703 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3703_1_cplx <==> 1 tl_term_b3703_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3703_1_rib_RF2_2	Translation termination 2 b3703 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3703_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3703_aa + 1 b3703_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b3703_2_rib1	Translation termination 1 b3703 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3703_2_cplx <==> 1 tl_term_b3703_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3703_2_rib2	Translation termination 2 b3703 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3703_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3703_aa + 1 b3703_mRNA_2 + 2 gdp + 6 h + 2 lys1_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3703_2_rib_RF2_1	Translation termination 1 b3703 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3703_2_cplx <==> 1 tl_term_b3703_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3703_2_rib_RF2_2	Translation termination 2 b3703 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b3703_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3703_aa + 1 b3703_mRNA_2 + 2 gdp + 6 h + 2 lys1_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3704_1_rib1	Translation termination 1 b3704 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3704_1_cplx <==> 1 tl_term_b3704_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.08E+02	1.08E+02	0	5.43E+01	54.28861	0	1.08E+01	10.8499
tl_term_b3704_1_rib2	Translation termination 2 b3704 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3704_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3704_aa + 1 b3704_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 ser1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.08E+02	1.08E+02	0	5.43E+01	54.28861	0	1.08E+01	10.8499
tl_term_b3704_3_rib1	Translation termination 1 b3704 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3704_3_cplx <==> 1 tl_term_b3704_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.60E+01	7.60E+01	0	1.96E+01	19.61562	0	3.62E+00	3.616633
tl_term_b3704_3_rib2	Translation termination 2 b3704 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3704_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3704_aa + 1 b3704_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70 + 3 ser1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	7.60E+01	7.60E+01	0	1.96E+01	19.61562	0	3.62E+00	3.616633
tl_term_b3704_7_rib1	Translation termination 1 b3704 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3704_7_cplx <==> 1 tl_term_b3704_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.02E+01	4.02E+01	0	8.47E+00	8.465205	0	1.55E+00	1.549986
tl_term_b3704_7_rib2	Translation termination 2 b3704 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3704_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3704_aa + 1 b3704_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70 + 7 ser1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.02E+01	4.02E+01	0	8.47E+00	8.465205	0	1.55E+00	1.549986
tl_term_b3706_13_rib1	Translation termination 1 b3706 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3706_13_cplx <==> 1 tl_term_b3706_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_term_b3706_13_rib2	Translation termination 2 b3706 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b3706_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b3706_aa + 1 b3706_mRNA_2 + 13 gdp + 39 h + 13 lys1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_term_b3706_13_rib_RF2_1	Translation termination 1 b3706 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3706_13_cplx <==> 1 tl_term_b3706_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_term_b3706_13_rib_RF2_2	Translation termination 2 b3706 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b3706_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b3706_aa + 1 b3706_mRNA_2 + 13 gdp + 39 h + 13 lys1_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_term_b3706_1_rib1	Translation termination 1 b3706 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3706_1_cplx <==> 1 tl_term_b3706_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_term_b3706_1_rib2	Translation termination 2 b3706 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3706_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3706_aa + 1 b3706_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_term_b3706_1_rib_RF2_1	Translation termination 1 b3706 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3706_1_cplx <==> 1 tl_term_b3706_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_term_b3706_1_rib_RF2_2	Translation termination 2 b3706 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3706_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3706_aa + 1 b3706_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_term_b3706_26_rib1	Translation termination 1 b3706 26 ribosome(s), (RF1_mono)	26 RF1_mono + 26 RF3_mono.GDP + 26 Rrf_mono + 1 rib_70_elo2_b3706_26_cplx <==> 1 tl_term_b3706_26_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_term_b3706_26_rib2	Translation termination 2 b3706 26 ribosome(s), (RF1_mono)	26 gtp + 52 h2o + 1 tl_term_b3706_26_rib_cplx --> 26 EF-G.GDP + 26 EF-Tu.GDP + 26 RF1_mono_inact + 26 RF3_mono.GDP_inact + 26 Rrf_mono_inact + 26 b3706_aa + 1 b3706_mRNA_2 + 26 gdp + 78 h + 26 lys1_tRNA + 78 pi + 26 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_term_b3706_26_rib_RF2_1	Translation termination 1 b3706 26 ribosome(s), RF2_mono	26 RF2_mono + 26 RF3_mono.GDP + 26 Rrf_mono + 1 rib_70_elo2_b3706_26_cplx <==> 1 tl_term_b3706_26_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343

tl_term_b3706_26_rib_RF2_2	Translation termination 2 b3706 26 ribosome(s), RF2	26 gtp + 52 h2o + 1 tl_term_b3706_26_rib_cplx2 --> 26 EF-G.GDP + 26 EF-Tu.GDP + 26 RF2_mono_inact + 26 RF3_mono.GDP_inact + 26 Rrf_mono_inact + 26 b3706_aa + 1 b3706_mRNA_2 + 26 gdp + 78 h + 26 lys1_tRNA + 78 pi + 26 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.03E+01	9.03E+01	0	1.57E+02	157.1226	0	3.34E+00	3.343
tl_term_b3740_12_rib1	Translation termination 1 b3740 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3740_12_cplx <==> 1 tl_term_b3740_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_term_b3740_12_rib2	Translation termination 2 b3740 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b3740_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b3740_aa + 1 b3740_mRNA_2 + 12 gdp + 36 h + 12 ile1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_term_b3740_12_rib_RF2_1	Translation termination 1 b3740 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3740_12_cplx <==> 1 tl_term_b3740_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_term_b3740_12_rib_RF2_2	Translation termination 2 b3740 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b3740_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b3740_aa + 1 b3740_mRNA_2 + 12 gdp + 36 h + 12 ile1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_term_b3740_1_rib1	Translation termination 1 b3740 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3740_1_cplx <==> 1 tl_term_b3740_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_term_b3740_1_rib2	Translation termination 2 b3740 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3740_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3740_aa + 1 b3740_mRNA_2 + 1 gdp + 3 h + 1 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_term_b3740_1_rib_RF2_1	Translation termination 1 b3740 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3740_1_cplx <==> 1 tl_term_b3740_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_term_b3740_1_rib_RF2_2	Translation termination 2 b3740 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3740_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3740_aa + 1 b3740_mRNA_2 + 1 gdp + 3 h + 1 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_term_b3740_6_rib1	Translation termination 1 b3740 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3740_6_cplx <==> 1 tl_term_b3740_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_term_b3740_6_rib2	Translation termination 2 b3740 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3740_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3740_aa + 1 b3740_mRNA_2 + 6 gdp + 18 h + 6 ile1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_term_b3740_6_rib_RF2_1	Translation termination 1 b3740 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3740_6_cplx <==> 1 tl_term_b3740_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_term_b3740_6_rib_RF2_2	Translation termination 2 b3740 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b3740_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b3740_aa + 1 b3740_mRNA_2 + 6 gdp + 18 h + 6 ile1_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.57E+01	5.57E+01	0	9.24E+01	92.44134	0	7.87E+00	7.867
tl_term_b3741_18_rib1	Translation termination 1 b3741 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b3741_18_cplx <==> 1 tl_term_b3741_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_term_b3741_18_rib2	Translation termination 2 b3741 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b3741_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 ala1_tRNA + 18 b3741_aa + 1 b3741_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_term_b3741_18_rib_RF2_1	Translation termination 1 b3741 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b3741_18_cplx <==> 1 tl_term_b3741_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_term_b3741_18_rib_RF2_2	Translation termination 2 b3741 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b3741_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 ala1_tRNA + 18 b3741_aa + 1 b3741_mRNA_2 + 18 gdp + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_term_b3741_1_rib1	Translation termination 1 b3741 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3741_1_cplx <==> 1 tl_term_b3741_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_term_b3741_1_rib2	Translation termination 2 b3741 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3741_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3741_aa + 1 b3741_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_term_b3741_1_rib_RF2_1	Translation termination 1 b3741 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3741_1_cplx <==> 1 tl_term_b3741_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_term_b3741_1_rib_RF2_2	Translation termination 2 b3741 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3741_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3741_aa + 1 b3741_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_term_b3741_37_rib1	Translation termination 1 b3741 37 ribosome(s), (RF1_mono)	37 RF1_mono + 37 RF3_mono.GDP + 37 Rrf_mono + 1 rib_70_elo2_b3741_37_cplx <==> 1 tl_term_b3741_37_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_term_b3741_37_rib2	Translation termination 2 b3741 37 ribosome(s), (RF1_mono)	37 gtp + 74 h2o + 1 tl_term_b3741_37_rib_cplx --> 37 EF-G.GDP + 37 EF-Tu.GDP + 37 RF1_mono_inact + 37 RF3_mono.GDP_inact + 37 Rrf_mono_inact + 37 ala1_tRNA + 37 b3741_aa + 1 b3741_mRNA_2 + 37 gdp + 111 h + 111 pi + 37 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_term_b3741_37_rib_RF2_1	Translation termination 1 b3741 37 ribosome(s), RF2_mono	37 RF2_mono + 37 RF3_mono.GDP + 37 Rrf_mono + 1 rib_70_elo2_b3741_37_cplx <==> 1 tl_term_b3741_37_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_term_b3741_37_rib_RF2_2	Translation termination 2 b3741 37 ribosome(s), RF2	37 gtp + 74 h2o + 1 tl_term_b3741_37_rib_cplx2 --> 37 EF-G.GDP + 37 EF-Tu.GDP + 37 RF2_mono_inact + 37 RF3_mono.GDP_inact + 37 Rrf_mono_inact + 37 ala1_tRNA + 37 b3741_aa + 1 b3741_mRNA_2 + 37 gdp + 111 h + 111 pi + 37 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.98E+01	4.98E+01	0	8.66E+01	86.56135	0	1.99E+00	1.987
tl_term_b3780_12_rib1	Translation termination 1 b3780 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3780_12_cplx <==> 1 tl_term_b3780_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	3.98E+01	39.7843	0	4.10E+00	4.096
tl_term_b3780_12_rib2	Translation termination 2 b3780 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b3780_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b3780_aa + 1 b3780_mRNA_2 + 12 gdp + 12 gly1_tRNA + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	3.98E+01	39.7843	0	4.10E+00	4.096
tl_term_b3780_12_rib_RF2_1	Translation termination 1 b3780 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3780_12_cplx <==> 1 tl_term_b3780_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	3.98E+01	39.7843	0	4.10E+00	4.096
tl_term_b3780_12_rib_RF2_2	Translation termination 2 b3780 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b3780_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b3780_aa + 1 b3780_mRNA_2 + 12 gdp + 12 gly1_tRNA + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	3.98E+01	39.7843	0	4.10E+00	4.096
tl_term_b3780_1_rib1	Translation termination 1 b3780 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3780_1_cplx <==> 1 tl_term_b3780_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.69E+01	9.69E+01	0	1.62E+02	162.3678	0	4.10E+00	4.096

tl_term_b3780_1_rib2	Translation termination 2 b3780 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3780_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3780_aa + 1 b3780_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.69E+01	9.69E+01	0	1.62E+02	162.3678	0	4.10E+00	4.096
tl_term_b3780_1_rib_RF2_1	Translation termination 1 b3780 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3780_1_cplx <==> 1 tl_term_b3780_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.69E+01	9.69E+01	0	1.62E+02	162.3678	0	4.10E+00	4.096
tl_term_b3780_1_rib_RF2_2	Translation termination 2 b3780 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3780_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3780_aa + 1 b3780_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.69E+01	9.69E+01	0	1.62E+02	162.3678	0	4.10E+00	4.096
tl_term_b3780_24_rib1	Translation termination 1 b3780 24 ribosome(s), (RF1_mono)	24 RF1_mono + 24 RF3_mono.GDP + 24 Rrf_mono + 1 rib_70_elo2_b3780_24_cplx <==> 1 tl_term_b3780_24_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.83E+01	1.83E+01	0	1.99E+01	19.89215	0	2.40E+00	2.401208
tl_term_b3780_24_rib2	Translation termination 2 b3780 24 ribosome(s), (RF1_mono)	24 gtp + 48 h2o + 1 tl_term_b3780_24_rib_cplx --> 24 EF-G.GDP + 24 EF-Tu.GDP + 24 RF1_mono_inact + 24 RF3_mono.GDP_inact + 24 Rrf_mono_inact + 24 b3780_aa + 1 b3780_mRNA_2 + 24 gdp + 24 gly1_tRNA + 72 h + 72 pi + 24 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.83E+01	1.83E+01	0	1.99E+01	19.89215	0	2.40E+00	2.401208
tl_term_b3780_24_rib_RF2_1	Translation termination 1 b3780 24 ribosome(s), RF2_mono	24 RF2_mono + 24 RF3_mono.GDP + 24 Rrf_mono + 1 rib_70_elo2_b3780_24_cplx <==> 1 tl_term_b3780_24_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.83E+01	1.83E+01	0	1.99E+01	19.89215	0	2.40E+00	2.401208
tl_term_b3780_24_rib_RF2_2	Translation termination 2 b3780 24 ribosome(s), RF2	24 gtp + 48 h2o + 1 tl_term_b3780_24_rib_cplx2 --> 24 EF-G.GDP + 24 EF-Tu.GDP + 24 RF2_mono_inact + 24 RF3_mono.GDP_inact + 24 Rrf_mono_inact + 24 b3780_aa + 1 b3780_mRNA_2 + 24 gdp + 24 gly1_tRNA + 72 h + 72 pi + 24 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.83E+01	1.83E+01	0	1.99E+01	19.89215	0	2.40E+00	2.401208
tl_term_b3782_1_rib1	Translation termination 1 b3782 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3782_1_cplx <==> 1 tl_term_b3782_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.72E+02	1.72E+02	0	2.38E+02	238.0054	0	8.50E+01	85.007
tl_term_b3782_1_rib2	Translation termination 2 b3782 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3782_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b3782_aa + 1 b3782_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+02	1.72E+02	0	2.38E+02	238.0054	0	8.50E+01	85.007
tl_term_b3783_12_rib1	Translation termination 1 b3783 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3783_12_cplx <==> 1 tl_term_b3783_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_term_b3783_12_rib2	Translation termination 2 b3783 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b3783_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b3783_aa + 1 b3783_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70 + 12 serT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_term_b3783_12_rib_RF2_1	Translation termination 1 b3783 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b3783_12_cplx <==> 1 tl_term_b3783_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_term_b3783_12_rib_RF2_2	Translation termination 2 b3783 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b3783_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b3783_aa + 1 b3783_mRNA_2 + 12 gdp + 36 h + 36 pi + 12 rib_70 + 12 serT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_term_b3783_1_rib1	Translation termination 1 b3783 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3783_1_cplx <==> 1 tl_term_b3783_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_term_b3783_1_rib2	Translation termination 2 b3783 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3783_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3783_aa + 1 b3783_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 serT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_term_b3783_1_rib_RF2_1	Translation termination 1 b3783 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3783_1_cplx <==> 1 tl_term_b3783_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_term_b3783_1_rib_RF2_2	Translation termination 2 b3783 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3783_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3783_aa + 1 b3783_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 serT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_term_b3783_24_rib1	Translation termination 1 b3783 24 ribosome(s), (RF1_mono)	24 RF1_mono + 24 RF3_mono.GDP + 24 Rrf_mono + 1 rib_70_elo2_b3783_24_cplx <==> 1 tl_term_b3783_24_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_term_b3783_24_rib2	Translation termination 2 b3783 24 ribosome(s), (RF1_mono)	24 gtp + 48 h2o + 1 tl_term_b3783_24_rib_cplx --> 24 EF-G.GDP + 24 EF-Tu.GDP + 24 RF1_mono_inact + 24 RF3_mono.GDP_inact + 24 Rrf_mono_inact + 24 b3783_aa + 1 b3783_mRNA_2 + 24 gdp + 72 h + 72 pi + 24 rib_70 + 24 serT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_term_b3783_24_rib_RF2_1	Translation termination 1 b3783 24 ribosome(s), RF2_mono	24 RF2_mono + 24 RF3_mono.GDP + 24 Rrf_mono + 1 rib_70_elo2_b3783_24_cplx <==> 1 tl_term_b3783_24_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_term_b3783_24_rib_RF2_2	Translation termination 2 b3783 24 ribosome(s), RF2	24 gtp + 48 h2o + 1 tl_term_b3783_24_rib_cplx2 --> 24 EF-G.GDP + 24 EF-Tu.GDP + 24 RF2_mono_inact + 24 RF3_mono.GDP_inact + 24 Rrf_mono_inact + 24 b3783_aa + 1 b3783_mRNA_2 + 24 gdp + 72 h + 72 pi + 24 rib_70 + 24 serT_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	9.17E+01	9.17E+01	0	1.58E+02	158.1054	0	5.11E+00	5.107
tl_term_b3885_11_rib1	Translation termination 1 b3885 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b3885_11_cplx <==> 1 tl_term_b3885_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_term_b3885_11_rib2	Translation termination 2 b3885 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b3885_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b3885_aa + 1 b3885_mRNA_2 + 11 cysT_tRNA + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_term_b3885_11_rib_RF2_1	Translation termination 1 b3885 11 ribosome(s), RF2_mono	11 RF2_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b3885_11_cplx <==> 1 tl_term_b3885_11_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_term_b3885_11_rib_RF2_2	Translation termination 2 b3885 11 ribosome(s), RF2	11 gtp + 22 h2o + 1 tl_term_b3885_11_rib_cplx2 --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF2_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b3885_aa + 1 b3885_mRNA_2 + 11 cysT_tRNA + 11 gdp + 33 h + 33 pi + 11 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_term_b3885_1_rib1	Translation termination 1 b3885 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3885_1_cplx <==> 1 tl_term_b3885_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_term_b3885_1_rib2	Translation termination 2 b3885 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3885_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3885_aa + 1 b3885_mRNA_2 + 1 cysT_tRNA + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_term_b3885_1_rib_RF2_1	Translation termination 1 b3885 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3885_1_cplx <==> 1 tl_term_b3885_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_term_b3885_1_rib_RF2_2	Translation termination 2 b3885 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3885_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3885_aa + 1 b3885_mRNA_2 + 1 cysT_tRNA + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_term_b3885_5_rib1	Translation termination 1 b3885 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3885_5_cplx <==> 1 tl_term_b3885_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474

tl_term_b3885_5_rib2	Translation termination 2 b3885 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3885_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3885_aa + 1 b3885_mRNA_2 + 5 cysT_tRNA + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_term_b3885_5_rib_RF2_1	Translation termination 1 b3885 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3885_5_cplx <==> 1 tl_term_b3885_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_term_b3885_5_rib_RF2_2	Translation termination 2 b3885 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3885_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b3885_aa + 1 b3885_mRNA_2 + 5 cysT_tRNA + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.37E+01	5.37E+01	0	8.76E+01	87.56639	0	9.47E+00	9.474
tl_term_b3886_17_rib1	Translation termination 1 b3886 17 ribosome(s), (RF1_mono)	17 RF1_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b3886_17_cplx <==> 1 tl_term_b3886_17_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284
tl_term_b3886_17_rib2	Translation termination 2 b3886 17 ribosome(s), (RF1_mono)	17 gtp + 34 h2o + 1 tl_term_b3886_17_rib_cplx --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF1_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 b3886_aa + 1 b3886_mRNA_2 + 17 gdp + 51 h + 51 pi + 17 proM_tRNA + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284
tl_term_b3886_1_rib1	Translation termination 1 b3886 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3886_1_cplx <==> 1 tl_term_b3886_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284
tl_term_b3886_1_rib2	Translation termination 2 b3886 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3886_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3886_aa + 1 b3886_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 proM_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284
tl_term_b3886_8_rib1	Translation termination 1 b3886 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3886_8_cplx <==> 1 tl_term_b3886_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284
tl_term_b3886_8_rib2	Translation termination 2 b3886 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3886_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3886_aa + 1 b3886_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 proM_tRNA + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.37639	0	4.28E+00	4.284
tl_term_b3887_1_rib1	Translation termination 1 b3887 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3887_1_cplx <==> 1 tl_term_b3887_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754
tl_term_b3887_1_rib2	Translation termination 2 b3887 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3887_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3887_aa + 1 b3887_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754
tl_term_b3887_4_rib1	Translation termination 1 b3887 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3887_4_cplx <==> 1 tl_term_b3887_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754
tl_term_b3887_4_rib2	Translation termination 2 b3887 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3887_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3887_aa + 1 b3887_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70 + 4 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754
tl_term_b3887_8_rib1	Translation termination 1 b3887 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3887_8_cplx <==> 1 tl_term_b3887_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754
tl_term_b3887_8_rib2	Translation termination 2 b3887 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3887_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b3887_aa + 1 b3887_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70 + 8 val1_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	8.78E+01	87.84639	0	9.75E+00	9.754
tl_term_b3888_19_rib1	Translation termination 1 b3888 19 ribosome(s), (RF2_mono)	19 RF2_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b3888_19_cplx <==> 1 tl_term_b3888_19_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354
tl_term_b3888_19_rib2	Translation termination 2 b3888 19 ribosome(s), (RF2_mono)	19 gtp + 38 h2o + 1 tl_term_b3888_19_rib_cplx --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF2_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 b3888_aa + 1 b3888_mRNA_2 + 19 gdp + 19 glu1_tRNA + 57 h + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354
tl_term_b3888_1_rib1	Translation termination 1 b3888 1 ribosome(s), (RF2_mono)	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3888_1_cplx <==> 1 tl_term_b3888_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354
tl_term_b3888_1_rib2	Translation termination 2 b3888 1 ribosome(s), (RF2_mono)	1 gtp + 2 h2o + 1 tl_term_b3888_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3888_aa + 1 b3888_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354
tl_term_b3888_9_rib1	Translation termination 1 b3888 9 ribosome(s), (RF2_mono)	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3888_9_cplx <==> 1 tl_term_b3888_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354
tl_term_b3888_9_rib2	Translation termination 2 b3888 9 ribosome(s), (RF2_mono)	9 gtp + 18 h2o + 1 tl_term_b3888_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b3888_aa + 1 b3888_mRNA_2 + 9 gdp + 9 glu1_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.85E+01	4.85E+01	0	8.24E+01	82.44639	0	4.35E+00	4.354
tl_term_b3936_1_rib1	Translation termination 1 b3936 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3936_1_cplx <==> 1 tl_term_b3936_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	5.62E+01	56.176
tl_term_b3936_1_rib2	Translation termination 2 b3936 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3936_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3936_aa + 1 b3936_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	5.62E+01	56.176
tl_term_b3936_1_rib_RF2_1	Translation termination 1 b3936 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3936_1_cplx <==> 1 tl_term_b3936_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	5.62E+01	56.176
tl_term_b3936_1_rib_RF2_2	Translation termination 2 b3936 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3936_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3936_aa + 1 b3936_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	5.62E+01	56.176
tl_term_b3936_2_rib1	Translation termination 1 b3936 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3936_2_cplx <==> 1 tl_term_b3936_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3936_2_rib2	Translation termination 2 b3936 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b3936_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3936_aa + 1 b3936_mRNA_2 + 2 gdp + 6 h + 2 lys1_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3936_2_rib_RF2_1	Translation termination 1 b3936 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b3936_2_cplx <==> 1 tl_term_b3936_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3936_2_rib_RF2_2	Translation termination 2 b3936 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b3936_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b3936_aa + 1 b3936_mRNA_2 + 2 gdp + 6 h + 2 lys1_tRNA + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b3936_4_rib1	Translation termination 1 b3936 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3936_4_cplx <==> 1 tl_term_b3936_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3936_4_rib2	Translation termination 2 b3936 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3936_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3936_aa + 1 b3936_mRNA_2 + 4 gdp + 12 h + 4 lys1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3936_4_rib_RF2_1	Translation termination 1 b3936 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3936_4_cplx <==> 1 tl_term_b3936_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72

tl_term_b3936_4_rib_RF2_2	Translation termination 2 b3936 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3936_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b3936_aa + 1 b3936_mRNA_2 + 4 gdp + 12 h + 4 lys1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3965_10_rib1	Translation termination 1 b3965 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3965_10_cplx <==> 1 tl_term_b3965_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_term_b3965_10_rib2	Translation termination 2 b3965 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b3965_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b3965_aa + 1 b3965_mRNA_2 + 10 gdp + 30 h + 10 lys1_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_term_b3965_10_rib_RF2_1	Translation termination 1 b3965 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3965_10_cplx <==> 1 tl_term_b3965_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_term_b3965_10_rib_RF2_2	Translation termination 2 b3965 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b3965_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b3965_aa + 1 b3965_mRNA_2 + 10 gdp + 30 h + 10 lys1_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_term_b3965_1_rib1	Translation termination 1 b3965 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3965_1_cplx <==> 1 tl_term_b3965_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_term_b3965_1_rib2	Translation termination 2 b3965 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3965_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3965_aa + 1 b3965_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_term_b3965_1_rib_RF2_1	Translation termination 1 b3965 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3965_1_cplx <==> 1 tl_term_b3965_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_term_b3965_1_rib_RF2_2	Translation termination 2 b3965 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3965_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3965_aa + 1 b3965_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_term_b3965_21_rib1	Translation termination 1 b3965 21 ribosome(s), (RF1_mono)	21 RF1_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b3965_21_cplx <==> 1 tl_term_b3965_21_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_term_b3965_21_rib2	Translation termination 2 b3965 21 ribosome(s), (RF1_mono)	21 gtp + 42 h2o + 1 tl_term_b3965_21_rib_cplx --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF1_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 b3965_aa + 1 b3965_mRNA_2 + 21 gdp + 63 h + 21 lys1_tRNA + 63 pi + 21 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_term_b3965_21_rib_RF2_1	Translation termination 1 b3965 21 ribosome(s), RF2_mono	21 RF2_mono + 21 RF3_mono.GDP + 21 Rrf_mono + 1 rib_70_elo2_b3965_21_cplx <==> 1 tl_term_b3965_21_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_term_b3965_21_rib_RF2_2	Translation termination 2 b3965 21 ribosome(s), RF2	21 gtp + 42 h2o + 1 tl_term_b3965_21_rib_cplx2 --> 21 EF-G.GDP + 21 EF-Tu.GDP + 21 RF2_mono_inact + 21 RF3_mono.GDP_inact + 21 Rrf_mono_inact + 21 b3965_aa + 1 b3965_mRNA_2 + 21 gdp + 63 h + 21 lys1_tRNA + 63 pi + 21 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.13E+02	212.8996	0	3.41E+00	3.4079
tl_term_b3980_11_rib1	Translation termination 1 b3980 11 ribosome(s), (RF1_mono)	11 RF1_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b3980_11_cplx <==> 1 tl_term_b3980_11_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.39E+02	238.5469	0	5.64E+01	56.41
tl_term_b3980_11_rib2	Translation termination 2 b3980 11 ribosome(s), (RF1_mono)	11 gtp + 22 h2o + 1 tl_term_b3980_11_rib_cplx --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF1_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b3980_aa + 1 b3980_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70 + 11 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.39E+02	238.5469	0	5.64E+01	56.41
tl_term_b3980_11_rib_RF2_1	Translation termination 1 b3980 11 ribosome(s), RF2_mono	11 RF2_mono + 11 RF3_mono.GDP + 11 Rrf_mono + 1 rib_70_elo2_b3980_11_cplx <==> 1 tl_term_b3980_11_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.39E+02	238.5469	0	5.64E+01	56.41
tl_term_b3980_11_rib_RF2_2	Translation termination 2 b3980 11 ribosome(s), RF2	11 gtp + 22 h2o + 1 tl_term_b3980_11_rib_cplx2 --> 11 EF-G.GDP + 11 EF-Tu.GDP + 11 RF2_mono_inact + 11 RF3_mono.GDP_inact + 11 Rrf_mono_inact + 11 b3980_aa + 1 b3980_mRNA_2 + 11 gdp + 33 h + 33 pi + 11 rib_70 + 11 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.39E+02	238.5469	0	5.64E+01	56.41
tl_term_b3980_1_rib1	Translation termination 1 b3980 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3980_1_cplx <==> 1 tl_term_b3980_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.39E+02	238.5469	0	5.64E+01	56.41
tl_term_b3980_1_rib2	Translation termination 2 b3980 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3980_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3980_aa + 1 b3980_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.39E+02	238.5469	0	5.64E+01	56.41
tl_term_b3980_1_rib_RF2_1	Translation termination 1 b3980 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3980_1_cplx <==> 1 tl_term_b3980_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.39E+02	238.5469	0	5.64E+01	56.41
tl_term_b3980_1_rib_RF2_2	Translation termination 2 b3980 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3980_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3980_aa + 1 b3980_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.39E+02	238.5469	0	5.64E+01	56.41
tl_term_b3980_23_rib1	Translation termination 1 b3980 23 ribosome(s), (RF1_mono)	23 RF1_mono + 23 RF3_mono.GDP + 23 Rrf_mono + 1 rib_70_elo2_b3980_23_cplx <==> 1 tl_term_b3980_23_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.32E+02	231.6607	0	5.64E+01	56.41
tl_term_b3980_23_rib2	Translation termination 2 b3980 23 ribosome(s), (RF1_mono)	23 gtp + 46 h2o + 1 tl_term_b3980_23_rib_cplx --> 23 EF-G.GDP + 23 EF-Tu.GDP + 23 RF1_mono_inact + 23 RF3_mono.GDP_inact + 23 Rrf_mono_inact + 23 b3980_aa + 1 b3980_mRNA_2 + 23 gdp + 69 h + 69 pi + 23 rib_70 + 23 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.32E+02	231.6607	0	5.64E+01	56.41
tl_term_b3980_23_rib_RF2_1	Translation termination 1 b3980 23 ribosome(s), RF2_mono	23 RF2_mono + 23 RF3_mono.GDP + 23 Rrf_mono + 1 rib_70_elo2_b3980_23_cplx <==> 1 tl_term_b3980_23_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.32E+02	231.6607	0	5.64E+01	56.41
tl_term_b3980_23_rib_RF2_2	Translation termination 2 b3980 23 ribosome(s), RF2	23 gtp + 46 h2o + 1 tl_term_b3980_23_rib_cplx2 --> 23 EF-G.GDP + 23 EF-Tu.GDP + 23 RF2_mono_inact + 23 RF3_mono.GDP_inact + 23 Rrf_mono_inact + 23 b3980_aa + 1 b3980_mRNA_2 + 23 gdp + 69 h + 69 pi + 23 rib_70 + 23 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.32E+02	231.6607	0	5.64E+01	56.41
tl_term_b3981_1_rib1	Translation termination 1 b3981 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3981_1_cplx <==> 1 tl_term_b3981_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739
tl_term_b3981_1_rib2	Translation termination 2 b3981 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3981_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3981_aa + 1 b3981_mRNA_2 + 1 gdp + 3 h + 1 phe1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739
tl_term_b3981_3_rib1	Translation termination 1 b3981 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3981_3_cplx <==> 1 tl_term_b3981_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739
tl_term_b3981_3_rib2	Translation termination 2 b3981 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3981_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3981_aa + 1 b3981_mRNA_2 + 3 gdp + 9 h + 3 phe1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739
tl_term_b3981_7_rib1	Translation termination 1 b3981 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3981_7_cplx <==> 1 tl_term_b3981_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739

tl_term_b3981_7_rib2	Translation termination 2 b3981 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3981_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3981_aa + 1 b3981_mRNA_2 + 7 gdp + 21 h + 7 phe1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.76E+02	275.956	0	1.27E+01	12.739
tl_term_b3982_10_rib1	Translation termination 1 b3982 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3982_10_cplx <==> 1 tl_term_b3982_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_term_b3982_10_rib2	Translation termination 2 b3982 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b3982_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 ala2_tRNA + 10 b3982_aa + 1 b3982_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_term_b3982_10_rib_RF2_1	Translation termination 1 b3982 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b3982_10_cplx <==> 1 tl_term_b3982_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_term_b3982_10_rib_RF2_2	Translation termination 2 b3982 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b3982_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 ala2_tRNA + 10 b3982_aa + 1 b3982_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_term_b3982_1_rib1	Translation termination 1 b3982 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3982_1_cplx <==> 1 tl_term_b3982_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_term_b3982_1_rib2	Translation termination 2 b3982 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3982_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala2_tRNA + 1 b3982_aa + 1 b3982_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_term_b3982_1_rib_RF2_1	Translation termination 1 b3982 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3982_1_cplx <==> 1 tl_term_b3982_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_term_b3982_1_rib_RF2_2	Translation termination 2 b3982 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3982_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala2_tRNA + 1 b3982_aa + 1 b3982_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_term_b3982_5_rib1	Translation termination 1 b3982 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3982_5_cplx <==> 1 tl_term_b3982_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_term_b3982_5_rib2	Translation termination 2 b3982 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b3982_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 ala2_tRNA + 5 b3982_aa + 1 b3982_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_term_b3982_5_rib_RF2_1	Translation termination 1 b3982 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b3982_5_cplx <==> 1 tl_term_b3982_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_term_b3982_5_rib_RF2_2	Translation termination 2 b3982 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b3982_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 ala2_tRNA + 5 b3982_aa + 1 b3982_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+02	1.58E+02	0	2.72E+02	272.216	0	9.00E+00	8.999
tl_term_b3983_1_rib1	Translation termination 1 b3983 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3983_1_cplx <==> 1 tl_term_b3983_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.60E+01	4.60E+01	0	5.92E+01	59.18534	0	3.64E+01	36.36457
tl_term_b3983_1_rib2	Translation termination 2 b3983 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3983_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b3983_aa + 1 b3983_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.60E+01	4.60E+01	0	5.92E+01	59.18534	0	3.64E+01	36.36457
tl_term_b3983_1_rib_RF2_1	Translation termination 1 b3983 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3983_1_cplx <==> 1 tl_term_b3983_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.60E+01	4.60E+01	0	5.92E+01	59.18534	0	3.64E+01	36.36457
tl_term_b3983_1_rib_RF2_2	Translation termination 2 b3983 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3983_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b3983_aa + 1 b3983_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.60E+01	4.60E+01	0	5.92E+01	59.18534	0	3.64E+01	36.36457
tl_term_b3983_4_rib1	Translation termination 1 b3983 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3983_4_cplx <==> 1 tl_term_b3983_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3983_4_rib2	Translation termination 2 b3983 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3983_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 asp1_tRNA + 4 b3983_aa + 1 b3983_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3983_4_rib_RF2_1	Translation termination 1 b3983 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3983_4_cplx <==> 1 tl_term_b3983_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3983_4_rib_RF2_2	Translation termination 2 b3983 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3983_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 asp1_tRNA + 4 b3983_aa + 1 b3983_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b3983_8_rib1	Translation termination 1 b3983 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3983_8_cplx <==> 1 tl_term_b3983_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3983_8_rib2	Translation termination 2 b3983 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b3983_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 asp1_tRNA + 8 b3983_aa + 1 b3983_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3983_8_rib_RF2_1	Translation termination 1 b3983 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b3983_8_cplx <==> 1 tl_term_b3983_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3983_8_rib_RF2_2	Translation termination 2 b3983 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b3983_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 asp1_tRNA + 8 b3983_aa + 1 b3983_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b3984_13_rib1	Translation termination 1 b3984 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3984_13_cplx <==> 1 tl_term_b3984_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.66E+00	8.66E+00	0	6.38E+00	6.375385	0	6.38E+00	6.375385
tl_term_b3984_13_rib2	Translation termination 2 b3984 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b3984_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 asn1_tRNA + 13 b3984_aa + 1 b3984_mRNA_2 + 13 gdp + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.66E+00	8.66E+00	0	6.38E+00	6.375385	0	6.38E+00	6.375385
tl_term_b3984_13_rib_RF2_1	Translation termination 1 b3984 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b3984_13_cplx <==> 1 tl_term_b3984_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.66E+00	8.66E+00	0	6.38E+00	6.375385	0	6.38E+00	6.375385
tl_term_b3984_13_rib_RF2_2	Translation termination 2 b3984 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b3984_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 asn1_tRNA + 13 b3984_aa + 1 b3984_mRNA_2 + 13 gdp + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.66E+00	8.66E+00	0	6.38E+00	6.375385	0	6.38E+00	6.375385
tl_term_b3984_1_rib1	Translation termination 1 b3984 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3984_1_cplx <==> 1 tl_term_b3984_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.96E+01	1.96E+01	0	3.10E+01	30.95693	0	9.32E+00	9.32475
tl_term_b3984_1_rib2	Translation termination 2 b3984 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3984_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b3984_aa + 1 b3984_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.96E+01	1.96E+01	0	3.10E+01	30.95693	0	9.32E+00	9.32475

tl_term_b3984_1_rib_RF2_1	Translation termination 1 b3984 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3984_1_cplx <==> 1 tl_term_b3984_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.96E+01	1.96E+01	0	3.10E+01	30.95693	0	9.32E+00	9.32475
tl_term_b3984_1_rib_RF2_2	Translation termination 2 b3984 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3984_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b3984_aa + 1 b3984_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.96E+01	1.96E+01	0	3.10E+01	30.95693	0	9.32E+00	9.32475
tl_term_b3984_6_rib1	Translation termination 1 b3984 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3984_6_cplx <==> 1 tl_term_b3984_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.72E+01	1.72E+01	0	1.38E+01	13.81333	0	1.34E+01	13.389
tl_term_b3984_6_rib2	Translation termination 2 b3984 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b3984_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 asn1_tRNA + 6 b3984_aa + 1 b3984_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	1.38E+01	13.81333	0	1.34E+01	13.389
tl_term_b3984_6_rib_RF2_1	Translation termination 1 b3984 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b3984_6_cplx <==> 1 tl_term_b3984_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.72E+01	1.72E+01	0	1.38E+01	13.81333	0	1.34E+01	13.389
tl_term_b3984_6_rib_RF2_2	Translation termination 2 b3984 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b3984_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 asn1_tRNA + 6 b3984_aa + 1 b3984_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	1.38E+01	13.81333	0	1.34E+01	13.389
tl_term_b3985_1_rib1	Translation termination 1 b3985 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3985_1_cplx <==> 1 tl_term_b3985_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.34E+01	2.34E+01	0	3.75E+01	37.54288	0	1.16E+01	11.56763
tl_term_b3985_1_rib2	Translation termination 2 b3985 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3985_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3985_aa + 1 b3985_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.34E+01	2.34E+01	0	3.75E+01	37.54288	0	1.16E+01	11.56763
tl_term_b3985_1_rib_RF2_1	Translation termination 1 b3985 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3985_1_cplx <==> 1 tl_term_b3985_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.34E+01	2.34E+01	0	3.75E+01	37.54288	0	1.16E+01	11.56763
tl_term_b3985_1_rib_RF2_2	Translation termination 2 b3985 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3985_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b3985_aa + 1 b3985_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.34E+01	2.34E+01	0	3.75E+01	37.54288	0	1.16E+01	11.56763
tl_term_b3985_4_rib1	Translation termination 1 b3985 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3985_4_cplx <==> 1 tl_term_b3985_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.43E+01	2.43E+01	0	2.07E+01	20.72	0	1.72E+01	17.189
tl_term_b3985_4_rib2	Translation termination 2 b3985 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b3985_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 ala1_tRNA + 4 b3985_aa + 1 b3985_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.43E+01	2.43E+01	0	2.07E+01	20.72	0	1.72E+01	17.189
tl_term_b3985_4_rib_RF2_1	Translation termination 1 b3985 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b3985_4_cplx <==> 1 tl_term_b3985_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.43E+01	2.43E+01	0	2.07E+01	20.72	0	1.72E+01	17.189
tl_term_b3985_4_rib_RF2_2	Translation termination 2 b3985 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b3985_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 ala1_tRNA + 4 b3985_aa + 1 b3985_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.43E+01	2.43E+01	0	2.07E+01	20.72	0	1.72E+01	17.189
tl_term_b3985_9_rib1	Translation termination 1 b3985 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3985_9_cplx <==> 1 tl_term_b3985_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.25E+01	1.25E+01	0	9.21E+00	9.208889	0	9.21E+00	9.208889
tl_term_b3985_9_rib2	Translation termination 2 b3985 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b3985_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 ala1_tRNA + 9 b3985_aa + 1 b3985_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.25E+01	1.25E+01	0	9.21E+00	9.208889	0	9.21E+00	9.208889
tl_term_b3985_9_rib_RF2_1	Translation termination 1 b3985 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b3985_9_cplx <==> 1 tl_term_b3985_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.25E+01	1.25E+01	0	9.21E+00	9.208889	0	9.21E+00	9.208889
tl_term_b3985_9_rib_RF2_2	Translation termination 2 b3985 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b3985_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 ala1_tRNA + 9 b3985_aa + 1 b3985_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.25E+01	1.25E+01	0	9.21E+00	9.208889	0	9.21E+00	9.208889
tl_term_b3986_1_rib1	Translation termination 1 b3986 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3986_1_cplx <==> 1 tl_term_b3986_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	3.32E+02	331.52	0	1.22E+02	121.5037
tl_term_b3986_1_rib2	Translation termination 2 b3986 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3986_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3986_aa + 1 b3986_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	3.32E+02	331.52	0	1.22E+02	121.5037
tl_term_b3986_1_rib_RF2_1	Translation termination 1 b3986 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3986_1_cplx <==> 1 tl_term_b3986_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	3.32E+02	331.52	0	1.22E+02	121.5037
tl_term_b3986_1_rib_RF2_2	Translation termination 2 b3986 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3986_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3986_aa + 1 b3986_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	3.32E+02	331.52	0	1.22E+02	121.5037
tl_term_b3986_3_rib1	Translation termination 1 b3986 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3986_3_cplx <==> 1 tl_term_b3986_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	1.11E+02	110.5067	0	1.11E+02	110.5067
tl_term_b3986_3_rib2	Translation termination 2 b3986 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b3986_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3986_aa + 1 b3986_mRNA_2 + 3 gdp + 9 h + 3 lys1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	1.11E+02	110.5067	0	1.11E+02	110.5067
tl_term_b3986_3_rib_RF2_1	Translation termination 1 b3986 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b3986_3_cplx <==> 1 tl_term_b3986_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	1.11E+02	110.5067	0	1.11E+02	110.5067
tl_term_b3986_3_rib_RF2_2	Translation termination 2 b3986 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b3986_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b3986_aa + 1 b3986_mRNA_2 + 3 gdp + 9 h + 3 lys1_tRNA + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	1.11E+02	110.5067	0	1.11E+02	110.5067
tl_term_b3986_7_rib1	Translation termination 1 b3986 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3986_7_cplx <==> 1 tl_term_b3986_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.43E+01	6.43E+01	0	4.74E+01	47.36	0	4.74E+01	47.36
tl_term_b3986_7_rib2	Translation termination 2 b3986 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b3986_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3986_aa + 1 b3986_mRNA_2 + 7 gdp + 21 h + 7 lys1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	4.74E+01	47.36	0	4.74E+01	47.36
tl_term_b3986_7_rib_RF2_1	Translation termination 1 b3986 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b3986_7_cplx <==> 1 tl_term_b3986_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.43E+01	6.43E+01	0	4.74E+01	47.36	0	4.74E+01	47.36
tl_term_b3986_7_rib_RF2_2	Translation termination 2 b3986 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b3986_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b3986_aa + 1 b3986_mRNA_2 + 7 gdp + 21 h + 7 lys1_tRNA + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	4.74E+01	47.36	0	4.74E+01	47.36
tl_term_b3987_1_rib1	Translation termination 1 b3987 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3987_1_cplx <==> 1 tl_term_b3987_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.69E+01	1.69E+01	0	2.83E+01	28.32872	0	2.21E+00	2.209
tl_term_b3987_1_rib2	Translation termination 2 b3987 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3987_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3987_aa + 1 b3987_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.69E+01	1.69E+01	0	2.83E+01	28.32872	0	2.21E+00	2.209
tl_term_b3987_1_rib_RF2_1	Translation termination 1 b3987 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3987_1_cplx <==> 1 tl_term_b3987_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.69E+01	1.69E+01	0	2.83E+01	28.32872	0	2.21E+00	2.209

tl_term_b3987_1_rib_RF2_2	Translation termination 2 b3987 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3987_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3987_aa + 1 b3987_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.69E+01	1.69E+01	0	2.83E+01	28.32872	0	2.21E+00	2.209
tl_term_b3987_39_rib1	Translation termination 1 b3987 39 ribosome(s), (RF1_mono)	39 RF1_mono + 39 RF3_mono.GDP + 39 Rrf_mono + 1 rib_70_elo2_b3987_39_cplx <==> 1 tl_term_b3987_39_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.99E+00	9.99E+00	0	1.49E+01	14.89415	0	2.21E+00	2.209
tl_term_b3987_39_rib2	Translation termination 2 b3987 39 ribosome(s), (RF1_mono)	39 gtp + 78 h2o + 1 tl_term_b3987_39_rib_cplx --> 39 EF-G.GDP + 39 EF-Tu.GDP + 39 RF1_mono_inact + 39 RF3_mono.GDP_inact + 39 Rrf_mono_inact + 39 b3987_aa + 1 b3987_mRNA_2 + 39 gdp + 39 glu1_tRNA + 117 h + 117 pi + 39 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.99E+00	9.99E+00	0	1.49E+01	14.89415	0	2.21E+00	2.209
tl_term_b3987_39_rib_RF2_1	Translation termination 1 b3987 39 ribosome(s), RF2_mono	39 RF2_mono + 39 RF3_mono.GDP + 39 Rrf_mono + 1 rib_70_elo2_b3987_39_cplx <==> 1 tl_term_b3987_39_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.99E+00	9.99E+00	0	1.49E+01	14.89415	0	2.21E+00	2.209
tl_term_b3987_39_rib_RF2_2	Translation termination 2 b3987 39 ribosome(s), RF2	39 gtp + 78 h2o + 1 tl_term_b3987_39_rib_cplx2 --> 39 EF-G.GDP + 39 EF-Tu.GDP + 39 RF2_mono_inact + 39 RF3_mono.GDP_inact + 39 Rrf_mono_inact + 39 b3987_aa + 1 b3987_mRNA_2 + 39 gdp + 39 glu1_tRNA + 117 h + 117 pi + 39 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.99E+00	9.99E+00	0	1.49E+01	14.89415	0	2.21E+00	2.209
tl_term_b3987_78_rib1	Translation termination 1 b3987 78 ribosome(s), (RF1_mono)	78 RF1_mono + 78 RF3_mono.GDP + 78 Rrf_mono + 1 rib_70_elo2_b3987_78_cplx <==> 1 tl_term_b3987_78_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.18E+00	6.18E+00	0	8.34E+00	8.341509	0	1.31E+00	1.313051
tl_term_b3987_78_rib2	Translation termination 2 b3987 78 ribosome(s), (RF1_mono)	78 gtp + 156 h2o + 1 tl_term_b3987_78_rib_cplx --> 78 EF-G.GDP + 78 EF-Tu.GDP + 78 RF1_mono_inact + 78 RF3_mono.GDP_inact + 78 Rrf_mono_inact + 78 b3987_aa + 1 b3987_mRNA_2 + 78 gdp + 78 glu1_tRNA + 234 h + 234 pi + 78 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+00	6.18E+00	0	8.34E+00	8.341509	0	1.31E+00	1.313051
tl_term_b3987_78_rib_RF2_1	Translation termination 1 b3987 78 ribosome(s), RF2_mono	78 RF2_mono + 78 RF3_mono.GDP + 78 Rrf_mono + 1 rib_70_elo2_b3987_78_cplx <==> 1 tl_term_b3987_78_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.18E+00	6.18E+00	0	8.34E+00	8.341509	0	1.31E+00	1.313051
tl_term_b3987_78_rib_RF2_2	Translation termination 2 b3987 78 ribosome(s), RF2	78 gtp + 156 h2o + 1 tl_term_b3987_78_rib_cplx2 --> 78 EF-G.GDP 78 EF-Tu.GDP + 78 RF2_mono_inact + 78 RF3_mono.GDP_inact + 78 Rrf_mono_inact + 78 b3987_aa + 1 b3987_mRNA_2 + 78 gdp + 78 glu1_tRNA + 234 h + 234 pi + 78 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.18E+00	6.18E+00	0	8.34E+00	8.341509	0	1.31E+00	1.313051
tl_term_b3988_1_rib1	Translation termination 1 b3988 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3988_1_cplx <==> 1 tl_term_b3988_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.60E+01	1.60E+01	0	2.74E+01	27.36872	0	1.25E+00	1.249
tl_term_b3988_1_rib2	Translation termination 2 b3988 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b3988_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3988_aa + 1 b3988_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.60E+01	1.60E+01	0	2.74E+01	27.36872	0	1.25E+00	1.249
tl_term_b3988_1_rib_RF2_1	Translation termination 1 b3988 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b3988_1_cplx <==> 1 tl_term_b3988_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.60E+01	1.60E+01	0	2.74E+01	27.36872	0	1.25E+00	1.249
tl_term_b3988_1_rib_RF2_2	Translation termination 2 b3988 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b3988_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b3988_aa + 1 b3988_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.60E+01	1.60E+01	0	2.74E+01	27.36872	0	1.25E+00	1.249
tl_term_b3988_41_rib1	Translation termination 1 b3988 41 ribosome(s), (RF1_mono)	41 RF1_mono + 41 RF3_mono.GDP + 41 Rrf_mono + 1 rib_70_elo2_b3988_41_cplx <==> 1 tl_term_b3988_41_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.31E+00	9.31E+00	0	1.41E+01	14.07016	0	1.25E+00	1.249
tl_term_b3988_41_rib2	Translation termination 2 b3988 41 ribosome(s), (RF1_mono)	41 gtp + 82 h2o + 1 tl_term_b3988_41_rib_cplx --> 41 EF-G.GDP + 41 EF-Tu.GDP + 41 RF1_mono_inact + 41 RF3_mono.GDP_inact + 41 Rrf_mono_inact + 41 b3988_aa + 1 b3988_mRNA_2 + 41 gdp + 41 glu1_tRNA + 123 h + 123 pi + 41 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.31E+00	9.31E+00	0	1.41E+01	14.07016	0	1.25E+00	1.249
tl_term_b3988_41_rib_RF2_1	Translation termination 1 b3988 41 ribosome(s), RF2_mono	41 RF2_mono + 41 RF3_mono.GDP + 41 Rrf_mono + 1 rib_70_elo2_b3988_41_cplx <==> 1 tl_term_b3988_41_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.31E+00	9.31E+00	0	1.41E+01	14.07016	0	1.25E+00	1.249
tl_term_b3988_41_rib_RF2_2	Translation termination 2 b3988 41 ribosome(s), RF2	41 gtp + 82 h2o + 1 tl_term_b3988_41_rib_cplx2 --> 41 EF-G.GDP + 41 EF-Tu.GDP + 41 RF2_mono_inact + 41 RF3_mono.GDP_inact + 41 Rrf_mono_inact + 41 b3988_aa + 1 b3988_mRNA_2 + 41 gdp + 41 glu1_tRNA + 123 h + 123 pi + 41 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.31E+00	9.31E+00	0	1.41E+01	14.07016	0	1.25E+00	1.249
tl_term_b3988_82_rib1	Translation termination 1 b3988 82 ribosome(s), (RF1_mono)	82 RF1_mono + 82 RF3_mono.GDP + 82 Rrf_mono + 1 rib_70_elo2_b3988_82_cplx <==> 1 tl_term_b3988_82_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.88E+00	5.88E+00	0	7.93E+00	7.934606	0	1.25E+00	1.249
tl_term_b3988_82_rib2	Translation termination 2 b3988 82 ribosome(s), (RF1_mono)	82 gtp + 164 h2o + 1 tl_term_b3988_82_rib_cplx --> 82 EF-G.GDP + 82 EF-Tu.GDP + 82 RF1_mono_inact + 82 RF3_mono.GDP_inact + 82 Rrf_mono_inact + 82 b3988_aa + 1 b3988_mRNA_2 + 82 gdp + 82 glu1_tRNA + 246 h + 246 pi + 82 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.88E+00	5.88E+00	0	7.93E+00	7.934606	0	1.25E+00	1.249
tl_term_b3988_82_rib_RF2_1	Translation termination 1 b3988 82 ribosome(s), RF2_mono	82 RF2_mono + 82 RF3_mono.GDP + 82 Rrf_mono + 1 rib_70_elo2_b3988_82_cplx <==> 1 tl_term_b3988_82_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.88E+00	5.88E+00	0	7.93E+00	7.934606	0	1.25E+00	1.249
tl_term_b3988_82_rib_RF2_2	Translation termination 2 b3988 82 ribosome(s), RF2	82 gtp + 164 h2o + 1 tl_term_b3988_82_rib_cplx2 --> 82 EF-G.GDP 82 EF-Tu.GDP + 82 RF2_mono_inact + 82 RF3_mono.GDP_inact + 82 Rrf_mono_inact + 82 b3988_aa + 1 b3988_mRNA_2 + 82 gdp + 82 glu1_tRNA + 246 h + 246 pi + 82 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.88E+00	5.88E+00	0	7.93E+00	7.934606	0	1.25E+00	1.249
tl_term_b4022_17_rib1	Translation termination 1 b4022 17 ribosome(s), (RF1_mono)	17 RF1_mono + 17 RF3_mono.GDP + 17 Rrf_mono + 1 rib_70_elo2_b4022_17_cplx <==> 1 tl_term_b4022_17_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641
tl_term_b4022_17_rib2	Translation termination 2 b4022 17 ribosome(s), (RF1_mono)	17 gtp + 34 h2o + 1 tl_term_b4022_17_rib_cplx --> 17 EF-G.GDP + 17 EF-Tu.GDP + 17 RF1_mono_inact + 17 RF3_mono.GDP_inact + 17 Rrf_mono_inact + 17 arg1_tRNA + 17 b4022_aa + 1 b4022_mRNA_2 + 17 gdp + 51 h + 51 pi + 17 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641
tl_term_b4022_1_rib1	Translation termination 1 b4022 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4022_1_cplx <==> 1 tl_term_b4022_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641
tl_term_b4022_1_rib2	Translation termination 2 b4022 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4022_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b4022_aa + 1 b4022_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641
tl_term_b4022_8_rib1	Translation termination 1 b4022 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b4022_8_cplx <==> 1 tl_term_b4022_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641
tl_term_b4022_8_rib2	Translation termination 2 b4022 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b4022_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 arg1_tRNA + 8 b4022_aa + 1 b4022_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.59E+02	1.59E+02	0	2.77E+02	276.5257	0	5.64E+00	5.641
tl_term_b4049_10_rib1	Translation termination 1 b4049 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b4049_10_cplx <==> 1 tl_term_b4049_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_term_b4049_10_rib2	Translation termination 2 b4049 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b4049_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 arg1_tRNA + 10 b4049_aa + 1 b4049_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_term_b4049_10_rib_RF2_1	Translation termination 1 b4049 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b4049_10_cplx <==> 1 tl_term_b4049_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78

tl_term_b4049_10_rib_RF2_2	Translation termination 2 b4049 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b4049_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 arg1_tRNA + 10 b4049_aa + 1 b4049_mRNA_2 + 10 gdp + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_term_b4049_1_rib1	Translation termination 1 b4049 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4049_1_cplx <==> 1 tl_term_b4049_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_term_b4049_1_rib2	Translation termination 2 b4049 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4049_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b4049_aa + 1 b4049_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_term_b4049_1_rib_RF2_1	Translation termination 1 b4049 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4049_1_cplx <==> 1 tl_term_b4049_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_term_b4049_1_rib_RF2_2	Translation termination 2 b4049 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4049_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b4049_aa + 1 b4049_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_term_b4049_20_rib1	Translation termination 1 b4049 20 ribosome(s), (RF1_mono)	20 RF1_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b4049_20_cplx <==> 1 tl_term_b4049_20_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_term_b4049_20_rib2	Translation termination 2 b4049 20 ribosome(s), (RF1_mono)	20 gtp + 40 h2o + 1 tl_term_b4049_20_rib_cplx --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF1_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 arg1_tRNA + 20 b4049_aa + 1 b4049_mRNA_2 + 20 gdp + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_term_b4049_20_rib_RF2_1	Translation termination 1 b4049 20 ribosome(s), RF2_mono	20 RF2_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b4049_20_cplx <==> 1 tl_term_b4049_20_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_term_b4049_20_rib_RF2_2	Translation termination 2 b4049 20 ribosome(s), RF2	20 gtp + 40 h2o + 1 tl_term_b4049_20_rib_cplx2 --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF2_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 arg1_tRNA + 20 b4049_aa + 1 b4049_mRNA_2 + 20 gdp + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.38E+02	237.5735	0	4.78E+00	4.78
tl_term_b4129_14_rib1	Translation termination 1 b4129 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b4129_14_cplx <==> 1 tl_term_b4129_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.78E+01	9.78E+01	0	1.70E+02	169.7023	0	4.09E+00	4.087
tl_term_b4129_14_rib2	Translation termination 2 b4129 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b4129_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b4129_aa + 1 b4129_mRNA_2 + 14 gdp + 42 h + 14 lys1_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.70E+02	169.7023	0	4.09E+00	4.087
tl_term_b4129_14_rib_RF2_1	Translation termination 1 b4129 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b4129_14_cplx <==> 1 tl_term_b4129_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.78E+01	9.78E+01	0	1.70E+02	169.7023	0	4.09E+00	4.087
tl_term_b4129_14_rib_RF2_2	Translation termination 2 b4129 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b4129_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b4129_aa + 1 b4129_mRNA_2 + 14 gdp + 42 h + 14 lys1_tRNA + 42 pi + 14 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.70E+02	169.7023	0	4.09E+00	4.087
tl_term_b4129_1_rib1	Translation termination 1 b4129 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4129_1_cplx <==> 1 tl_term_b4129_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.78E+01	9.78E+01	0	1.70E+02	169.7023	0	4.09E+00	4.087
tl_term_b4129_1_rib2	Translation termination 2 b4129 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4129_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4129_aa + 1 b4129_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.70E+02	169.7023	0	4.09E+00	4.087
tl_term_b4129_1_rib_RF2_1	Translation termination 1 b4129 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4129_1_cplx <==> 1 tl_term_b4129_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.78E+01	9.78E+01	0	1.70E+02	169.7023	0	4.09E+00	4.087
tl_term_b4129_1_rib_RF2_2	Translation termination 2 b4129 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4129_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4129_aa + 1 b4129_mRNA_2 + 1 gdp + 3 h + 1 lys1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.70E+02	169.7023	0	4.09E+00	4.087
tl_term_b4129_29_rib1	Translation termination 1 b4129 29 ribosome(s), (RF1_mono)	29 RF1_mono + 29 RF3_mono.GDP + 29 Rrf_mono + 1 rib_70_elo2_b4129_29_cplx <==> 1 tl_term_b4129_29_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	9.78E+01	9.78E+01	0	1.48E+02	147.7835	0	4.09E+00	4.087
tl_term_b4129_29_rib2	Translation termination 2 b4129 29 ribosome(s), (RF1_mono)	29 gtp + 58 h2o + 1 tl_term_b4129_29_rib_cplx --> 29 EF-G.GDP + 29 EF-Tu.GDP + 29 RF1_mono_inact + 29 RF3_mono.GDP_inact + 29 Rrf_mono_inact + 29 b4129_aa + 1 b4129_mRNA_2 + 29 gdp + 87 h + 29 lys1_tRNA + 87 pi + 29 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.48E+02	147.7835	0	4.09E+00	4.087
tl_term_b4129_29_rib_RF2_1	Translation termination 1 b4129 29 ribosome(s), RF2_mono	29 RF2_mono + 29 RF3_mono.GDP + 29 Rrf_mono + 1 rib_70_elo2_b4129_29_cplx <==> 1 tl_term_b4129_29_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	9.78E+01	9.78E+01	0	1.48E+02	147.7835	0	4.09E+00	4.087
tl_term_b4129_29_rib_RF2_2	Translation termination 2 b4129 29 ribosome(s), RF2	29 gtp + 58 h2o + 1 tl_term_b4129_29_rib_cplx2 --> 29 EF-G.GDP + 29 EF-Tu.GDP + 29 RF2_mono_inact + 29 RF3_mono.GDP_inact + 29 Rrf_mono_inact + 29 b4129_aa + 1 b4129_mRNA_2 + 29 gdp + 87 h + 29 lys1_tRNA + 87 pi + 29 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	9.78E+01	9.78E+01	0	1.48E+02	147.7835	0	4.09E+00	4.087
tl_term_b4142_1_rib1	Translation termination 1 b4142 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4142_1_cplx <==> 1 tl_term_b4142_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_term_b4142_1_rib2	Translation termination 2 b4142 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4142_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b4142_aa + 1 b4142_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_term_b4142_1_rib_RF2_1	Translation termination 1 b4142 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4142_1_cplx <==> 1 tl_term_b4142_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_term_b4142_1_rib_RF2_2	Translation termination 2 b4142 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4142_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 ala1_tRNA + 1 b4142_aa + 1 b4142_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_term_b4142_2_rib1	Translation termination 1 b4142 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b4142_2_cplx <==> 1 tl_term_b4142_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_term_b4142_2_rib2	Translation termination 2 b4142 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b4142_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 ala1_tRNA + 2 b4142_aa + 1 b4142_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_term_b4142_2_rib_RF2_1	Translation termination 1 b4142 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b4142_2_cplx <==> 1 tl_term_b4142_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_term_b4142_2_rib_RF2_2	Translation termination 2 b4142 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b4142_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 ala1_tRNA + 2 b4142_aa + 1 b4142_mRNA_2 + 2 gdp + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_term_b4142_5_rib1	Translation termination 1 b4142 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b4142_5_cplx <==> 1 tl_term_b4142_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222

tl_term_b4142_5_rib2	Translation termination 2 b4142 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b4142_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 ala1_tRNA + 5 b4142_aa + 1 b4142_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_term_b4142_5_rib_RF2_1	Translation termination 1 b4142 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b4142_5_cplx <==> 1 tl_term_b4142_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_term_b4142_5_rib_RF2_2	Translation termination 2 b4142 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b4142_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 ala1_tRNA + 5 b4142_aa + 1 b4142_mRNA_2 + 5 gdp + 15 h + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	1.00E+03	1000.26	0	6.12E+01	61.222
tl_term_b4143_16_rib1	Translation termination 1 b4143 16 ribosome(s), (RF1_mono)	16 RF1_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b4143_16_cplx <==> 1 tl_term_b4143_16_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	7.82E+01	7.82E+01	0	1.28E+02	128.0933	0	7.29E+00	7.292
tl_term_b4143_16_rib2	Translation termination 2 b4143 16 ribosome(s), (RF1_mono)	16 gtp + 32 h2o + 1 tl_term_b4143_16_rib_cplx --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF1_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b4143_aa + 1 b4143_mRNA_2 + 16 gdp + 48 h + 16 met1_tRNA + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.82E+01	7.82E+01	0	1.28E+02	128.0933	0	7.29E+00	7.292
tl_term_b4143_16_rib_RF2_1	Translation termination 1 b4143 16 ribosome(s), RF2_mono	16 RF2_mono + 16 RF3_mono.GDP + 16 Rrf_mono + 1 rib_70_elo2_b4143_16_cplx <==> 1 tl_term_b4143_16_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	7.82E+01	7.82E+01	0	1.28E+02	128.0933	0	7.29E+00	7.292
tl_term_b4143_16_rib_RF2_2	Translation termination 2 b4143 16 ribosome(s), RF2	16 gtp + 32 h2o + 1 tl_term_b4143_16_rib_cplx2 --> 16 EF-G.GDP + 16 EF-Tu.GDP + 16 RF2_mono_inact + 16 RF3_mono.GDP_inact + 16 Rrf_mono_inact + 16 b4143_aa + 1 b4143_mRNA_2 + 16 gdp + 48 h + 16 met1_tRNA + 48 pi + 16 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	7.82E+01	7.82E+01	0	1.28E+02	128.0933	0	7.29E+00	7.292
tl_term_b4143_1_rib1	Translation termination 1 b4143 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4143_1_cplx <==> 1 tl_term_b4143_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.80E+01	8.80E+01	0	1.50E+02	150.0754	0	7.29E+00	7.292
tl_term_b4143_1_rib2	Translation termination 2 b4143 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4143_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4143_aa + 1 b4143_mRNA_2 + 1 gdp + 3 h + 1 met1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.80E+01	8.80E+01	0	1.50E+02	150.0754	0	7.29E+00	7.292
tl_term_b4143_1_rib_RF2_1	Translation termination 1 b4143 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4143_1_cplx <==> 1 tl_term_b4143_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.80E+01	8.80E+01	0	1.50E+02	150.0754	0	7.29E+00	7.292
tl_term_b4143_1_rib_RF2_2	Translation termination 2 b4143 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4143_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4143_aa + 1 b4143_mRNA_2 + 1 gdp + 3 h + 1 met1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.80E+01	8.80E+01	0	1.50E+02	150.0754	0	7.29E+00	7.292
tl_term_b4143_32_rib1	Translation termination 1 b4143 32 ribosome(s), (RF1_mono)	32 RF1_mono + 32 RF3_mono.GDP + 32 Rrf_mono + 1 rib_70_elo2_b4143_32_cplx <==> 1 tl_term_b4143_32_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	6.54E+01	6.54E+01	0	1.07E+02	107.1087	0	7.29E+00	7.292
tl_term_b4143_32_rib2	Translation termination 2 b4143 32 ribosome(s), (RF1_mono)	32 gtp + 64 h2o + 1 tl_term_b4143_32_rib_cplx --> 32 EF-G.GDP + 32 EF-Tu.GDP + 32 RF1_mono_inact + 32 RF3_mono.GDP_inact + 32 Rrf_mono_inact + 32 b4143_aa + 1 b4143_mRNA_2 + 32 gdp + 96 h + 32 met1_tRNA + 96 pi + 32 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.54E+01	6.54E+01	0	1.07E+02	107.1087	0	7.29E+00	7.292
tl_term_b4143_32_rib_RF2_1	Translation termination 1 b4143 32 ribosome(s), RF2_mono	32 RF2_mono + 32 RF3_mono.GDP + 32 Rrf_mono + 1 rib_70_elo2_b4143_32_cplx <==> 1 tl_term_b4143_32_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	6.54E+01	6.54E+01	0	1.07E+02	107.1087	0	7.29E+00	7.292
tl_term_b4143_32_rib_RF2_2	Translation termination 2 b4143 32 ribosome(s), RF2	32 gtp + 64 h2o + 1 tl_term_b4143_32_rib_cplx2 --> 32 EF-G.GDP + 32 EF-Tu.GDP + 32 RF2_mono_inact + 32 RF3_mono.GDP_inact + 32 Rrf_mono_inact + 32 b4143_aa + 1 b4143_mRNA_2 + 32 gdp + 96 h + 32 met1_tRNA + 96 pi + 32 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	6.54E+01	6.54E+01	0	1.07E+02	107.1087	0	7.29E+00	7.292
tl_term_b4162_10_rib1	Translation termination 1 b4162 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b4162_10_cplx <==> 1 tl_term_b4162_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_term_b4162_10_rib2	Translation termination 2 b4162 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b4162_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b4162_aa + 1 b4162_mRNA_2 + 10 gdp + 30 h + 10 leu1_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_term_b4162_10_rib_RF2_1	Translation termination 1 b4162 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b4162_10_cplx <==> 1 tl_term_b4162_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_term_b4162_10_rib_RF2_2	Translation termination 2 b4162 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b4162_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b4162_aa + 1 b4162_mRNA_2 + 10 gdp + 30 h + 10 leu1_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_term_b4162_1_rib1	Translation termination 1 b4162 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4162_1_cplx <==> 1 tl_term_b4162_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_term_b4162_1_rib2	Translation termination 2 b4162 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4162_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4162_aa + 1 b4162_mRNA_2 + 1 gdp + 3 h + 1 leu1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_term_b4162_1_rib_RF2_1	Translation termination 1 b4162 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4162_1_cplx <==> 1 tl_term_b4162_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_term_b4162_1_rib_RF2_2	Translation termination 2 b4162 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4162_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4162_aa + 1 b4162_mRNA_2 + 1 gdp + 3 h + 1 leu1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_term_b4162_5_rib1	Translation termination 1 b4162 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b4162_5_cplx <==> 1 tl_term_b4162_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_term_b4162_5_rib2	Translation termination 2 b4162 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b4162_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b4162_aa + 1 b4162_mRNA_2 + 5 gdp + 15 h + 5 leu1_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_term_b4162_5_rib_RF2_1	Translation termination 1 b4162 5 ribosome(s), RF2_mono	5 RF2_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b4162_5_cplx <==> 1 tl_term_b4162_5_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_term_b4162_5_rib_RF2_2	Translation termination 2 b4162 5 ribosome(s), RF2	5 gtp + 10 h2o + 1 tl_term_b4162_5_rib_cplx2 --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF2_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b4162_aa + 1 b4162_mRNA_2 + 5 gdp + 15 h + 5 leu1_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.47E+02	2.47E+02	0	4.31E+02	431.1167	0	7.35E+00	7.352
tl_term_b4167_15_rib1	Translation termination 1 b4167 15 ribosome(s), (RF1_mono)	15 RF1_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b4167_15_cplx <==> 1 tl_term_b4167_15_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184
tl_term_b4167_15_rib2	Translation termination 2 b4167 15 ribosome(s), (RF1_mono)	15 gtp + 30 h2o + 1 tl_term_b4167_15_rib_cplx --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF1_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b4167_aa + 1 b4167_mRNA_2 + 15 gdp + 45 h + 45 pi + 15 proL_tRNA + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184
tl_term_b4167_1_rib1	Translation termination 1 b4167 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4167_1_cplx <==> 1 tl_term_b4167_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184

tl_term_b4167_1_rib2	Translation termination 2 b4167 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4167_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4167_aa + 1 b4167_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 proL_tRNA + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184
tl_term_b4167_30_rib1	Translation termination 1 b4167 30 ribosome(s), (RF1_mono)	30 RF1_mono + 30 RF3_mono.GDP + 30 Rrf_mono + 1 rib_70_elo2_b4167_30_cplx <==> 1 tl_term_b4167_30_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184
tl_term_b4167_30_rib2	Translation termination 2 b4167 30 ribosome(s), (RF1_mono)	30 gtp + 60 h2o + 1 tl_term_b4167_30_rib_cplx --> 30 EF-G.GDP + 30 EF-Tu.GDP + 30 RF1_mono_inact + 30 RF3_mono.GDP_inact + 30 Rrf_mono_inact + 30 b4167_aa + 1 b4167_mRNA_2 + 30 gdp + 90 h + 90 pi + 30 proL_tRNA + 30 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.53E+01	1.53E+01	0	2.46E+01	24.64007	0	3.18E+00	3.184
tl_term_b4168_1_rib1	Translation termination 1 b4168 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4168_1_cplx <==> 1 tl_term_b4168_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_term_b4168_1_rib2	Translation termination 2 b4168 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4168_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4168_aa + 1 b4168_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_term_b4168_1_rib_RF2_1	Translation termination 1 b4168 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4168_1_cplx <==> 1 tl_term_b4168_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_term_b4168_1_rib_RF2_2	Translation termination 2 b4168 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4168_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4168_aa + 1 b4168_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_term_b4168_4_rib1	Translation termination 1 b4168 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b4168_4_cplx <==> 1 tl_term_b4168_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_term_b4168_4_rib2	Translation termination 2 b4168 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b4168_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b4168_aa + 1 b4168_mRNA_2 + 4 gdp + 4 gly1_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_term_b4168_4_rib_RF2_1	Translation termination 1 b4168 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b4168_4_cplx <==> 1 tl_term_b4168_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_term_b4168_4_rib_RF2_2	Translation termination 2 b4168 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b4168_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b4168_aa + 1 b4168_mRNA_2 + 4 gdp + 4 gly1_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_term_b4168_9_rib1	Translation termination 1 b4168 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b4168_9_cplx <==> 1 tl_term_b4168_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_term_b4168_9_rib2	Translation termination 2 b4168 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b4168_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b4168_aa + 1 b4168_mRNA_2 + 9 gdp + 9 gly1_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_term_b4168_9_rib_RF2_1	Translation termination 1 b4168 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b4168_9_cplx <==> 1 tl_term_b4168_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_term_b4168_9_rib_RF2_2	Translation termination 2 b4168 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b4168_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b4168_aa + 1 b4168_mRNA_2 + 9 gdp + 9 gly1_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.89E+01	1.89E+01	0	2.83E+01	28.27007	0	6.81E+00	6.814
tl_term_b4169_13_rib1	Translation termination 1 b4169 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b4169_13_cplx <==> 1 tl_term_b4169_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_term_b4169_13_rib2	Translation termination 2 b4169 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b4169_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 asn1_tRNA + 13 b4169_aa + 1 b4169_mRNA_2 + 13 gdp + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_term_b4169_13_rib_RF2_1	Translation termination 1 b4169 13 ribosome(s), RF2_mono	13 RF2_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b4169_13_cplx <==> 1 tl_term_b4169_13_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_term_b4169_13_rib_RF2_2	Translation termination 2 b4169 13 ribosome(s), RF2	13 gtp + 26 h2o + 1 tl_term_b4169_13_rib_cplx2 --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF2_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 asn1_tRNA + 13 b4169_aa + 1 b4169_mRNA_2 + 13 gdp + 39 h + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_term_b4169_1_rib1	Translation termination 1 b4169 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4169_1_cplx <==> 1 tl_term_b4169_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_term_b4169_1_rib2	Translation termination 2 b4169 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4169_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b4169_aa + 1 b4169_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_term_b4169_1_rib_RF2_1	Translation termination 1 b4169 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4169_1_cplx <==> 1 tl_term_b4169_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_term_b4169_1_rib_RF2_2	Translation termination 2 b4169 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4169_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asn1_tRNA + 1 b4169_aa + 1 b4169_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_term_b4169_26_rib1	Translation termination 1 b4169 26 ribosome(s), (RF1_mono)	26 RF1_mono + 26 RF3_mono.GDP + 26 Rrf_mono + 1 rib_70_elo2_b4169_26_cplx <==> 1 tl_term_b4169_26_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_term_b4169_26_rib2	Translation termination 2 b4169 26 ribosome(s), (RF1_mono)	26 gtp + 52 h2o + 1 tl_term_b4169_26_rib_cplx --> 26 EF-G.GDP + 26 EF-Tu.GDP + 26 RF1_mono_inact + 26 RF3_mono.GDP_inact + 26 Rrf_mono_inact + 26 asn1_tRNA + 26 b4169_aa + 1 b4169_mRNA_2 + 26 gdp + 78 h + 78 pi + 26 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_term_b4169_26_rib_RF2_1	Translation termination 1 b4169 26 ribosome(s), RF2_mono	26 RF2_mono + 26 RF3_mono.GDP + 26 Rrf_mono + 1 rib_70_elo2_b4169_26_cplx <==> 1 tl_term_b4169_26_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_term_b4169_26_rib_RF2_2	Translation termination 2 b4169 26 ribosome(s), RF2	26 gtp + 52 h2o + 1 tl_term_b4169_26_rib_cplx2 --> 26 EF-G.GDP + 26 EF-Tu.GDP + 26 RF2_mono_inact + 26 RF3_mono.GDP_inact + 26 Rrf_mono_inact + 26 asn1_tRNA + 26 b4169_aa + 1 b4169_mRNA_2 + 26 gdp + 78 h + 78 pi + 26 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.58E+01	1.58E+01	0	2.51E+01	25.12007	0	3.66E+00	3.664
tl_term_b4170_18_rib1	Translation termination 1 b4170 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b4170_18_cplx <==> 1 tl_term_b4170_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924
tl_term_b4170_18_rib2	Translation termination 2 b4170 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b4170_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b4170_aa + 1 b4170_mRNA_2 + 18 gdp + 18 glu1_tRNA + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924
tl_term_b4170_1_rib1	Translation termination 1 b4170 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4170_1_cplx <==> 1 tl_term_b4170_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924
tl_term_b4170_1_rib2	Translation termination 2 b4170 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4170_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4170_aa + 1 b4170_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924

tl_term_b4170_36_rib1	Translation termination 1 b4170 36 ribosome(s), (RF1_mono)	36 RF1_mono + 36 RF3_mono.GDP + 36 Rrf_mono + 1 rib_70_elo2_b4170_36_cplx <==> 1 tl_term_b4170_36_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924
tl_term_b4170_36_rib2	Translation termination 2 b4170 36 ribosome(s), (RF1_mono)	36 gtp + 72 h2o + 1 tl_term_b4170_36_rib_cplx --> 36 EF-G.GDP + 36 EF-Tu.GDP + 36 RF1_mono_inact + 36 RF3_mono.GDP_inact + 36 Rrf_mono_inact + 36 b4170_aa + 1 b4170_mRNA_2 + 36 gdp + 36 glu1_tRNA + 108 h + 108 pi + 36 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.40E+01	1.40E+01	0	2.34E+01	23.38007	0	1.92E+00	1.924
tl_term_b4171_18_rib1	Translation termination 1 b4171 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b4171_18_cplx <==> 1 tl_term_b4171_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954
tl_term_b4171_18_rib2	Translation termination 2 b4171 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b4171_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b4171_aa + 1 b4171_mRNA_2 + 18 gdp + 18 gly1_tRNA + 54 h + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954
tl_term_b4171_1_rib1	Translation termination 1 b4171 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4171_1_cplx <==> 1 tl_term_b4171_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954
tl_term_b4171_1_rib2	Translation termination 2 b4171 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4171_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4171_aa + 1 b4171_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954
tl_term_b4171_9_rib1	Translation termination 1 b4171 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b4171_9_cplx <==> 1 tl_term_b4171_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954
tl_term_b4171_9_rib2	Translation termination 2 b4171 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b4171_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b4171_aa + 1 b4171_mRNA_2 + 9 gdp + 9 gly1_tRNA + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.11E+01	2.11E+01	0	3.04E+01	30.41007	0	8.95E+00	8.954
tl_term_b4172_1_rib1	Translation termination 1 b4172 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4172_1_cplx <==> 1 tl_term_b4172_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_term_b4172_1_rib2	Translation termination 2 b4172 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4172_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4172_aa + 1 b4172_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_term_b4172_1_rib_RF2_1	Translation termination 1 b4172 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4172_1_cplx <==> 1 tl_term_b4172_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_term_b4172_1_rib_RF2_2	Translation termination 2 b4172 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4172_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4172_aa + 1 b4172_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_term_b4172_3_rib1	Translation termination 1 b4172 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b4172_3_cplx <==> 1 tl_term_b4172_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_term_b4172_3_rib2	Translation termination 2 b4172 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b4172_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b4172_aa + 1 b4172_mRNA_2 + 3 gdp + 3 glu1_tRNA + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_term_b4172_3_rib_RF2_1	Translation termination 1 b4172 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b4172_3_cplx <==> 1 tl_term_b4172_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_term_b4172_3_rib_RF2_2	Translation termination 2 b4172 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b4172_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b4172_aa + 1 b4172_mRNA_2 + 3 gdp + 3 glu1_tRNA + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_term_b4172_6_rib1	Translation termination 1 b4172 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b4172_6_cplx <==> 1 tl_term_b4172_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_term_b4172_6_rib2	Translation termination 2 b4172 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b4172_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b4172_aa + 1 b4172_mRNA_2 + 6 gdp + 6 glu1_tRNA + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_term_b4172_6_rib_RF2_1	Translation termination 1 b4172 6 ribosome(s), RF2_mono	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b4172_6_cplx <==> 1 tl_term_b4172_6_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_term_b4172_6_rib_RF2_2	Translation termination 2 b4172 6 ribosome(s), RF2	6 gtp + 12 h2o + 1 tl_term_b4172_6_rib_cplx2 --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b4172_aa + 1 b4172_mRNA_2 + 6 gdp + 6 glu1_tRNA + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.14E+02	1.14E+02	0	1.23E+02	123.0511	0	1.02E+02	101.595
tl_term_b4173_12_rib1	Translation termination 1 b4173 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b4173_12_cplx <==> 1 tl_term_b4173_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_term_b4173_12_rib2	Translation termination 2 b4173 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b4173_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b4173_aa + 1 b4173_mRNA_2 + 12 gdp + 36 h + 12 ile1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_term_b4173_12_rib_RF2_1	Translation termination 1 b4173 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b4173_12_cplx <==> 1 tl_term_b4173_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_term_b4173_12_rib_RF2_2	Translation termination 2 b4173 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b4173_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b4173_aa + 1 b4173_mRNA_2 + 12 gdp + 36 h + 12 ile1_tRNA + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_term_b4173_1_rib1	Translation termination 1 b4173 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4173_1_cplx <==> 1 tl_term_b4173_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_term_b4173_1_rib2	Translation termination 2 b4173 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4173_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4173_aa + 1 b4173_mRNA_2 + 1 gdp + 3 h + 1 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_term_b4173_1_rib_RF2_1	Translation termination 1 b4173 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4173_1_cplx <==> 1 tl_term_b4173_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_term_b4173_1_rib_RF2_2	Translation termination 2 b4173 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4173_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4173_aa + 1 b4173_mRNA_2 + 1 gdp + 3 h + 1 ile1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_term_b4173_25_rib1	Translation termination 1 b4173 25 ribosome(s), (RF1_mono)	25 RF1_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b4173_25_cplx <==> 1 tl_term_b4173_25_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_term_b4173_25_rib2	Translation termination 2 b4173 25 ribosome(s), (RF1_mono)	25 gtp + 50 h2o + 1 tl_term_b4173_25_rib_cplx --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF1_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 b4173_aa + 1 b4173_mRNA_2 + 25 gdp + 75 h + 25 ile1_tRNA + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_term_b4173_25_rib_RF2_1	Translation termination 1 b4173 25 ribosome(s), RF2_mono	25 RF2_mono + 25 RF3_mono.GDP + 25 Rrf_mono + 1 rib_70_elo2_b4173_25_cplx <==> 1 tl_term_b4173_25_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604

tl_term_b4173_25_rib_RF2_2	Translation termination 2 b4173 25 ribosome(s), RF2	25 gtp + 50 h2o + 1 tl_term_b4173_25_rib_cplx2 --> 25 EF-G.GDP + 25 EF-Tu.GDP + 25 RF2_mono_inact + 25 RF3_mono.GDP_inact + 25 Rrf_mono_inact + 25 b4173_aa + 1 b4173_mRNA_2 + 25 gdp + 75 h + 25 ile1_tRNA + 75 pi + 25 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.57E+01	1.57E+01	0	2.51E+01	25.06007	0	3.60E+00	3.604
tl_term_b4174_12_rib1	Translation termination 1 b4174 12 ribosome(s), (RF1_mono)	12 RF1_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b4174_12_cplx <==> 1 tl_term_b4174_12_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_term_b4174_12_rib2	Translation termination 2 b4174 12 ribosome(s), (RF1_mono)	12 gtp + 24 h2o + 1 tl_term_b4174_12_rib_cplx --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF1_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b4174_aa + 1 b4174_mRNA_2 + 12 gdp + 12 glu1_tRNA + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_term_b4174_12_rib_RF2_1	Translation termination 1 b4174 12 ribosome(s), RF2_mono	12 RF2_mono + 12 RF3_mono.GDP + 12 Rrf_mono + 1 rib_70_elo2_b4174_12_cplx <==> 1 tl_term_b4174_12_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_term_b4174_12_rib_RF2_2	Translation termination 2 b4174 12 ribosome(s), RF2	12 gtp + 24 h2o + 1 tl_term_b4174_12_rib_cplx2 --> 12 EF-G.GDP + 12 EF-Tu.GDP + 12 RF2_mono_inact + 12 RF3_mono.GDP_inact + 12 Rrf_mono_inact + 12 b4174_aa + 1 b4174_mRNA_2 + 12 gdp + 12 glu1_tRNA + 36 h + 36 pi + 12 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_term_b4174_1_rib1	Translation termination 1 b4174 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4174_1_cplx <==> 1 tl_term_b4174_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_term_b4174_1_rib2	Translation termination 2 b4174 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4174_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4174_aa + 1 b4174_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_term_b4174_1_rib_RF2_1	Translation termination 1 b4174 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4174_1_cplx <==> 1 tl_term_b4174_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_term_b4174_1_rib_RF2_2	Translation termination 2 b4174 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4174_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4174_aa + 1 b4174_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_term_b4174_24_rib1	Translation termination 1 b4174 24 ribosome(s), (RF1_mono)	24 RF1_mono + 24 RF3_mono.GDP + 24 Rrf_mono + 1 rib_70_elo2_b4174_24_cplx <==> 1 tl_term_b4174_24_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_term_b4174_24_rib2	Translation termination 2 b4174 24 ribosome(s), (RF1_mono)	24 gtp + 48 h2o + 1 tl_term_b4174_24_rib_cplx --> 24 EF-G.GDP + 24 EF-Tu.GDP + 24 RF1_mono_inact + 24 RF3_mono.GDP_inact + 24 Rrf_mono_inact + 24 b4174_aa + 1 b4174_mRNA_2 + 24 gdp + 24 glu1_tRNA + 72 h + 72 pi + 24 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_term_b4174_24_rib_RF2_1	Translation termination 1 b4174 24 ribosome(s), RF2_mono	24 RF2_mono + 24 RF3_mono.GDP + 24 Rrf_mono + 1 rib_70_elo2_b4174_24_cplx <==> 1 tl_term_b4174_24_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_term_b4174_24_rib_RF2_2	Translation termination 2 b4174 24 ribosome(s), RF2	24 gtp + 48 h2o + 1 tl_term_b4174_24_rib_cplx2 --> 24 EF-G.GDP + 24 EF-Tu.GDP + 24 RF2_mono_inact + 24 RF3_mono.GDP_inact + 24 Rrf_mono_inact + 24 b4174_aa + 1 b4174_mRNA_2 + 24 gdp + 24 glu1_tRNA + 72 h + 72 pi + 24 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.64E+01	1.64E+01	0	2.58E+01	25.79007	0	4.33E+00	4.334
tl_term_b4175_19_rib1	Translation termination 1 b4175 19 ribosome(s), (RF1_mono)	19 RF1_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b4175_19_cplx <==> 1 tl_term_b4175_19_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_term_b4175_19_rib2	Translation termination 2 b4175 19 ribosome(s), (RF1_mono)	19 gtp + 38 h2o + 1 tl_term_b4175_19_rib_cplx --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF1_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 arg1_tRNA + 19 b4175_aa + 1 b4175_mRNA_2 + 19 gdp + 57 h + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_term_b4175_19_rib_RF2_1	Translation termination 1 b4175 19 ribosome(s), RF2_mono	19 RF2_mono + 19 RF3_mono.GDP + 19 Rrf_mono + 1 rib_70_elo2_b4175_19_cplx <==> 1 tl_term_b4175_19_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_term_b4175_19_rib_RF2_2	Translation termination 2 b4175 19 ribosome(s), RF2	19 gtp + 38 h2o + 1 tl_term_b4175_19_rib_cplx2 --> 19 EF-G.GDP + 19 EF-Tu.GDP + 19 RF2_mono_inact + 19 RF3_mono.GDP_inact + 19 Rrf_mono_inact + 19 arg1_tRNA + 19 b4175_aa + 1 b4175_mRNA_2 + 19 gdp + 57 h + 57 pi + 19 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_term_b4175_1_rib1	Translation termination 1 b4175 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4175_1_cplx <==> 1 tl_term_b4175_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_term_b4175_1_rib2	Translation termination 2 b4175 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4175_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b4175_aa + 1 b4175_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_term_b4175_1_rib_RF2_1	Translation termination 1 b4175 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4175_1_cplx <==> 1 tl_term_b4175_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_term_b4175_1_rib_RF2_2	Translation termination 2 b4175 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4175_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 arg1_tRNA + 1 b4175_aa + 1 b4175_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_term_b4175_9_rib1	Translation termination 1 b4175 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b4175_9_cplx <==> 1 tl_term_b4175_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_term_b4175_9_rib2	Translation termination 2 b4175 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b4175_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 arg1_tRNA + 9 b4175_aa + 1 b4175_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_term_b4175_9_rib_RF2_1	Translation termination 1 b4175 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b4175_9_cplx <==> 1 tl_term_b4175_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_term_b4175_9_rib_RF2_2	Translation termination 2 b4175 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b4175_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 arg1_tRNA + 9 b4175_aa + 1 b4175_mRNA_2 + 9 gdp + 27 h + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.72E+01	1.72E+01	0	2.66E+01	26.59007	0	5.13E+00	5.134
tl_term_b4178_1_rib1	Translation termination 1 b4178 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4178_1_cplx <==> 1 tl_term_b4178_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718
tl_term_b4178_1_rib2	Translation termination 2 b4178 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4178_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4178_aa + 1 b4178_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718
tl_term_b4178_4_rib1	Translation termination 1 b4178 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b4178_4_cplx <==> 1 tl_term_b4178_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718
tl_term_b4178_4_rib2	Translation termination 2 b4178 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b4178_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b4178_aa + 1 b4178_mRNA_2 + 4 gdp + 4 glu1_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718
tl_term_b4178_8_rib1	Translation termination 1 b4178 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b4178_8_cplx <==> 1 tl_term_b4178_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718

tl_term_b4178_8_rib2	Translation termination 2 b4178 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b4178_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b4178_aa + 1 b4178_mRNA_2 + 8 gdp + 8 glu1_tRNA + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.42E+01	4.42E+01	0	6.99E+01	69.88454	0	1.07E+01	10.718
tl_term_b4179_1_rib1	Translation termination 1 b4179 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4179_1_cplx <==> 1 tl_term_b4179_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.51E+01	3.51E+01	0	6.08E+01	60.77454	0	1.61E+00	1.608
tl_term_b4179_1_rib2	Translation termination 2 b4179 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4179_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4179_aa + 1 b4179_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.51E+01	3.51E+01	0	6.08E+01	60.77454	0	1.61E+00	1.608
tl_term_b4179_23_rib1	Translation termination 1 b4179 23 ribosome(s), (RF1_mono)	23 RF1_mono + 23 RF3_mono.GDP + 23 Rrf_mono + 1 rib_70_elo2_b4179_23_cplx <==> 1 tl_term_b4179_23_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.51E+01	3.51E+01	0	6.08E+01	60.77454	0	1.61E+00	1.608
tl_term_b4179_23_rib2	Translation termination 2 b4179 23 ribosome(s), (RF1_mono)	23 gtp + 46 h2o + 1 tl_term_b4179_23_rib_cplx --> 23 EF-G.GDP + 23 EF-Tu.GDP + 23 RF1_mono_inact + 23 RF3_mono.GDP_inact + 23 Rrf_mono_inact + 23 b4179_aa + 1 b4179_mRNA_2 + 23 gdp + 23 glu1_tRNA + 69 h + 69 pi + 23 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.51E+01	3.51E+01	0	6.08E+01	60.77454	0	1.61E+00	1.608
tl_term_b4179_47_rib1	Translation termination 1 b4179 47 ribosome(s), (RF1_mono)	47 RF1_mono + 47 RF3_mono.GDP + 47 Rrf_mono + 1 rib_70_elo2_b4179_47_cplx <==> 1 tl_term_b4179_47_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.51E+01	3.51E+01	0	5.95E+01	59.4638	0	1.61E+00	1.608
tl_term_b4179_47_rib2	Translation termination 2 b4179 47 ribosome(s), (RF1_mono)	47 gtp + 94 h2o + 1 tl_term_b4179_47_rib_cplx --> 47 EF-G.GDP + 47 EF-Tu.GDP + 47 RF1_mono_inact + 47 RF3_mono.GDP_inact + 47 Rrf_mono_inact + 47 b4179_aa + 1 b4179_mRNA_2 + 47 gdp + 47 glu1_tRNA + 141 h + 141 pi + 47 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.51E+01	3.51E+01	0	5.95E+01	59.4638	0	1.61E+00	1.608
tl_term_b4180_14_rib1	Translation termination 1 b4180 14 ribosome(s), (RF1_mono)	14 RF1_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b4180_14_cplx <==> 1 tl_term_b4180_14_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_term_b4180_14_rib2	Translation termination 2 b4180 14 ribosome(s), (RF1_mono)	14 gtp + 28 h2o + 1 tl_term_b4180_14_rib_cplx --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF1_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b4180_aa + 1 b4180_mRNA_2 + 14 gdp + 42 h + 42 pi + 14 rib_70 + 14 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_term_b4180_14_rib_RF2_1	Translation termination 1 b4180 14 ribosome(s), RF2_mono	14 RF2_mono + 14 RF3_mono.GDP + 14 Rrf_mono + 1 rib_70_elo2_b4180_14_cplx <==> 1 tl_term_b4180_14_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_term_b4180_14_rib_RF2_2	Translation termination 2 b4180 14 ribosome(s), RF2	14 gtp + 28 h2o + 1 tl_term_b4180_14_rib_cplx2 --> 14 EF-G.GDP + 14 EF-Tu.GDP + 14 RF2_mono_inact + 14 RF3_mono.GDP_inact + 14 Rrf_mono_inact + 14 b4180_aa + 1 b4180_mRNA_2 + 14 gdp + 42 h + 42 pi + 14 rib_70 + 14 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_term_b4180_1_rib1	Translation termination 1 b4180 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4180_1_cplx <==> 1 tl_term_b4180_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_term_b4180_1_rib2	Translation termination 2 b4180 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4180_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4180_aa + 1 b4180_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_term_b4180_1_rib_RF2_1	Translation termination 1 b4180 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4180_1_cplx <==> 1 tl_term_b4180_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_term_b4180_1_rib_RF2_2	Translation termination 2 b4180 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4180_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4180_aa + 1 b4180_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70 + 1 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_term_b4180_7_rib1	Translation termination 1 b4180 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b4180_7_cplx <==> 1 tl_term_b4180_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_term_b4180_7_rib2	Translation termination 2 b4180 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b4180_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b4180_aa + 1 b4180_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70 + 7 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_term_b4180_7_rib_RF2_1	Translation termination 1 b4180 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b4180_7_cplx <==> 1 tl_term_b4180_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_term_b4180_7_rib_RF2_2	Translation termination 2 b4180 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b4180_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b4180_aa + 1 b4180_mRNA_2 + 7 gdp + 21 h + 21 pi + 7 rib_70 + 7 serV_tRNA	irreversible	Translation	0.00E+00	1.00E+09	0	4.01E+01	4.01E+01	0	6.58E+01	65.80454	0	6.64E+00	6.638
tl_term_b4200_1_rib1	Translation termination 1 b4200 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4200_1_cplx <==> 1 tl_term_b4200_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.00E+02	1.00E+02	0	8.29E+01	82.88	0	6.06E+01	60.5605
tl_term_b4200_1_rib2	Translation termination 2 b4200 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4200_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4200_aa + 1 b4200_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.00E+02	1.00E+02	0	8.29E+01	82.88	0	6.06E+01	60.5605
tl_term_b4200_1_rib_RF2_1	Translation termination 1 b4200 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4200_1_cplx <==> 1 tl_term_b4200_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.00E+02	1.00E+02	0	8.29E+01	82.88	0	6.06E+01	60.5605
tl_term_b4200_1_rib_RF2_2	Translation termination 2 b4200 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4200_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4200_aa + 1 b4200_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.00E+02	1.00E+02	0	8.29E+01	82.88	0	6.06E+01	60.5605
tl_term_b4200_3_rib1	Translation termination 1 b4200 3 ribosome(s), (RF1_mono)	3 RF1_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b4200_3_cplx <==> 1 tl_term_b4200_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b4200_3_rib2	Translation termination 2 b4200 3 ribosome(s), (RF1_mono)	3 gtp + 6 h2o + 1 tl_term_b4200_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF1_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b4200_aa + 1 b4200_mRNA_2 + 3 gdp + 3 glu1_tRNA + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b4200_3_rib_RF2_1	Translation termination 1 b4200 3 ribosome(s), RF2_mono	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b4200_3_cplx <==> 1 tl_term_b4200_3_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b4200_3_rib_RF2_2	Translation termination 2 b4200 3 ribosome(s), RF2	3 gtp + 6 h2o + 1 tl_term_b4200_3_rib_cplx2 --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 b4200_aa + 1 b4200_mRNA_2 + 3 gdp + 3 glu1_tRNA + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.75E+01	3.75E+01	0	2.76E+01	27.62667	0	2.76E+01	27.62667
tl_term_b4200_7_rib1	Translation termination 1 b4200 7 ribosome(s), (RF1_mono)	7 RF1_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b4200_7_cplx <==> 1 tl_term_b4200_7_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b4200_7_rib2	Translation termination 2 b4200 7 ribosome(s), (RF1_mono)	7 gtp + 14 h2o + 1 tl_term_b4200_7_rib_cplx --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF1_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b4200_aa + 1 b4200_mRNA_2 + 7 gdp + 7 glu1_tRNA + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b4200_7_rib_RF2_1	Translation termination 1 b4200 7 ribosome(s), RF2_mono	7 RF2_mono + 7 RF3_mono.GDP + 7 Rrf_mono + 1 rib_70_elo2_b4200_7_cplx <==> 1 tl_term_b4200_7_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84
tl_term_b4200_7_rib_RF2_2	Translation termination 2 b4200 7 ribosome(s), RF2	7 gtp + 14 h2o + 1 tl_term_b4200_7_rib_cplx2 --> 7 EF-G.GDP + 7 EF-Tu.GDP + 7 RF2_mono_inact + 7 RF3_mono.GDP_inact + 7 Rrf_mono_inact + 7 b4200_aa + 1 b4200_mRNA_2 + 7 gdp + 7 glu1_tRNA + 21 h + 21 pi + 7 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.61E+01	1.61E+01	0	1.18E+01	11.84	0	1.18E+01	11.84

tl_term_b4201_1_rib1	Translation termination 1 b4201 1 ribosome(s), (RF2_mono)	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4201_1_cplx <==> 1 tl_term_b4201_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089
tl_term_b4201_1_rib2	Translation termination 2 b4201 1 ribosome(s), (RF2_mono)	1 gtp + 2 h2o + 1 tl_term_b4201_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b4201_aa + 1 b4201_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089
tl_term_b4201_3_rib1	Translation termination 1 b4201 3 ribosome(s), (RF2_mono)	3 RF2_mono + 3 RF3_mono.GDP + 3 Rrf_mono + 1 rib_70_elo2_b4201_3_cplx <==> 1 tl_term_b4201_3_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089
tl_term_b4201_3_rib2	Translation termination 2 b4201 3 ribosome(s), (RF2_mono)	3 gtp + 6 h2o + 1 tl_term_b4201_3_rib_cplx --> 3 EF-G.GDP + 3 EF-Tu.GDP + 3 RF2_mono_inact + 3 RF3_mono.GDP_inact + 3 Rrf_mono_inact + 3 asp1_tRNA + 3 b4201_aa + 1 b4201_mRNA_2 + 3 gdp + 9 h + 9 pi + 3 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089
tl_term_b4201_6_rib1	Translation termination 1 b4201 6 ribosome(s), (RF2_mono)	6 RF2_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b4201_6_cplx <==> 1 tl_term_b4201_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089
tl_term_b4201_6_rib2	Translation termination 2 b4201 6 ribosome(s), (RF2_mono)	6 gtp + 12 h2o + 1 tl_term_b4201_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF2_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 asp1_tRNA + 6 b4201_aa + 1 b4201_mRNA_2 + 6 gdp + 18 h + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.48E+02	1.48E+02	0	1.46E+02	145.68	0	6.31E+01	63.089
tl_term_b4202_1_rib1	Translation termination 1 b4202 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4202_1_cplx <==> 1 tl_term_b4202_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b4202_1_rib2	Translation termination 2 b4202 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4202_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4202_aa + 1 b4202_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b4202_1_rib_RF2_1	Translation termination 1 b4202 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4202_1_cplx <==> 1 tl_term_b4202_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b4202_1_rib_RF2_2	Translation termination 2 b4202 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4202_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4202_aa + 1 b4202_mRNA_2 + 1 gdp + 1 gln1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	0	8.29E+01	82.88
tl_term_b4202_2_rib1	Translation termination 1 b4202 2 ribosome(s), (RF1_mono)	2 RF1_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b4202_2_cplx <==> 1 tl_term_b4202_2_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b4202_2_rib2	Translation termination 2 b4202 2 ribosome(s), (RF1_mono)	2 gtp + 4 h2o + 1 tl_term_b4202_2_rib_cplx --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF1_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b4202_aa + 1 b4202_mRNA_2 + 2 gdp + 2 gln1_tRNA + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b4202_2_rib_RF2_1	Translation termination 1 b4202 2 ribosome(s), RF2_mono	2 RF2_mono + 2 RF3_mono.GDP + 2 Rrf_mono + 1 rib_70_elo2_b4202_2_cplx <==> 1 tl_term_b4202_2_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b4202_2_rib_RF2_2	Translation termination 2 b4202 2 ribosome(s), RF2	2 gtp + 4 h2o + 1 tl_term_b4202_2_rib_cplx2 --> 2 EF-G.GDP + 2 EF-Tu.GDP + 2 RF2_mono_inact + 2 RF3_mono.GDP_inact + 2 Rrf_mono_inact + 2 b4202_aa + 1 b4202_mRNA_2 + 2 gdp + 2 gln1_tRNA + 6 h + 6 pi + 2 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.63E+01	5.63E+01	0	4.14E+01	41.44	0	4.14E+01	41.44
tl_term_b4202_4_rib1	Translation termination 1 b4202 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b4202_4_cplx <==> 1 tl_term_b4202_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b4202_4_rib2	Translation termination 2 b4202 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b4202_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b4202_aa + 1 b4202_mRNA_2 + 4 gdp + 4 gln1_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b4202_4_rib_RF2_1	Translation termination 1 b4202 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b4202_4_cplx <==> 1 tl_term_b4202_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b4202_4_rib_RF2_2	Translation termination 2 b4202 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b4202_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b4202_aa + 1 b4202_mRNA_2 + 4 gdp + 4 gln1_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.81E+01	2.81E+01	0	2.07E+01	20.72	0	2.07E+01	20.72
tl_term_b4203_1_rib1	Translation termination 1 b4203 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4203_1_cplx <==> 1 tl_term_b4203_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.94E+01	8.94E+01	0	8.29E+01	82.88	0	1.01E+01	10.07886
tl_term_b4203_1_rib2	Translation termination 2 b4203 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4203_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4203_aa + 1 b4203_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.94E+01	8.94E+01	0	8.29E+01	82.88	0	1.01E+01	10.07886
tl_term_b4203_1_rib_RF2_1	Translation termination 1 b4203 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4203_1_cplx <==> 1 tl_term_b4203_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.94E+01	8.94E+01	0	8.29E+01	82.88	0	1.01E+01	10.07886
tl_term_b4203_1_rib_RF2_2	Translation termination 2 b4203 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4203_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4203_aa + 1 b4203_mRNA_2 + 1 gdp + 1 glu1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.94E+01	8.94E+01	0	8.29E+01	82.88	0	1.01E+01	10.07886
tl_term_b4203_4_rib1	Translation termination 1 b4203 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b4203_4_cplx <==> 1 tl_term_b4203_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	2.73E+01	2.73E+01	0	2.07E+01	20.72	0	1.66E+01	16.589
tl_term_b4203_4_rib2	Translation termination 2 b4203 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b4203_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b4203_aa + 1 b4203_mRNA_2 + 4 gdp + 4 glu1_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.73E+01	2.73E+01	0	2.07E+01	20.72	0	1.66E+01	16.589
tl_term_b4203_4_rib_RF2_1	Translation termination 1 b4203 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b4203_4_cplx <==> 1 tl_term_b4203_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	2.73E+01	2.73E+01	0	2.07E+01	20.72	0	1.66E+01	16.589
tl_term_b4203_4_rib_RF2_2	Translation termination 2 b4203 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b4203_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b4203_aa + 1 b4203_mRNA_2 + 4 gdp + 4 glu1_tRNA + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	2.73E+01	2.73E+01	0	2.07E+01	20.72	0	1.66E+01	16.589
tl_term_b4203_8_rib1	Translation termination 1 b4203 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b4203_8_cplx <==> 1 tl_term_b4203_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b4203_8_rib2	Translation termination 2 b4203 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b4203_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b4203_aa + 1 b4203_mRNA_2 + 8 gdp + 8 glu1_tRNA + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b4203_8_rib_RF2_1	Translation termination 1 b4203 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b4203_8_cplx <==> 1 tl_term_b4203_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b4203_8_rib_RF2_2	Translation termination 2 b4203 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b4203_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b4203_aa + 1 b4203_mRNA_2 + 8 gdp + 8 glu1_tRNA + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.41E+01	1.41E+01	0	1.04E+01	10.36	0	1.04E+01	10.36
tl_term_b4258_1_rib1	Translation termination 1 b4258 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4258_1_cplx <==> 1 tl_term_b4258_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.37E+01	4.37E+01	0	7.60E+01	75.95142	0	2.16E+00	2.16
tl_term_b4258_1_rib2	Translation termination 2 b4258 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4258_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4258_aa + 1 b4258_mRNA_2 + 1 gdp + 3 h + 1 leu1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.37E+01	4.37E+01	0	7.60E+01	75.95142	0	2.16E+00	2.16
tl_term_b4258_1_rib_RF2_1	Translation termination 1 b4258 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4258_1_cplx <==> 1 tl_term_b4258_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.37E+01	4.37E+01	0	7.60E+01	75.95142	0	2.16E+00	2.16

tl_term_b4258_1_rib_RF2_2	Translation termination 2 b4258 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4258_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4258_aa + 1 b4258_mRNA_2 + 1 gdp + 3 h + 1 leu1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.37E+01	4.37E+01	0	7.60E+01	75.95142	0	2.16E+00	2.16
tl_term_b4258_27_rib1	Translation termination 1 b4258 27 ribosome(s), (RF1_mono)	27 RF1_mono + 27 RF3_mono.GDP + 27 Rrf_mono + 1 rib_70_elo2_b4258_27_cplx <==> 1 tl_term_b4258_27_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	4.37E+01	4.37E+01	0	7.60E+01	75.95142	0	2.16E+00	2.16
tl_term_b4258_27_rib2	Translation termination 2 b4258 27 ribosome(s), (RF1_mono)	27 gtp + 54 h2o + 1 tl_term_b4258_27_rib_cplx --> 27 EF-G.GDP + 27 EF-Tu.GDP + 27 RF1_mono_inact + 27 RF3_mono.GDP_inact + 27 Rrf_mono_inact + 27 b4258_aa + 1 b4258_mRNA_2 + 27 gdp + 81 h + 27 leu1_tRNA + 81 pi + 27 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.37E+01	4.37E+01	0	7.60E+01	75.95142	0	2.16E+00	2.16
tl_term_b4258_27_rib_RF2_1	Translation termination 1 b4258 27 ribosome(s), RF2_mono	27 RF2_mono + 27 RF3_mono.GDP + 27 Rrf_mono + 1 rib_70_elo2_b4258_27_cplx <==> 1 tl_term_b4258_27_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	4.37E+01	4.37E+01	0	7.60E+01	75.95142	0	2.16E+00	2.16
tl_term_b4258_27_rib_RF2_2	Translation termination 2 b4258 27 ribosome(s), RF2	27 gtp + 54 h2o + 1 tl_term_b4258_27_rib_cplx2 --> 27 EF-G.GDP + 27 EF-Tu.GDP + 27 RF2_mono_inact + 27 RF3_mono.GDP_inact + 27 Rrf_mono_inact + 27 b4258_aa + 1 b4258_mRNA_2 + 27 gdp + 81 h + 27 leu1_tRNA + 81 pi + 27 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	4.37E+01	4.37E+01	0	7.60E+01	75.95142	0	2.16E+00	2.16
tl_term_b4258_55_rib1	Translation termination 1 b4258 55 ribosome(s), (RF1_mono)	55 RF1_mono + 55 RF3_mono.GDP + 55 Rrf_mono + 1 rib_70_elo2_b4258_55_cplx <==> 1 tl_term_b4258_55_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	3.67E+01	3.67E+01	0	3.74E+01	37.39572	0	2.16E+00	2.16
tl_term_b4258_55_rib2	Translation termination 2 b4258 55 ribosome(s), (RF1_mono)	55 gtp + 110 h2o + 1 tl_term_b4258_55_rib_cplx --> 55 EF-G.GDP + 55 EF-Tu.GDP + 55 RF1_mono_inact + 55 RF3_mono.GDP_inact + 55 Rrf_mono_inact + 55 b4258_aa + 1 b4258_mRNA_2 + 55 gdp + 165 h + 55 leu1_tRNA + 165 pi + 55 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.67E+01	3.67E+01	0	3.74E+01	37.39572	0	2.16E+00	2.16
tl_term_b4258_55_rib_RF2_1	Translation termination 1 b4258 55 ribosome(s), RF2_mono	55 RF2_mono + 55 RF3_mono.GDP + 55 Rrf_mono + 1 rib_70_elo2_b4258_55_cplx <==> 1 tl_term_b4258_55_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	3.67E+01	3.67E+01	0	3.74E+01	37.39572	0	2.16E+00	2.16
tl_term_b4258_55_rib_RF2_2	Translation termination 2 b4258 55 ribosome(s), RF2	55 gtp + 110 h2o + 1 tl_term_b4258_55_rib_cplx2 --> 55 EF-G.GDP 55 EF-Tu.GDP + 55 RF2_mono_inact + 55 RF3_mono.GDP_inact + 55 Rrf_mono_inact + 55 b4258_aa + 1 b4258_mRNA_2 + 55 gdp + 165 h + 55 leu1_tRNA + 165 pi + 55 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	3.67E+01	3.67E+01	0	3.74E+01	37.39572	0	2.16E+00	2.16
tl_term_b4292_18_rib1	Translation termination 1 b4292 18 ribosome(s), (RF1_mono)	18 RF1_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b4292_18_cplx <==> 1 tl_term_b4292_18_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_term_b4292_18_rib2	Translation termination 2 b4292 18 ribosome(s), (RF1_mono)	18 gtp + 36 h2o + 1 tl_term_b4292_18_rib_cplx --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF1_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b4292_aa + 1 b4292_mRNA_2 + 18 gdp + 54 h + 18 leu1_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_term_b4292_18_rib_RF2_1	Translation termination 1 b4292 18 ribosome(s), RF2_mono	18 RF2_mono + 18 RF3_mono.GDP + 18 Rrf_mono + 1 rib_70_elo2_b4292_18_cplx <==> 1 tl_term_b4292_18_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_term_b4292_18_rib_RF2_2	Translation termination 2 b4292 18 ribosome(s), RF2	18 gtp + 36 h2o + 1 tl_term_b4292_18_rib_cplx2 --> 18 EF-G.GDP + 18 EF-Tu.GDP + 18 RF2_mono_inact + 18 RF3_mono.GDP_inact + 18 Rrf_mono_inact + 18 b4292_aa + 1 b4292_mRNA_2 + 18 gdp + 54 h + 18 leu1_tRNA + 54 pi + 18 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_term_b4292_1_rib1	Translation termination 1 b4292 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4292_1_cplx <==> 1 tl_term_b4292_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_term_b4292_1_rib2	Translation termination 2 b4292 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4292_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4292_aa + 1 b4292_mRNA_2 + 1 gdp + 3 h + 1 leu1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_term_b4292_1_rib_RF2_1	Translation termination 1 b4292 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4292_1_cplx <==> 1 tl_term_b4292_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_term_b4292_1_rib_RF2_2	Translation termination 2 b4292 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4292_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4292_aa + 1 b4292_mRNA_2 + 1 gdp + 3 h + 1 leu1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_term_b4292_9_rib1	Translation termination 1 b4292 9 ribosome(s), (RF1_mono)	9 RF1_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b4292_9_cplx <==> 1 tl_term_b4292_9_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_term_b4292_9_rib2	Translation termination 2 b4292 9 ribosome(s), (RF1_mono)	9 gtp + 18 h2o + 1 tl_term_b4292_9_rib_cplx --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF1_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b4292_aa + 1 b4292_mRNA_2 + 9 gdp + 27 h + 9 leu1_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_term_b4292_9_rib_RF2_1	Translation termination 1 b4292 9 ribosome(s), RF2_mono	9 RF2_mono + 9 RF3_mono.GDP + 9 Rrf_mono + 1 rib_70_elo2_b4292_9_cplx <==> 1 tl_term_b4292_9_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_term_b4292_9_rib_RF2_2	Translation termination 2 b4292 9 ribosome(s), RF2	9 gtp + 18 h2o + 1 tl_term_b4292_9_rib_cplx2 --> 9 EF-G.GDP + 9 EF-Tu.GDP + 9 RF2_mono_inact + 9 RF3_mono.GDP_inact + 9 Rrf_mono_inact + 9 b4292_aa + 1 b4292_mRNA_2 + 9 gdp + 27 h + 9 leu1_tRNA + 27 pi + 9 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
tl_term_b4293_10_rib1	Translation termination 1 b4293 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b4293_10_cplx <==> 1 tl_term_b4293_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tl_term_b4293_10_rib2	Translation termination 2 b4293 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b4293_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b4293_aa + 1 b4293_mRNA_2 + 10 gdp + 30 h + 10 leuZ_tRNA + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tl_term_b4293_1_rib1	Translation termination 1 b4293 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4293_1_cplx <==> 1 tl_term_b4293_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tl_term_b4293_1_rib2	Translation termination 2 b4293 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4293_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4293_aa + 1 b4293_mRNA_2 + 1 gdp + 3 h + 1 leuZ_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tl_term_b4293_5_rib1	Translation termination 1 b4293 5 ribosome(s), (RF1_mono)	5 RF1_mono + 5 RF3_mono.GDP + 5 Rrf_mono + 1 rib_70_elo2_b4293_5_cplx <==> 1 tl_term_b4293_5_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tl_term_b4293_5_rib2	Translation termination 2 b4293 5 ribosome(s), (RF1_mono)	5 gtp + 10 h2o + 1 tl_term_b4293_5_rib_cplx --> 5 EF-G.GDP + 5 EF-Tu.GDP + 5 RF1_mono_inact + 5 RF3_mono.GDP_inact + 5 Rrf_mono_inact + 5 b4293_aa + 1 b4293_mRNA_2 + 5 gdp + 15 h + 5 leuZ_tRNA + 15 pi + 5 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tl_term_b4371_10_rib1	Translation termination 1 b4371 10 ribosome(s), (RF1_mono)	10 RF1_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b4371_10_cplx <==> 1 tl_term_b4371_10_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_term_b4371_10_rib2	Translation termination 2 b4371 10 ribosome(s), (RF1_mono)	10 gtp + 20 h2o + 1 tl_term_b4371_10_rib_cplx --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF1_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b4371_aa + 1 b4371_mRNA_2 + 10 gdp + 10 gly1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_term_b4371_10_rib_RF2_1	Translation termination 1 b4371 10 ribosome(s), RF2_mono	10 RF2_mono + 10 RF3_mono.GDP + 10 Rrf_mono + 1 rib_70_elo2_b4371_10_cplx <==> 1 tl_term_b4371_10_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957

tl_term_b4371_10_rib_RF2_2	Translation termination 2 b4371 10 ribosome(s), RF2	10 gtp + 20 h2o + 1 tl_term_b4371_10_rib_cplx2 --> 10 EF-G.GDP + 10 EF-Tu.GDP + 10 RF2_mono_inact + 10 RF3_mono.GDP_inact + 10 Rrf_mono_inact + 10 b4371_aa + 1 b4371_mRNA_2 + 10 gdp + 10 gly1_tRNA + 30 h + 30 pi + 10 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_term_b4371_1_rib1	Translation termination 1 b4371 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4371_1_cplx <==> 1 tl_term_b4371_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_term_b4371_1_rib2	Translation termination 2 b4371 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4371_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4371_aa + 1 b4371_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_term_b4371_1_rib_RF2_1	Translation termination 1 b4371 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4371_1_cplx <==> 1 tl_term_b4371_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_term_b4371_1_rib_RF2_2	Translation termination 2 b4371 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4371_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4371_aa + 1 b4371_mRNA_2 + 1 gdp + 1 gly1_tRNA + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_term_b4371_20_rib1	Translation termination 1 b4371 20 ribosome(s), (RF1_mono)	20 RF1_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b4371_20_cplx <==> 1 tl_term_b4371_20_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_term_b4371_20_rib2	Translation termination 2 b4371 20 ribosome(s), (RF1_mono)	20 gtp + 40 h2o + 1 tl_term_b4371_20_rib_cplx --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF1_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 b4371_aa + 1 b4371_mRNA_2 + 20 gdp + 20 gly1_tRNA + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_term_b4371_20_rib_RF2_1	Translation termination 1 b4371 20 ribosome(s), RF2_mono	20 RF2_mono + 20 RF3_mono.GDP + 20 Rrf_mono + 1 rib_70_elo2_b4371_20_cplx <==> 1 tl_term_b4371_20_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_term_b4371_20_rib_RF2_2	Translation termination 2 b4371 20 ribosome(s), RF2	20 gtp + 40 h2o + 1 tl_term_b4371_20_rib_cplx2 --> 20 EF-G.GDP + 20 EF-Tu.GDP + 20 RF2_mono_inact + 20 RF3_mono.GDP_inact + 20 Rrf_mono_inact + 20 b4371_aa + 1 b4371_mRNA_2 + 20 gdp + 20 gly1_tRNA + 60 h + 60 pi + 20 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	1.22E+02	1.22E+02	0	2.12E+02	211.8979	0	4.96E+00	4.957
tl_term_b4372_1_rib1	Translation termination 1 b4372 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4372_1_cplx <==> 1 tl_term_b4372_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429
tl_term_b4372_1_rib2	Translation termination 2 b4372 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4372_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 asp1_tRNA + 1 b4372_aa + 1 b4372_mRNA_2 + 1 gdp + 3 h + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429
tl_term_b4372_4_rib1	Translation termination 1 b4372 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b4372_4_cplx <==> 1 tl_term_b4372_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429
tl_term_b4372_4_rib2	Translation termination 2 b4372 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b4372_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 asp1_tRNA + 4 b4372_aa + 1 b4372_mRNA_2 + 4 gdp + 12 h + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429
tl_term_b4372_8_rib1	Translation termination 1 b4372 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b4372_8_cplx <==> 1 tl_term_b4372_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429
tl_term_b4372_8_rib2	Translation termination 2 b4372 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b4372_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 asp1_tRNA + 8 b4372_aa + 1 b4372_mRNA_2 + 8 gdp + 24 h + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.64E+01	8.64E+01	0	1.46E+02	145.6937	0	8.94E+00	8.9429
tl_term_b4373_1_rib1	Translation termination 1 b4373 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4373_1_cplx <==> 1 tl_term_b4373_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_term_b4373_1_rib2	Translation termination 2 b4373 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4373_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4373_aa + 1 b4373_mRNA_2 + 1 gdp + 3 h + 1 met1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_term_b4373_1_rib_RF2_1	Translation termination 1 b4373 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4373_1_cplx <==> 1 tl_term_b4373_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_term_b4373_1_rib_RF2_2	Translation termination 2 b4373 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4373_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4373_aa + 1 b4373_mRNA_2 + 1 gdp + 3 h + 1 met1_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_term_b4373_4_rib1	Translation termination 1 b4373 4 ribosome(s), (RF1_mono)	4 RF1_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b4373_4_cplx <==> 1 tl_term_b4373_4_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_term_b4373_4_rib2	Translation termination 2 b4373 4 ribosome(s), (RF1_mono)	4 gtp + 8 h2o + 1 tl_term_b4373_4_rib_cplx --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF1_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b4373_aa + 1 b4373_mRNA_2 + 4 gdp + 12 h + 4 met1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_term_b4373_4_rib_RF2_1	Translation termination 1 b4373 4 ribosome(s), RF2_mono	4 RF2_mono + 4 RF3_mono.GDP + 4 Rrf_mono + 1 rib_70_elo2_b4373_4_cplx <==> 1 tl_term_b4373_4_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_term_b4373_4_rib_RF2_2	Translation termination 2 b4373 4 ribosome(s), RF2	4 gtp + 8 h2o + 1 tl_term_b4373_4_rib_cplx2 --> 4 EF-G.GDP + 4 EF-Tu.GDP + 4 RF2_mono_inact + 4 RF3_mono.GDP_inact + 4 Rrf_mono_inact + 4 b4373_aa + 1 b4373_mRNA_2 + 4 gdp + 12 h + 4 met1_tRNA + 12 pi + 4 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_term_b4373_8_rib1	Translation termination 1 b4373 8 ribosome(s), (RF1_mono)	8 RF1_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b4373_8_cplx <==> 1 tl_term_b4373_8_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_term_b4373_8_rib2	Translation termination 2 b4373 8 ribosome(s), (RF1_mono)	8 gtp + 16 h2o + 1 tl_term_b4373_8_rib_cplx --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF1_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b4373_aa + 1 b4373_mRNA_2 + 8 gdp + 24 h + 8 met1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_term_b4373_8_rib_RF2_1	Translation termination 1 b4373 8 ribosome(s), RF2_mono	8 RF2_mono + 8 RF3_mono.GDP + 8 Rrf_mono + 1 rib_70_elo2_b4373_8_cplx <==> 1 tl_term_b4373_8_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_term_b4373_8_rib_RF2_2	Translation termination 2 b4373 8 ribosome(s), RF2	8 gtp + 16 h2o + 1 tl_term_b4373_8_rib_cplx2 --> 8 EF-G.GDP + 8 EF-Tu.GDP + 8 RF2_mono_inact + 8 RF3_mono.GDP_inact + 8 Rrf_mono_inact + 8 b4373_aa + 1 b4373_mRNA_2 + 8 gdp + 24 h + 8 met1_tRNA + 24 pi + 8 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.70E+01	8.70E+01	0	1.46E+02	146.2937	0	9.54E+00	9.5429
tl_term_b4374_13_rib1	Translation termination 1 b4374 13 ribosome(s), (RF1_mono)	13 RF1_mono + 13 RF3_mono.GDP + 13 Rrf_mono + 1 rib_70_elo2_b4374_13_cplx <==> 1 tl_term_b4374_13_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929
tl_term_b4374_13_rib2	Translation termination 2 b4374 13 ribosome(s), (RF1_mono)	13 gtp + 26 h2o + 1 tl_term_b4374_13_rib_cplx --> 13 EF-G.GDP + 13 EF-Tu.GDP + 13 RF1_mono_inact + 13 RF3_mono.GDP_inact + 13 Rrf_mono_inact + 13 b4374_aa + 1 b4374_mRNA_2 + 13 gdp + 39 h + 13 hisR_tRNA + 39 pi + 13 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929
tl_term_b4374_1_rib1	Translation termination 1 b4374 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4374_1_cplx <==> 1 tl_term_b4374_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929
tl_term_b4374_1_rib2	Translation termination 2 b4374 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4374_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4374_aa + 1 b4374_mRNA_2 + 1 gdp + 3 h + 1 hisR_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929

tl_term_b4374_6_rib1	Translation termination 1 b4374 6 ribosome(s), (RF1_mono)	6 RF1_mono + 6 RF3_mono.GDP + 6 Rrf_mono + 1 rib_70_elo2_b4374_6_cplx <==> 1 tl_term_b4374_6_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929
tl_term_b4374_6_rib2	Translation termination 2 b4374 6 ribosome(s), (RF1_mono)	6 gtp + 12 h2o + 1 tl_term_b4374_6_rib_cplx --> 6 EF-G.GDP + 6 EF-Tu.GDP + 6 RF1_mono_inact + 6 RF3_mono.GDP_inact + 6 Rrf_mono_inact + 6 b4374_aa + 1 b4374_mRNA_2 + 6 gdp + 18 h + 6 hisR_tRNA + 18 pi + 6 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.33E+01	8.33E+01	0	1.43E+02	142.6437	0	5.89E+00	5.8929
tl_term_b4375_15_rib1	Translation termination 1 b4375 15 ribosome(s), (RF1_mono)	15 RF1_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b4375_15_cplx <==> 1 tl_term_b4375_15_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_term_b4375_15_rib2	Translation termination 2 b4375 15 ribosome(s), (RF1_mono)	15 gtp + 30 h2o + 1 tl_term_b4375_15_rib_cplx --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF1_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b4375_aa + 1 b4375_mRNA_2 + 15 gdp + 45 h + 15 hisR_tRNA + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_term_b4375_15_rib_RF2_1	Translation termination 1 b4375 15 ribosome(s), RF2_mono	15 RF2_mono + 15 RF3_mono.GDP + 15 Rrf_mono + 1 rib_70_elo2_b4375_15_cplx <==> 1 tl_term_b4375_15_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_term_b4375_15_rib_RF2_2	Translation termination 2 b4375 15 ribosome(s), RF2	15 gtp + 30 h2o + 1 tl_term_b4375_15_rib_cplx2 --> 15 EF-G.GDP + 15 EF-Tu.GDP + 15 RF2_mono_inact + 15 RF3_mono.GDP_inact + 15 Rrf_mono_inact + 15 b4375_aa + 1 b4375_mRNA_2 + 15 gdp + 45 h + 15 hisR_tRNA + 45 pi + 15 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_term_b4375_1_rib1	Translation termination 1 b4375 1 ribosome(s), (RF1_mono)	1 RF1_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4375_1_cplx <==> 1 tl_term_b4375_1_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_term_b4375_1_rib2	Translation termination 2 b4375 1 ribosome(s), (RF1_mono)	1 gtp + 2 h2o + 1 tl_term_b4375_1_rib_cplx --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF1_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4375_aa + 1 b4375_mRNA_2 + 1 gdp + 3 h + 1 hisR_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_term_b4375_1_rib_RF2_1	Translation termination 1 b4375 1 ribosome(s), RF2_mono	1 RF2_mono + 1 RF3_mono.GDP + 1 Rrf_mono + 1 rib_70_elo2_b4375_1_cplx <==> 1 tl_term_b4375_1_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_term_b4375_1_rib_RF2_2	Translation termination 2 b4375 1 ribosome(s), RF2	1 gtp + 2 h2o + 1 tl_term_b4375_1_rib_cplx2 --> 1 EF-G.GDP + 1 EF-Tu.GDP + 1 RF2_mono_inact + 1 RF3_mono.GDP_inact + 1 Rrf_mono_inact + 1 b4375_aa + 1 b4375_mRNA_2 + 1 gdp + 3 h + 1 hisR_tRNA + 3 pi + 1 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_term_b4375_31_rib1	Translation termination 1 b4375 31 ribosome(s), (RF1_mono)	31 RF1_mono + 31 RF3_mono.GDP + 31 Rrf_mono + 1 rib_70_elo2_b4375_31_cplx <==> 1 tl_term_b4375_31_rib_cplx	reversible	Translation	-1.00E+09	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_term_b4375_31_rib2	Translation termination 2 b4375 31 ribosome(s), (RF1_mono)	31 gtp + 62 h2o + 1 tl_term_b4375_31_rib_cplx --> 31 EF-G.GDP + 31 EF-Tu.GDP + 31 RF1_mono_inact + 31 RF3_mono.GDP_inact + 31 Rrf_mono_inact + 31 b4375_aa + 1 b4375_mRNA_2 + 31 gdp + 93 h + 31 hisR_tRNA + 93 pi + 31 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_term_b4375_31_rib_RF2_1	Translation termination 1 b4375 31 ribosome(s), RF2_mono	31 RF2_mono + 31 RF3_mono.GDP + 31 Rrf_mono + 1 rib_70_elo2_b4375_31_cplx <==> 1 tl_term_b4375_31_rib_cplx2	reversible	Translation	-1.00E+09	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
tl_term_b4375_31_rib_RF2_2	Translation termination 2 b4375 31 ribosome(s), RF2	31 gtp + 62 h2o + 1 tl_term_b4375_31_rib_cplx2 --> 31 EF-G.GDP + 31 EF-Tu.GDP + 31 RF2_mono_inact + 31 RF3_mono.GDP_inact + 31 Rrf_mono_inact + 31 b4375_aa + 1 b4375_mRNA_2 + 31 gdp + 93 h + 31 hisR_tRNA + 93 pi + 31 rib_70	irreversible	Translation	0.00E+00	1.00E+09	0	8.03E+01	8.03E+01	0	1.40E+02	139.8166	0	2.95E+00	2.948
transGroES_FORM	formation of trans GroES	1 GroS_hepta --> 1 transGroES_hepta	irreversible	Protein complex formation	0.00E+00	1.00E+09	0	4.23E+02	4.23E+02	0	7.14E+02	714.4714	0	4.37E+01	43.73
trdoxt	transport of trdox	1 trdox <==> 1 trdox[e]	reversible	Transport	-1.00E+09	1.00E+09	-5.49E+03	1.86E+03	7.34E+03	-9.34E+03	1.09E+03	10432.265	-5.89E+02	5.27E+02	1116.229
trdrdt	transport of trdrd	1 trdrd <==> 1 trdrd[e]	reversible	Transport	-1.00E+09	1.00E+09	-1.86E+03	5.49E+03	7.34E+03	-1.09E+03	9.34E+03	10432.265	-5.27E+02	5.89E+02	1116.229
trpT_tRNA_CHARGa	charging trpT_tRNA	1 Trp_RS_2trp_2amp + 2 trpT_tRNA --> 1 Trp_RS_dim_inact + 2 amp + 2 trpT_tRNA_trp	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.69E+04	2.69E+04	0	2.74E+04	27384.14	0	2.63E+04	26259.02
trpT_tRNA_CHARGb	charging trpT_tRNA	1 Trp_RS_trp_amp + 1 trpT_tRNA --> 1 Trp_RS_dim_inact + 1 amp + 1 trpT_tRNA_trp	irreversible	tRNA charging	0.00E+00	1.00E+09	0	5.38E+04	5.38E+04	0	5.48E+04	54768.28	0	5.25E+04	52518.04
tscr_elo_TU-8389_ini	Formation complex for elongation of T 8389	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU-8389_cplx <==> 1 transcr_elo_TU-8389_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.81E+02	5.81E+02	0	1.03E+03	1025.084	0	6.81E+00	6.81
tscr_elo_TU-8390_ini	Formation complex for elongation of T 8390	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU-8390_cplx <==> 1 transcr_elo_TU-8390_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.81E+02	5.81E+02	0	1.03E+03	1025.084	0	6.81E+00	6.81
tscr_elo_TU-8392_ini_rho_dep	Formation complex for elongation of T 8392 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU-8392_cplx <==> 1 transcr_elo_TU-8392_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.54E+01	3.54E+01	0	6.24E+01	62.43587	0	1.42E-01	0.142
tscr_elo_TU-8397_ini_rho_dep	Formation complex for elongation of T 8397 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU-8397_cplx <==> 1 transcr_elo_TU-8397_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.07E+02	3.07E+02	0	5.42E+02	542.1115	0	2.45E-01	0.245
tscr_elo_TU-8398_ini_rho_dep	Formation complex for elongation of T 8398 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU-8398_cplx <==> 1 transcr_elo_TU-8398_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.04E+01	3.04E+01	0	5.37E+01	53.74604	0	2.07E-01	0.207
tscr_elo_TU-8407_ini_rho_dep	Formation complex for elongation of T 8407 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU-8407_cplx <==> 1 transcr_elo_TU-8407_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.60E+01	3.60E+01	0	6.36E+01	63.56211	0	1.89E-01	0.189
tscr_elo_TU0-1181_ini_stab	Formation complex for elongation of TU0-1181 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-1181_cplx <==> 1 transcr_elo_TU0-1181_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
tscr_elo_TU0-1182_ini_stab	Formation complex for elongation of TU0-1182 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-1182_cplx <==> 1 transcr_elo_TU0-1182_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
tscr_elo_TU0-1183_ini_stab	Formation complex for elongation of TU0-1183 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-1183_cplx <==> 1 transcr_elo_TU0-1183_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
tscr_elo_TU0-1184_ini_stab	Formation complex for elongation of TU0-1184 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-1184_cplx <==> 1 transcr_elo_TU0-1184_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
tscr_elo_TU0-1186_ini_stab	Formation complex for elongation of TU0-1186 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-1186_cplx <==> 1 transcr_elo_TU0-1186_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6

tscr_elo_TU0-1187_ini_stab	Formation complex for elongation of TU0-1187 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-1187_cplx <==> 1 transcr_elo_TU0-1187_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
tscr_elo_TU0-1188_ini_stab	Formation complex for elongation of TU0-1188 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-1188_cplx <==> 1 transcr_elo_TU0-1188_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
tscr_elo_TU0-1189_ini_stab	Formation complex for elongation of TU0-1189 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-1189_cplx <==> 1 transcr_elo_TU0-1189_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
tscr_elo_TU0-1190_ini_stab	Formation complex for elongation of TU0-1190 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-1190_cplx <==> 1 transcr_elo_TU0-1190_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
tscr_elo_TU0-1191_ini_stab	Formation complex for elongation of TU0-1191 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-1191_cplx <==> 1 transcr_elo_TU0-1191_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
tscr_elo_TU0-1192_ini_stab	Formation complex for elongation of TU0-1192 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-1192_cplx <==> 1 transcr_elo_TU0-1192_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
tscr_elo_TU0-12803_ini_rho_dep	Formation complex for elongation of TU0-12803 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-12803_cplx <==> 1 transcr_elo_TU0-12803_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	6.04E+01	60.36359	0	1.86E-01	0.186
tscr_elo_TU0-12827_ini_rho_dep	Formation complex for elongation of TU0-12827 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-12827_cplx <==> 1 transcr_elo_TU0-12827_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207
tscr_elo_TU0-12830_ini_rho_dep	Formation complex for elongation of TU0-12830 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-12830_cplx <==> 1 transcr_elo_TU0-12830_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.46E+02	2.46E+02	0	4.34E+02	433.6892	0	3.99E-01	0.399
tscr_elo_TU0-12833_ini_rho_dep	Formation complex for elongation of TU0-12833 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-12833_cplx <==> 1 transcr_elo_TU0-12833_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.48E+01	9.48E+01	0	1.67E+02	167.2985	0	1.66E-01	0.166
tscr_elo_TU0-12921_ini_rho_dep	Formation complex for elongation of TU0-12921 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-12921_cplx <==> 1 transcr_elo_TU0-12921_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
tscr_elo_TU0-12928_ini_rho_dep	Formation complex for elongation of TU0-12928 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-12928_cplx <==> 1 transcr_elo_TU0-12928_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	3.08E-01	0.308
tscr_elo_TU0-13010_ini_rho_dep	Formation complex for elongation of TU0-13010 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13010_cplx <==> 1 transcr_elo_TU0-13010_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
tscr_elo_TU0-13018_ini_rho_dep	Formation complex for elongation of TU0-13018 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13018_cplx <==> 1 transcr_elo_TU0-13018_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.54E+01	8.54E+01	0	1.51E+02	150.7476	0	1.92E-01	0.192
tscr_elo_TU0-13020_ini_rho_dep	Formation complex for elongation of TU0-13020 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13020_cplx <==> 1 transcr_elo_TU0-13020_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.55E+01	7.55E+01	0	1.33E+02	133.2851	0	4.14E-01	0.414
tscr_elo_TU0-13034_ini_stab	Formation complex for elongation of TU0-13034 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-13034_cplx <==> 1 transcr_elo_TU0-13034_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
tscr_elo_TU0-13035_ini_stab	Formation complex for elongation of TU0-13035 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-13035_cplx <==> 1 transcr_elo_TU0-13035_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
tscr_elo_TU0-13036_ini_stab	Formation complex for elongation of TU0-13036 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-13036_cplx <==> 1 transcr_elo_TU0-13036_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
tscr_elo_TU0-13072_ini_rho_dep	Formation complex for elongation of TU0-13072 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13072_cplx <==> 1 transcr_elo_TU0-13072_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.59E+01	7.59E+01	0	1.34E+02	133.9183	0	1.04E-01	0.104
tscr_elo_TU0-13080_ini_rho_dep	Formation complex for elongation of TU0-13080 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13080_cplx <==> 1 transcr_elo_TU0-13080_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.98E+01	9.98E+01	0	1.76E+02	176.1862	0	8.29E-01	0.829
tscr_elo_TU0-13093_ini_rho_dep	Formation complex for elongation of TU0-13093 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13093_cplx <==> 1 transcr_elo_TU0-13093_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.10E+01	9.10E+01	0	1.61E+02	160.6256	0	6.34E-01	0.634
tscr_elo_TU0-13104_ini_rho_dep	Formation complex for elongation of TU0-13104 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13104_cplx <==> 1 transcr_elo_TU0-13104_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.99E+02	4.99E+02	0	8.81E+02	880.9312	0	1.54E-01	0.154
tscr_elo_TU0-13134_ini_rho_dep	Formation complex for elongation of TU0-13134 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13134_cplx <==> 1 transcr_elo_TU0-13134_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.51E+02	1.51E+02	0	2.66E+02	265.9415	0	2.07E-01	0.207
tscr_elo_TU0-13139_ini_rho_dep	Formation complex for elongation of TU0-13139 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13139_cplx <==> 1 transcr_elo_TU0-13139_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207

tscr_elo_TU0-13145_ini_rho_dep	Formation complex for elongation of TU0-13145 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13145_cplx <==> 1 transcr_elo_TU0-13145_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	2.00E+02	199.9276	0	1.28E-01	0.128
tscr_elo_TU0-13195_ini_rho_dep	Formation complex for elongation of TU0-13195 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13195_cplx <==> 1 transcr_elo_TU0-13195_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.56E+02	1.56E+02	0	2.75E+02	275.0224	0	2.45E-01	0.245
tscr_elo_TU0-13225_ini_rho_dep	Formation complex for elongation of TU0-13225 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13225_cplx <==> 1 transcr_elo_TU0-13225_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.53E+02	1.53E+02	0	2.70E+02	269.7588	0	1.89E-01	0.189
tscr_elo_TU0-13421_ini_rho_dep	Formation complex for elongation of TU0-13421 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13421_cplx <==> 1 transcr_elo_TU0-13421_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.62E+02	1.62E+02	0	2.86E+02	286.1908	0	7.98E-02	0.0798
tscr_elo_TU0-13443_ini_rho_dep	Formation complex for elongation of TU0-13443 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13443_cplx <==> 1 transcr_elo_TU0-13443_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158
tscr_elo_TU0-13444_ini_rho_dep	Formation complex for elongation of TU0-13444 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13444_cplx <==> 1 transcr_elo_TU0-13444_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.32E+01	7.32E+01	0	1.29E+02	129.311	0	3.26E-01	0.326
tscr_elo_TU0-13519_ini_rho_dep	Formation complex for elongation of TU0-13519 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13519_cplx <==> 1 transcr_elo_TU0-13519_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.98E+01	5.98E+01	0	1.06E+02	105.5798	0	5.13E-01	0.513
tscr_elo_TU0-13534_ini_rho_dep	Formation complex for elongation of TU0-13534 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13534_cplx <==> 1 transcr_elo_TU0-13534_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	1.83E-01	0.183
tscr_elo_TU0-13555_ini_rho_dep	Formation complex for elongation of TU0-13555 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13555_cplx <==> 1 transcr_elo_TU0-13555_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.78E+02	1.78E+02	0	3.15E+02	314.9698	0	1.86E-01	0.186
tscr_elo_TU0-13557_ini_rho_dep	Formation complex for elongation of TU0-13557 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono J + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13557_cplx <==> 1 transcr_elo_TU0-13557_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	3.50E-01	0.35
tscr_elo_TU0-13573_ini_rho_dep	Formation complex for elongation of TU0-13573 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13573_cplx <==> 1 transcr_elo_TU0-13573_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.37E+02	1.37E+02	0	2.42E+02	241.9725	0	1.71E-01	0.171
tscr_elo_TU0-13593_ini_rho_dep	Formation complex for elongation of TU0-13593 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13593_cplx <==> 1 transcr_elo_TU0-13593_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
tscr_elo_TU0-13667_ini_rho_dep	Formation complex for elongation of TU0-13667 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13667_cplx <==> 1 transcr_elo_TU0-13667_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	1.31E-01	0.131
tscr_elo_TU0-13675_ini_rho_dep	Formation complex for elongation of TU0-13675 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13675_cplx <==> 1 transcr_elo_TU0-13675_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
tscr_elo_TU0-13704_ini_stab	Formation complex for elongation of TU0-13704 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-13704_cplx <==> 1 transcr_elo_TU0-13704_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
tscr_elo_TU0-13717_ini_rho_dep	Formation complex for elongation of TU0-13717 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13717_cplx <==> 1 transcr_elo_TU0-13717_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.01E+01	5.01E+01	0	8.85E+01	88.508	0	5.39E-01	0.539
tscr_elo_TU0-13734_ini_rho_dep	Formation complex for elongation of TU0-13734 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13734_cplx <==> 1 transcr_elo_TU0-13734_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.31E+01	4.31E+01	0	7.52E+01	75.1818	0	4.14E-01	0.414
tscr_elo_TU0-13735_ini_rho_dep	Formation complex for elongation of TU0-13735 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13735_cplx <==> 1 transcr_elo_TU0-13735_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.95E+01	9.95E+01	0	1.76E+02	175.6374	0	9.45E-02	0.0945
tscr_elo_TU0-13736_ini_rho_dep	Formation complex for elongation of TU0-13736 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13736_cplx <==> 1 transcr_elo_TU0-13736_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
tscr_elo_TU0-13738_ini_rho_dep	Formation complex for elongation of TU0-13738 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13738_cplx <==> 1 transcr_elo_TU0-13738_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.54E+02	1.54E+02	0	2.71E+02	271.0557	0	1.04E-01	0.104
tscr_elo_TU0-13805_ini_rho_dep	Formation complex for elongation of TU0-13805 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13805_cplx <==> 1 transcr_elo_TU0-13805_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
tscr_elo_TU0-13809_ini_rho_dep	Formation complex for elongation of TU0-13809 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13809_cplx <==> 1 transcr_elo_TU0-13809_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.38E+02	1.38E+02	0	2.44E+02	244.0675	0	1.52E-01	0.152
tscr_elo_TU0-13915_ini_rho_dep	Formation complex for elongation of TU0-13915 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13915_cplx <==> 1 transcr_elo_TU0-13915_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
tscr_elo_TU0-13931_ini_rho_dep	Formation complex for elongation of TU0-13931 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-13931_cplx <==> 1 transcr_elo_TU0-13931_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.90E+02	2.90E+02	0	5.13E+02	512.5418	0	9.45E-02	0.0945
tscr_elo_TU0-14007_ini_stab	Formation complex for elongation of TU0-14007 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-14007_cplx <==> 1 transcr_elo_TU0-14007_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
tscr_elo_TU0-14021_ini_rho_dep	Formation complex for elongation of TU0-14021 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-14021_cplx <==> 1 transcr_elo_TU0-14021_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.73E+01	8.73E+01	0	1.54E+02	154.0426	0	2.63E-01	0.263
tscr_elo_TU0-14029_ini_rho_dep	Formation complex for elongation of TU0-14029 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-14029_cplx <==> 1 transcr_elo_TU0-14029_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.48E+01	84.78135	0	2.07E-01	0.207

tscr_elo_TU0-14037_ini_rho_dep	Formation complex for elongation of TU0-14037 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-14037_cplx <==> 1 transcr_elo_TU0-14037_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.34E+01	9.34E+01	0	1.59E+02	159.0788	0	3.26E-01	0.326
tscr_elo_TU0-14038_ini_rho_dep	Formation complex for elongation of TU0-14038 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-14038_cplx <==> 1 transcr_elo_TU0-14038_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
tscr_elo_TU0-14070_ini_rho_dep	Formation complex for elongation of TU0-14070 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-14070_cplx <==> 1 transcr_elo_TU0-14070_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
tscr_elo_TU0-14100_ini_rho_dep	Formation complex for elongation of TU0-14100 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-14100_cplx <==> 1 transcr_elo_TU0-14100_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	1.84E+02	183.6469	0	1.51E+00	1.51
tscr_elo_TU0-14118_ini_rho_dep	Formation complex for elongation of TU0-14118 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-14118_cplx <==> 1 transcr_elo_TU0-14118_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.32E+02	1.32E+02	0	2.33E+02	232.9735	0	1.80E-01	0.18
tscr_elo_TU0-14151_ini_rho_dep	Formation complex for elongation of TU0-14151 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-14151_cplx <==> 1 transcr_elo_TU0-14151_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.40E+02	2.40E+02	0	4.24E+02	423.9067	0	1.42E-01	0.142
tscr_elo_TU0-14215_ini_rho_dep	Formation complex for elongation of TU0-14215 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-14215_cplx <==> 1 transcr_elo_TU0-14215_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.17E+02	1.17E+02	0	2.07E+02	207.2779	0	3.37E-01	0.337
tscr_elo_TU0-14216_ini_rho_dep	Formation complex for elongation of TU0-14216 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-14216_cplx <==> 1 transcr_elo_TU0-14216_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
tscr_elo_TU0-14217_ini_rho_dep	Formation complex for elongation of TU0-14217 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-14217_cplx <==> 1 transcr_elo_TU0-14217_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.77E+01	7.77E+01	0	1.37E+02	137.1766	0	3.08E-01	0.308
tscr_elo_TU0-14252_ini_rho_dep	Formation complex for elongation of TU0-14252 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-14252_cplx <==> 1 transcr_elo_TU0-14252_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	3.08E-01	0.308
tscr_elo_TU0-1881_ini_rho_dep	Formation complex for elongation of TU0-1881 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-1881_cplx <==> 1 transcr_elo_TU0-1881_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
tscr_elo_TU0-1_ini_rho_dep	Formation complex for elongation of TU0-1 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-1_cplx <==> 1 transcr_elo_TU0-1_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
tscr_elo_TU0-2081_ini_rho_dep	Formation complex for elongation of TU0-2081 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-2081_cplx <==> 1 transcr_elo_TU0-2081_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
tscr_elo_TU0-2082_ini_rho_dep	Formation complex for elongation of TU0-2082 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-2082_cplx <==> 1 transcr_elo_TU0-2082_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
tscr_elo_TU0-2101_ini_rho_dep	Formation complex for elongation of TU0-2101 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-2101_cplx <==> 1 transcr_elo_TU0-2101_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.24E+01	5.24E+01	0	9.26E+01	92.57733	0	2.07E-01	0.207
tscr_elo_TU0-2121_ini_rho_dep	Formation complex for elongation of TU0-2121 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-2121_cplx <==> 1 transcr_elo_TU0-2121_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.07E-01	0.207
tscr_elo_TU0-3304_ini_rho_dep	Formation complex for elongation of TU0-3304 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-3304_cplx <==> 1 transcr_elo_TU0-3304_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.73E+02	2.73E+02	0	4.82E+02	481.8769	0	6.22E-01	0.622
tscr_elo_TU0-3305_ini_rho_dep	Formation complex for elongation of TU0-3305 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-3305_cplx <==> 1 transcr_elo_TU0-3305_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.73E+02	2.73E+02	0	4.82E+02	481.8769	0	6.22E-01	0.622
tscr_elo_TU0-3364_ini_stab	Formation complex for elongation of TU0-3364 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-3364_cplx <==> 1 transcr_elo_TU0-3364_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
tscr_elo_TU0-3561_ini_stab	Formation complex for elongation of TU0-3561 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-3561_cplx <==> 1 transcr_elo_TU0-3561_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
tscr_elo_TU0-3901_ini_rho_dep	Formation complex for elongation of TU0-3901 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-3901_cplx <==> 1 transcr_elo_TU0-3901_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	3.10E+00	3.1
tscr_elo_TU0-4925_ini_rho_dep	Formation complex for elongation of TU0-4925 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-4925_cplx <==> 1 transcr_elo_TU0-4925_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	1.84E+02	183.6469	0	1.51E+00	1.51
tscr_elo_TU0-5003_ini_rho_dep	Formation complex for elongation of TU0-5003 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-5003_cplx <==> 1 transcr_elo_TU0-5003_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.32E+02	5.32E+02	0	9.40E+02	939.6599	0	6.22E-01	0.622
tscr_elo_TU0-5121_ini_rho_dep	Formation complex for elongation of TU0-5121 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-5121_cplx <==> 1 transcr_elo_TU0-5121_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.82E+01	3.82E+01	0	6.74E+01	67.35913	0	7.58E-01	0.758
tscr_elo_TU0-5182_ini_rho_dep	Formation complex for elongation of TU0-5182 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-5182_cplx <==> 1 transcr_elo_TU0-5182_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.50E+01	3.50E+01	0	6.18E+01	61.81973	0	9.45E-02	0.0945
tscr_elo_TU0-5183_ini_rho_dep	Formation complex for elongation of TU0-5183 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-5183_cplx <==> 1 transcr_elo_TU0-5183_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945
tscr_elo_TU0-5186_ini_rho_dep	Formation complex for elongation of TU0-5186 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-5186_cplx <==> 1 transcr_elo_TU0-5186_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.90E+01	5.90E+01	0	1.04E+02	104.2137	0	1.68E-01	0.168
tscr_elo_TU0-5201_ini_rho_dep	Formation complex for elongation of TU0-5201 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-5201_cplx <==> 1 transcr_elo_TU0-5201_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.90E+01	3.90E+01	0	6.89E+01	68.92371	0	1.68E-01	0.168

tscr_elo_TU0-5221_ini_rho_dep	Formation complex for elongation of TU0-5221 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-5221_cplx <==> 1 transcr_elo_TU0-5221_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.43E+01	6.43E+01	0	1.13E+02	113.4398	0	1.68E-01	0.168
tscr_elo_TU0-5522_ini_rho_dep	Formation complex for elongation of TU0-5522 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-5522_cplx <==> 1 transcr_elo_TU0-5522_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.30E+01	6.30E+01	0	7.71E+01	77.08692	0	1.04E-01	0.104
tscr_elo_TU0-5543_ini_rho_dep	Formation complex for elongation of TU0-5543 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-5543_cplx <==> 1 transcr_elo_TU0-5543_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	1.92E-01	0.192
tscr_elo_TU0-5601_ini	Formation complex for elongation of TU0-5601	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-5601_cplx <==> 1 transcr_elo_TU0-5601_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	1.04E-01	0.104
tscr_elo_TU0-6223_ini	Formation complex for elongation of TU0-6223	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-6223_cplx <==> 1 transcr_elo_TU0-6223_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
tscr_elo_TU0-6405_ini	Formation complex for elongation of TU0-6405	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-6405_cplx <==> 1 transcr_elo_TU0-6405_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.21E+01	4.21E+01	0	7.43E+01	74.28142	0	4.90E-01	0.49
tscr_elo_TU0-6409_ini_rho_dep	Formation complex for elongation of TU0-6409 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-6409_cplx <==> 1 transcr_elo_TU0-6409_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
tscr_elo_TU0-6423_ini_rho_dep	Formation complex for elongation of TU0-6423 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-6423_cplx <==> 1 transcr_elo_TU0-6423_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.93E+02	2.93E+02	0	4.97E+02	496.5524	0	1.15E-01	0.115
tscr_elo_TU0-6441_ini_rho_dep	Formation complex for elongation of TU0-6441 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-6441_cplx <==> 1 transcr_elo_TU0-6441_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.01E+01	5.01E+01	0	8.85E+01	88.508	0	5.39E-01	0.539
tscr_elo_TU0-6504_ini	Formation complex for elongation of TU0-6504	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-6504_cplx <==> 1 transcr_elo_TU0-6504_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.55E+01	7.55E+01	0	1.33E+02	133.2851	0	4.14E-01	0.414
tscr_elo_TU0-6506_ini_rho_dep	Formation complex for elongation of TU0-6506 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-6506_cplx <==> 1 transcr_elo_TU0-6506_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	5.99E-01	0.599
tscr_elo_TU0-6512_ini	Formation complex for elongation of TU0-6512	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-6512_cplx <==> 1 transcr_elo_TU0-6512_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
tscr_elo_TU0-6550_ini_rho_dep	Formation complex for elongation of TU0-6550 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-6550_cplx <==> 1 transcr_elo_TU0-6550_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
tscr_elo_TU0-6551_ini_rho_dep	Formation complex for elongation of TU0-6551 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-6551_cplx <==> 1 transcr_elo_TU0-6551_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
tscr_elo_TU0-6562_ini	Formation complex for elongation of TU0-6562	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-6562_cplx <==> 1 transcr_elo_TU0-6562_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.21E+01	7.21E+01	0	1.27E+02	127.2677	0	2.07E-01	0.207
tscr_elo_TU0-6626_ini	Formation complex for elongation of TU0-6626	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-6626_cplx <==> 1 transcr_elo_TU0-6626_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
tscr_elo_TU0-6654_ini	Formation complex for elongation of TU0-6654	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-6654_cplx <==> 1 transcr_elo_TU0-6654_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.71E+01	5.71E+01	0	1.00E+02	100.0923	0	6.46E-01	0.646
tscr_elo_TU0-6657_ini	Formation complex for elongation of TU0-6657	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-6657_cplx <==> 1 transcr_elo_TU0-6657_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	1.65E-01	0.165
tscr_elo_TU0-6658_ini	Formation complex for elongation of TU0-6658	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-6658_cplx <==> 1 transcr_elo_TU0-6658_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_elo_TU0-6660_ini	Formation complex for elongation of TU0-6660	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-6660_cplx <==> 1 transcr_elo_TU0-6660_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.77E+01	4.77E+01	0	7.03E+01	70.31333	0	4.81E-01	0.481
tscr_elo_TU0-6687_ini	Formation complex for elongation of TU0-6687	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-6687_cplx <==> 1 transcr_elo_TU0-6687_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.21E+01	4.21E+01	0	7.43E+01	74.28142	0	4.90E-01	0.49
tscr_elo_TU0-6941_ini_rho_dep	Formation complex for elongation of TU0-6941 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-6941_cplx <==> 1 transcr_elo_TU0-6941_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
tscr_elo_TU0-7002_ini	Formation complex for elongation of TU0-7002	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-7002_cplx <==> 1 transcr_elo_TU0-7002_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.49E+01	1.49E+01	0	2.63E+01	26.30872	0	1.89E-01	0.189
tscr_elo_TU0-7141_ini_rho_dep	Formation complex for elongation of TU0-7141 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-7141_cplx <==> 1 transcr_elo_TU0-7141_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.03E+02	1.03E+02	0	8.29E+01	82.88	0	1.89E-01	0.189
tscr_elo_TU0-7281_ini_rho_dep	Formation complex for elongation of TU0-7281 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-7281_cplx <==> 1 transcr_elo_TU0-7281_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
tscr_elo_TU0-7842_ini	Formation complex for elongation of TU0-7842	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-7842_cplx <==> 1 transcr_elo_TU0-7842_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	2.92E+00	2.92
tscr_elo_TU0-7844_ini	Formation complex for elongation of TU0-7844	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-7844_cplx <==> 1 transcr_elo_TU0-7844_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	2.92E+00	2.92
tscr_elo_TU0-8084_ini	Formation complex for elongation of TU0-8084	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-8084_cplx <==> 1 transcr_elo_TU0-8084_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.08E+01	7.08E+01	0	1.25E+02	125.0102	0	1.04E-01	0.104
tscr_elo_TU0-8281_ini_rho_dep	Formation complex for elongation of TU0-8281 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-8281_cplx <==> 1 transcr_elo_TU0-8281_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.28E+02	2.28E+02	0	4.03E+02	402.7114	0	3.11E-01	0.311
tscr_elo_TU0-8464_ini_rho_dep	Formation complex for elongation of TU0-8464 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-8464_cplx <==> 1 transcr_elo_TU0-8464_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.61E+02	3.61E+02	0	3.32E+02	331.52	0	1.70E+00	1.7
tscr_elo_TU0-8474_ini	Formation complex for elongation of TU0-8474	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-8474_cplx <==> 1 transcr_elo_TU0-8474_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	4.81E-01	0.481
tscr_elo_TU0-8476_ini_stab	Formation complex for elongation of TU0-8476 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU0-8476_cplx <==> 1 transcr_elo_TU0-8476_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11

tscr_elo_TU0-8477_ini_rho_dep	Formation complex for elongation of TU0-8477 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-8477_cplx <==> 1 transcr_elo_TU0-8477_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.76E-01	0.276
tscr_elo_TU0-8502_ini_rho_dep	Formation complex for elongation of TU0-8502 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-8502_cplx <==> 1 transcr_elo_TU0-8502_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118
tscr_elo_TU0-8505_ini_rho_dep	Formation complex for elongation of TU0-8505 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-8505_cplx <==> 1 transcr_elo_TU0-8505_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.54E+02	1.54E+02	0	2.71E+02	271.0557	0	1.71E-01	0.171
tscr_elo_TU0-8506_ini_rho_dep	Formation complex for elongation of TU0-8506 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-8506_cplx <==> 1 transcr_elo_TU0-8506_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	3.72E-01	0.372
tscr_elo_TU0-8510_ini_rho_dep	Formation complex for elongation of TU0-8510 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-8510_cplx <==> 1 transcr_elo_TU0-8510_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.77E+02	4.77E+02	0	8.41E+02	841.4865	0	2.00E-01	0.2
tscr_elo_TU0-8529_ini_rho_dep	Formation complex for elongation of TU0-8529 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-8529_cplx <==> 1 transcr_elo_TU0-8529_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.92E+01	8.92E+01	0	1.57E+02	157.4849	0	1.86E-01	0.186
tscr_elo_TU0-8823_ini_rho_dep	Formation complex for elongation of TU0-8823 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-8823_cplx <==> 1 transcr_elo_TU0-8823_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.65E+01	6.65E+01	0	1.17E+02	117.4575	0	1.17E-01	0.117
tscr_elo_TU0-8855_ini	Formation complex for elongation of TU0-8855	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU0-8855_cplx <==> 1 transcr_elo_TU0-8855_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.02E+02	1.02E+02	0	8.29E+01	82.88	0	9.88E-02	0.0988
tscr_elo_TU0-8862_ini_rho_dep	Formation complex for elongation of TU0-8862 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-8862_cplx <==> 1 transcr_elo_TU0-8862_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.30E+02	1.30E+02	0	2.30E+02	230.1208	0	1.89E-01	0.189
tscr_elo_TU0-8864_ini_rho_dep	Formation complex for elongation of TU0-8864 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-8864_cplx <==> 1 transcr_elo_TU0-8864_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.46E+01	4.46E+01	0	7.87E+01	78.74245	0	1.04E-01	0.104
tscr_elo_TU0-8865_ini_rho_dep	Formation complex for elongation of TU0-8865 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU0-8865_cplx <==> 1 transcr_elo_TU0-8865_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.09E+01	6.09E+01	0	1.08E+02	107.5946	0	2.24E-01	0.224
tscr_elo_TU00021_ini_rho_dep	Formation complex for elongation of TU00021 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00021_cplx <==> 1 transcr_elo_TU00021_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	1.28E-01	0.128
tscr_elo_TU00083_ini	Formation complex for elongation of TU00083	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00083_cplx <==> 1 transcr_elo_TU00083_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_elo_TU00084_ini	Formation complex for elongation of TU00084	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00084_cplx <==> 1 transcr_elo_TU00084_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_elo_TU00221_ini_rho_dep	Formation complex for elongation of TU00221 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00221_cplx <==> 1 transcr_elo_TU00221_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.39E+01	9.39E+01	0	1.66E+02	165.8223	0	2.07E-01	0.207
tscr_elo_TU00236_ini_rho_dep	Formation complex for elongation of TU00236 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00236_cplx <==> 1 transcr_elo_TU00236_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
tscr_elo_TU00258_ini_rho_dep	Formation complex for elongation of TU00258 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00258_cplx <==> 1 transcr_elo_TU00258_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.07E+01	9.07E+01	0	1.60E+02	160.1693	0	2.84E-01	0.284
tscr_elo_TU00260_ini_rho_dep	Formation complex for elongation of TU00260 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00260_cplx <==> 1 transcr_elo_TU00260_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
tscr_elo_TU00277_ini	Formation complex for elongation of TU00277	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00277_cplx <==> 1 transcr_elo_TU00277_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
tscr_elo_TU00281_ini	Formation complex for elongation of TU00281	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00281_cplx <==> 1 transcr_elo_TU00281_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.02E+01	4.02E+01	0	7.10E+01	71.00705	0	2.07E-01	0.207
tscr_elo_TU00291_ini_rho_dep	Formation complex for elongation of TU00291 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00291_cplx <==> 1 transcr_elo_TU00291_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
tscr_elo_TU00304_ini_rho_dep	Formation complex for elongation of TU00304 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00304_cplx <==> 1 transcr_elo_TU00304_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
tscr_elo_TU00309_ini_rho_dep	Formation complex for elongation of TU00309 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00309_cplx <==> 1 transcr_elo_TU00309_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
tscr_elo_TU00311_ini_rho_dep	Formation complex for elongation of TU00311 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00311_cplx <==> 1 transcr_elo_TU00311_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
tscr_elo_TU00314_ini	Formation complex for elongation of TU00314	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00314_cplx <==> 1 transcr_elo_TU00314_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196
tscr_elo_TU00324_ini_rho_dep	Formation complex for elongation of TU00324 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00324_cplx <==> 1 transcr_elo_TU00324_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.70E+01	4.70E+01	0	8.30E+01	83.03328	0	2.91E-01	0.291
tscr_elo_TU00332_ini_rho_dep	Formation complex for elongation of TU00332 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00332_cplx <==> 1 transcr_elo_TU00332_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.19E+01	8.19E+01	0	1.45E+02	144.5631	0	1.35E-01	0.135
tscr_elo_TU00333_ini_rho_dep	Formation complex for elongation of TU00333 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00333_cplx <==> 1 transcr_elo_TU00333_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.14E+01	2.14E+01	0	3.79E+01	37.86407	0	1.71E-01	0.171
tscr_elo_TU00335_ini	Formation complex for elongation of TU00335	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00335_cplx <==> 1 transcr_elo_TU00335_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.32E+01	1.32E+01	0	2.33E+01	23.27811	0	1.89E-01	0.189
tscr_elo_TU00336_ini	Formation complex for elongation of TU00336	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00336_cplx <==> 1 transcr_elo_TU00336_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.48E+01	9.48E+01	0	8.29E+01	82.88	0	4.68E-01	0.468

tscr_elo_TU00337_ini_rho_dep	Formation complex for elongation of TU00337 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00337_cplx <==> 1 transcr_elo_TU00337_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
tscr_elo_TU00338_ini_rho_dep	Formation complex for elongation of TU00338 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00338_cplx <==> 1 transcr_elo_TU00338_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.01E+02	1.01E+02	0	8.29E+01	82.88	0	5.39E-01	0.539
tscr_elo_TU00339_ini	Formation complex for elongation of TU00339	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00339_cplx <==> 1 transcr_elo_TU00339_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.41E-01	0.641
tscr_elo_TU00340_ini_rho_dep	Formation complex for elongation of TU00340 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00340_cplx <==> 1 transcr_elo_TU00340_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
tscr_elo_TU00342_ini_rho_dep	Formation complex for elongation of TU00342 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00342_cplx <==> 1 transcr_elo_TU00342_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
tscr_elo_TU00343_ini_rho_dep	Formation complex for elongation of TU00343 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00343_cplx <==> 1 transcr_elo_TU00343_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.36E+01	8.36E+01	0	1.48E+02	147.5906	0	2.07E-01	0.207
tscr_elo_TU00344_ini_rho_dep	Formation complex for elongation of TU00344 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00344_cplx <==> 1 transcr_elo_TU00344_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
tscr_elo_TU00345_ini_rho_dep	Formation complex for elongation of TU00345 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00345_cplx <==> 1 transcr_elo_TU00345_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.50E+01	7.50E+01	0	8.09E+01	80.94127	0	5.18E-01	0.518
tscr_elo_TU00346_ini_rho_dep	Formation complex for elongation of TU00346 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00346_cplx <==> 1 transcr_elo_TU00346_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
tscr_elo_TU00347_ini	Formation complex for elongation of TU00347	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00347_cplx <==> 1 transcr_elo_TU00347_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
tscr_elo_TU00348_ini_rho_dep	Formation complex for elongation of TU00348 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00348_cplx <==> 1 transcr_elo_TU00348_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.93E+01	2.93E+01	0	5.17E+01	51.7244	0	5.67E-01	0.567
tscr_elo_TU00349_ini	Formation complex for elongation of TU00349	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00349_cplx <==> 1 transcr_elo_TU00349_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
tscr_elo_TU00351_ini_rho_dep	Formation complex for elongation of TU00351 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00351_cplx <==> 1 transcr_elo_TU00351_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
tscr_elo_TU00352_ini	Formation complex for elongation of TU00352	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00352_cplx <==> 1 transcr_elo_TU00352_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
tscr_elo_TU00354_ini_rho_dep	Formation complex for elongation of TU00354 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00354_cplx <==> 1 transcr_elo_TU00354_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	2.39E-01	0.239
tscr_elo_TU00355_ini_rho_dep	Formation complex for elongation of TU00355 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00355_cplx <==> 1 transcr_elo_TU00355_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.70E+01	3.70E+01	0	1.37E+01	13.7	0	1.86E-01	0.186
tscr_elo_TU00362_ini_rho_dep	Formation complex for elongation of TU00362 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00362_cplx <==> 1 transcr_elo_TU00362_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.75E+01	2.75E+01	0	4.85E+01	48.51944	0	1.68E-01	0.168
tscr_elo_TU00366_ini	Formation complex for elongation of TU00366	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00366_cplx <==> 1 transcr_elo_TU00366_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.35E+01	4.35E+01	0	6.79E+01	67.90817	0	1.65E-01	0.165
tscr_elo_TU00411_ini_rho_dep	Formation complex for elongation of TU00411 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00411_cplx <==> 1 transcr_elo_TU00411_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.64E+02	2.64E+02	0	4.66E+02	465.9471	0	2.87E-01	0.287
tscr_elo_TU00414_ini	Formation complex for elongation of TU00414	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00414_cplx <==> 1 transcr_elo_TU00414_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
tscr_elo_TU00415_ini	Formation complex for elongation of TU00415	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00415_cplx <==> 1 transcr_elo_TU00415_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
tscr_elo_TU00417_ini_rho_dep	Formation complex for elongation of TU00417 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00417_cplx <==> 1 transcr_elo_TU00417_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
tscr_elo_TU00418_ini_rho_dep	Formation complex for elongation of TU00418 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00418_cplx <==> 1 transcr_elo_TU00418_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
tscr_elo_TU00426_ini	Formation complex for elongation of TU00426	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00426_cplx <==> 1 transcr_elo_TU00426_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_elo_TU00427_ini	Formation complex for elongation of TU00427	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00427_cplx <==> 1 transcr_elo_TU00427_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_elo_TU00429_ini_rho_dep	Formation complex for elongation of TU00429 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00429_cplx <==> 1 transcr_elo_TU00429_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.39E+01	9.39E+01	0	1.66E+02	165.8223	0	2.07E-01	0.207
tscr_elo_TU00430_ini_rho_dep	Formation complex for elongation of TU00430 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00430_cplx <==> 1 transcr_elo_TU00430_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.19E+02	1.19E+02	0	2.10E+02	209.5896	0	9.79E-02	0.0979
tscr_elo_TU00434_ini	Formation complex for elongation of TU00434	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00434_cplx <==> 1 transcr_elo_TU00434_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
tscr_elo_TU00435_ini	Formation complex for elongation of TU00435	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00435_cplx <==> 1 transcr_elo_TU00435_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
tscr_elo_TU00436_ini	Formation complex for elongation of TU00436	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00436_cplx <==> 1 transcr_elo_TU00436_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
tscr_elo_TU00437_ini	Formation complex for elongation of TU00437	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00437_cplx <==> 1 transcr_elo_TU00437_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
tscr_elo_TU00438_ini	Formation complex for elongation of TU00438	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00438_cplx <==> 1 transcr_elo_TU00438_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399

tscr_elo_TU00440_ini_rho_dep	Formation complex for elongation of TU00440 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00440_cplx <==> 1 transcr_elo_TU00440_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
tscr_elo_TU00442_ini_rho_dep	Formation complex for elongation of TU00442 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00442_cplx <==> 1 transcr_elo_TU00442_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.42E+02	1.42E+02	0	2.51E+02	250.576	0	2.31E-01	0.231
tscr_elo_TU00460_ini_rho_dep	Formation complex for elongation of TU00460 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00460_cplx <==> 1 transcr_elo_TU00460_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tscr_elo_TU00471_ini	Formation complex for elongation of TU00471	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00471_cplx <==> 1 transcr_elo_TU00471_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
tscr_elo_TU00472_ini	Formation complex for elongation of TU00472	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU00472_cplx <==> 1 transcr_elo_TU00472_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	2.19E+00	2.19
tscr_elo_TU00487_ini_rho_dep	Formation complex for elongation of TU00487 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00487_cplx <==> 1 transcr_elo_TU00487_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
tscr_elo_TU00489_ini_stab	Formation complex for elongation of TU00489 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00489_cplx <==> 1 transcr_elo_TU00489_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
tscr_elo_TU00490_ini_stab	Formation complex for elongation of TU00490 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00490_cplx <==> 1 transcr_elo_TU00490_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
tscr_elo_TU00491_ini_stab	Formation complex for elongation of TU00491 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00491_cplx <==> 1 transcr_elo_TU00491_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
tscr_elo_TU00492_ini_stab	Formation complex for elongation of TU00492 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00492_cplx <==> 1 transcr_elo_TU00492_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
tscr_elo_TU00493_ini_stab	Formation complex for elongation of TU00493 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00493_cplx <==> 1 transcr_elo_TU00493_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
tscr_elo_TU00494_ini_stab	Formation complex for elongation of TU00494 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00494_cplx <==> 1 transcr_elo_TU00494_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
tscr_elo_TU00495_ini_stab	Formation complex for elongation of TU00495 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00495_cplx <==> 1 transcr_elo_TU00495_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
tscr_elo_TU00496_ini_stab	Formation complex for elongation of TU00496 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00496_cplx <==> 1 transcr_elo_TU00496_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
tscr_elo_TU00497_ini_stab	Formation complex for elongation of TU00497 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00497_cplx <==> 1 transcr_elo_TU00497_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
tscr_elo_TU00498_ini_stab	Formation complex for elongation of TU00498 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00498_cplx <==> 1 transcr_elo_TU00498_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
tscr_elo_TU00499_ini_stab	Formation complex for elongation of TU00499 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00499_cplx <==> 1 transcr_elo_TU00499_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
tscr_elo_TU00500_ini_stab	Formation complex for elongation of TU00500 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00500_cplx <==> 1 transcr_elo_TU00500_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
tscr_elo_TU00501_ini_stab	Formation complex for elongation of TU00501 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00501_cplx <==> 1 transcr_elo_TU00501_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
tscr_elo_TU00502_ini_stab	Formation complex for elongation of TU00502 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00502_cplx <==> 1 transcr_elo_TU00502_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
tscr_elo_TU00503_ini_stab	Formation complex for elongation of TU00503 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00503_cplx <==> 1 transcr_elo_TU00503_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9

tscr_elo_TU00504_ini_stab	Formation complex for elongation of TU00504 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00504_cplx <==> 1 transcr_elo_TU00504_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
tscr_elo_TU00505_ini_stab	Formation complex for elongation of TU00505 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00505_cplx <==> 1 transcr_elo_TU00505_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
tscr_elo_TU00506_ini_stab	Formation complex for elongation of TU00506 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00506_cplx <==> 1 transcr_elo_TU00506_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
tscr_elo_TU00507_ini_stab	Formation complex for elongation of TU00507 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00507_cplx <==> 1 transcr_elo_TU00507_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
tscr_elo_TU00508_ini_stab	Formation complex for elongation of TU00508 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00508_cplx <==> 1 transcr_elo_TU00508_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
tscr_elo_TU00509_ini_stab	Formation complex for elongation of TU00509 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00509_cplx <==> 1 transcr_elo_TU00509_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
tscr_elo_TU00510_ini_stab	Formation complex for elongation of TU00510 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00510_cplx <==> 1 transcr_elo_TU00510_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
tscr_elo_TU00511_ini_rho_dep	Formation complex for elongation of TU00511 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00511_cplx <==> 1 transcr_elo_TU00511_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
tscr_elo_TU00512_ini_stab	Formation complex for elongation of TU00512 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00512_cplx <==> 1 transcr_elo_TU00512_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
tscr_elo_TU00513_ini_stab	Formation complex for elongation of TU00513 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00513_cplx <==> 1 transcr_elo_TU00513_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
tscr_elo_TU00514_ini_stab	Formation complex for elongation of TU00514 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00514_cplx <==> 1 transcr_elo_TU00514_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
tscr_elo_TU00515_ini_stab	Formation complex for elongation of TU00515 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00515_cplx <==> 1 transcr_elo_TU00515_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
tscr_elo_TU00516_ini_stab	Formation complex for elongation of TU00516 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00516_cplx <==> 1 transcr_elo_TU00516_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
tscr_elo_TU00517_ini_rho_dep	Formation complex for elongation of TU00517 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU00517_cplx <==> 1 transcr_elo_TU00517_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
tscr_elo_TU00518_ini_stab	Formation complex for elongation of TU00518 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00518_cplx <==> 1 transcr_elo_TU00518_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11
tscr_elo_TU00519_ini_stab	Formation complex for elongation of TU00519 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00519_cplx <==> 1 transcr_elo_TU00519_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
tscr_elo_TU00520_ini_stab	Formation complex for elongation of TU00520 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00520_cplx <==> 1 transcr_elo_TU00520_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
tscr_elo_TU00521_ini_stab	Formation complex for elongation of TU00521 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU00521_cplx <==> 1 transcr_elo_TU00521_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
tscr_elo_TU221_ini	Formation complex for elongation of TU221	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU221_cplx <==> 1 transcr_elo_TU221_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_elo_TU281_ini_rho_dep	Formation complex for elongation of TU281 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU281_cplx <==> 1 transcr_elo_TU281_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
tscr_elo_TU341_ini	Formation complex for elongation of TU341	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU341_cplx <==> 1 transcr_elo_TU341_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146

tscr_elo_TU343_ini_stab	Formation complex for elongation of TU343 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU343_cplx <==> 1 transcr_elo_TU343_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
tscr_elo_TU361_ini_rho_dep	Formation complex for elongation of TU361 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU361_cplx <==> 1 transcr_elo_TU361_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.39E+01	5.39E+01	0	7.34E+01	73.37709	0	3.44E-01	0.344
tscr_elo_TU482_ini	Formation complex for elongation of TU482	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU482_cplx <==> 1 transcr_elo_TU482_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
tscr_elo_TU483_ini_rho_dep	Formation complex for elongation of TU483 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU483_cplx <==> 1 transcr_elo_TU483_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
tscr_elo_TU543_ini_stab	Formation complex for elongation of TU543 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_TU543_cplx <==> 1 transcr_elo_TU543_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.81E+02	2.81E+02	0	1.08E+01	10.8	0	1.08E+01	10.8
tscr_elo_TU564_ini_rho_dep	Formation complex for elongation of TU564 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU564_cplx <==> 1 transcr_elo_TU564_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
tscr_elo_TU565_ini_rho_dep	Formation complex for elongation of TU565 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU565_cplx <==> 1 transcr_elo_TU565_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
tscr_elo_TU582_ini	Formation complex for elongation of TU582	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU582_cplx <==> 1 transcr_elo_TU582_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	4.90E-01	0.49
tscr_elo_TU583_ini	Formation complex for elongation of TU583	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU583_cplx <==> 1 transcr_elo_TU583_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	4.90E-01	0.49
tscr_elo_TU601_ini_rho_dep	Formation complex for elongation of TU601 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU601_cplx <==> 1 transcr_elo_TU601_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
tscr_elo_TU602_ini_rho_dep	Formation complex for elongation of TU602 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU602_cplx <==> 1 transcr_elo_TU602_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
tscr_elo_TU682_ini_rho_dep	Formation complex for elongation of TU682 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU682_cplx <==> 1 transcr_elo_TU682_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
tscr_elo_TU743_ini_rho_dep	Formation complex for elongation of TU743 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU743_cplx <==> 1 transcr_elo_TU743_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
tscr_elo_TU801_ini_rho_dep	Formation complex for elongation of TU801 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU801_cplx <==> 1 transcr_elo_TU801_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
tscr_elo_TU802_ini_rho_dep	Formation complex for elongation of TU802 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU802_cplx <==> 1 transcr_elo_TU802_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
tscr_elo_TU870_ini	Formation complex for elongation of TU870	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 RpoZ_mono + 1 transcr_ini_TU870_cplx <==> 1 transcr_elo_TU870_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.15E+01	9.15E+01	0	1.62E+02	161.5461	0	1.96E-01	0.196
tscr_elo_TU871_ini_rho_dep	Formation complex for elongation of TU871 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU871_cplx <==> 1 transcr_elo_TU871_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	3.39E-02	0.0339
tscr_elo_TU872_ini_rho_dep	Formation complex for elongation of TU872 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU872_cplx <==> 1 transcr_elo_TU872_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
tscr_elo_TU873_ini_rho_dep	Formation complex for elongation of TU873 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU873_cplx <==> 1 transcr_elo_TU873_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
tscr_elo_TU874_ini_rho_dep	Formation complex for elongation of TU874 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU874_cplx <==> 1 transcr_elo_TU874_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.71E+01	2.71E+01	0	4.78E+01	47.81984	0	1.74E-01	0.174
tscr_elo_TU875_ini_rho_dep	Formation complex for elongation of TU875 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU875_cplx <==> 1 transcr_elo_TU875_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
tscr_elo_TU876_ini_rho_dep	Formation complex for elongation of TU876 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU876_cplx <==> 1 transcr_elo_TU876_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
tscr_elo_TU877_ini_rho_dep	Formation complex for elongation of TU877 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_TU877_cplx <==> 1 transcr_elo_TU877_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.36E+01	5.36E+01	0	9.46E+01	94.59664	0	1.89E-01	0.189
tscr_elo_b0144_ini_rho_dep	Formation complex for elongation of b0144 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_b0144_cplx <==> 1 transcr_elo_b0144_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.23E+02	1.23E+02	0	2.18E+02	217.6818	0	2.03E-01	0.203
tscr_elo_b0206_ini_stab	Formation complex for elongation of b0206 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_b0206_cplx <==> 1 transcr_elo_b0206_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
tscr_elo_b0503_ini_rho_dep	Formation complex for elongation of b0503 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_b0503_cplx <==> 1 transcr_elo_b0503_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.17E+02	1.17E+02	0	2.07E+02	206.5187	0	1.36E-01	0.136
tscr_elo_b1133_ini_rho_dep	Formation complex for elongation of b1133 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_b1133_cplx <==> 1 transcr_elo_b1133_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.99E+02	199.2212	0	2.07E-01	0.207
tscr_elo_b1211_ini_rho_dep	Formation complex for elongation of b1211 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_b1211_cplx <==> 1 transcr_elo_b1211_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.16E+02	1.16E+02	0	2.04E+02	204.2739	0	3.08E-01	0.308
tscr_elo_b1212_ini_rho_dep	Formation complex for elongation of b1212 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_b1212_cplx <==> 1 transcr_elo_b1212_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	2.57E+02	257.4411	0	2.07E-01	0.207
tscr_elo_b1804_ini_rho_dep	Formation complex for elongation of b1804 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_b1804_cplx <==> 1 transcr_elo_b1804_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.95E+02	195.0851	0	9.45E-02	0.0945
tscr_elo_b2745_ini_rho_dep	Formation complex for elongation of b2745 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_b2745_cplx <==> 1 transcr_elo_b2745_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.34E+02	1.34E+02	0	2.37E+02	236.8891	0	2.29E-01	0.229
tscr_elo_b3289_ini_rho_dep	Formation complex for elongation of b3289 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_b3289_cplx <==> 1 transcr_elo_b3289_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.01E+02	1.01E+02	0	1.78E+02	177.8536	0	3.17E-01	0.317
tscr_elo_b3760_ini_stab	Formation complex for elongation of b3760 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_b3760_cplx <==> 1 transcr_elo_b3760_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
tscr_elo_b3761_ini_stab	Formation complex for elongation of b3761 (stable RNA)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusB_mono + 1 NusG_mono + 1 Rho_hexa + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 transcr_ini_b3761_cplx <==> 1 transcr_elo_b3761_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
tscr_elo_b4143_ini_rho_dep	Formation complex for elongation of b4143 (RHO DEPENDENT TERMINATION)	1 GreA_mono + 1 GreB_mono + 1 Mfd_mono + 1 NusA_mono + 1 NusG_mono + 1 Rho_hexa + 1 RpoZ_mono + 1 transcr_ini_b4143_cplx <==> 1 transcr_elo_b4143_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.11E+01	8.11E+01	0	1.43E+02	143.0954	0	3.12E-01	0.312

tscr_elo_term_TU-8389	Transcription elongation and termination of TU-8389	57 atp + 52 ctp + 47 gtp + 1 transcr_elo_TU-8389_cplx + 47 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU-8389_DNA_neu + 1 b0884_v1_mRNA + 1 hRNAP_inact + 203 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.81E+02	5.81E+02	0	1.03E+03	1025.084	0	6.81E+00	6.81
tscr_elo_term_TU-8390	Transcription elongation and termination of TU-8390	57 atp + 52 ctp + 47 gtp + 1 transcr_elo_TU-8390_cplx + 47 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU-8390_DNA_neu + 1 b0884_mRNA + 1 hRNAP_inact + 203 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.81E+02	5.81E+02	0	1.03E+03	1025.084	0	6.81E+00	6.81
tscr_elo_term_TU-8392_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU-8392 (dsbCp2, no_common_name_3124)	879 atp + 903 ctp + 1047 gtp + 3 h2o + 1 transcr_elo_TU-8392_cplx + 797 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU-8392_DNA_neu + 1 TU-8392_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3623 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.54E+01	3.54E+01	0	6.24E+01	62.43587	0	1.42E-01	0.142
tscr_elo_term_TU-8397_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU-8397	134 atp + 100 ctp + 124 gtp + 3 h2o + 1 transcr_elo_TU-8397_cplx + 106 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU-8397_DNA_neu + 3 adp + 1 b3181_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 461 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.07E+02	3.07E+02	0	5.42E+02	542.1115	0	2.45E-01	0.245
tscr_elo_term_TU-8398_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU-8398 (lptBp, no_common_name_3119)	1023 atp + 1046 ctp + 1043 gtp + 3 h2o + 1 transcr_elo_TU-8398_cplx + 901 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU-8398_DNA_neu + 1 TU-8398_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 4010 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.04E+01	3.04E+01	0	5.37E+01	53.74604	0	2.07E-01	0.207
tscr_elo_term_TU-8407_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU-8407	792 atp + 887 ctp + 883 gtp + 3 h2o + 1 transcr_elo_TU-8407_cplx + 611 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU-8407_DNA_neu + 3 adp + 1 b1084_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 3170 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.60E+01	3.60E+01	0	6.36E+01	63.56211	0	1.89E-01	0.189
tscr_elo_term_TU0-1181_stab	Transcription elongation and termination of TU0-1181 (stable RNA) (rrnAp1, no_common_name_3075)	1335 atp + 1129 ctp + 1565 gtp + 3 h2o + 1 transcr_elo_TU0-1181_cplx + 1064 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-1181_DNA_neu + 1 TU0-1181_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 5090 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
tscr_elo_term_TU0-1182_stab	Transcription elongation and termination of TU0-1182 (stable RNA) (rrsBp1, no_common_name_3074)	1330 atp + 1136 ctp + 1564 gtp + 3 h2o + 1 transcr_elo_TU0-1182_cplx + 1055 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-1182_DNA_neu + 1 TU0-1182_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 5082 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
tscr_elo_term_TU0-1183_stab	Transcription elongation and termination of TU0-1183 (stable RNA) (rrnCp1, no_common_name_3073)	1306 atp + 1120 ctp + 1541 gtp + 3 h2o + 1 transcr_elo_TU0-1183_cplx + 1032 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-1183_DNA_neu + 1 TU0-1183_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 4996 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
tscr_elo_term_TU0-1184_stab	Transcription elongation and termination of TU0-1184 (stable RNA) (rrnCp2, no_common_name_3072)	1306 atp + 1120 ctp + 1541 gtp + 3 h2o + 1 transcr_elo_TU0-1184_cplx + 1032 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-1184_DNA_neu + 1 TU0-1184_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 4996 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	0	0	0	0	0
tscr_elo_term_TU0-1186_stab	Transcription elongation and termination of TU0-1186 (stable RNA) (rrnEp, no_common_name_3071)	1303 atp + 1119 ctp + 1543 gtp + 3 h2o + 1 transcr_elo_TU0-1186_cplx + 1035 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-1186_DNA_neu + 1 TU0-1186_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 4997 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
tscr_elo_term_TU0-1187_stab	Transcription elongation and termination of TU0-1187 (stable RNA) (rrsGp1, no_common_name_3070)	1322 atp + 1137 ctp + 1561 gtp + 3 h2o + 1 transcr_elo_TU0-1187_cplx + 1056 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-1187_DNA_neu + 1 TU0-1187_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 5073 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
tscr_elo_term_TU0-1188_stab	Transcription elongation and termination of TU0-1188 (stable RNA) (rrsGp2, no_common_name_3069)	1322 atp + 1137 ctp + 1561 gtp + 3 h2o + 1 transcr_elo_TU0-1188_cplx + 1056 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-1188_DNA_neu + 1 TU0-1188_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 5073 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
tscr_elo_term_TU0-1189_stab	Transcription elongation and termination of TU0-1189 (stable RNA) (rrsHp1, no_common_name_3068)	1330 atp + 1132 ctp + 1566 gtp + 3 h2o + 1 transcr_elo_TU0-1189_cplx + 1064 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-1189_DNA_neu + 1 TU0-1189_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 5089 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54

tscr_elo_term_TU0-1190_stab	Transcription elongation and termination of TU0-1190 (stable RNA) (rrsHp2, no_common_name_3067)	1330 atp + 1132 ctp + 1566 gtp + 3 h2o + 1 transcr_elo_TU0-1190_cplx + 1064 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-1190_DNA_neu + 1 TU0-1190_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 5089 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
tscr_elo_term_TU0-1191_stab	Transcription elongation and termination of TU0-1191 (stable RNA) (rrnDp1, no_common_name_3066)	1384 atp + 1194 ctp + 1637 gtp + 3 h2o + 1 transcr_elo_TU0-1191_cplx + 1112 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-1191_DNA_neu + 1 TU0-1191_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 5324 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
tscr_elo_term_TU0-1192_stab	Transcription elongation and termination of TU0-1192 (stable RNA) (rrnDp2, no_common_name_3065)	1384 atp + 1194 ctp + 1637 gtp + 3 h2o + 1 transcr_elo_TU0-1192_cplx + 1112 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-1192_DNA_neu + 1 TU0-1192_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 5324 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	0	0	0	0	0
tscr_elo_term_TU0-12803_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-12803 (, no_common_name_3037)	842 atp + 930 ctp + 1023 gtp + 3 h2o + 1 transcr_elo_TU0-12803_cplx + 770 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-12803_DNA_neu + TU0-12803_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3562 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.42E+01	3.42E+01	0	6.04E+01	60.36359	0	1.86E-01	0.186
tscr_elo_term_TU0-12827_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-12827 (, no_common_name_3012)	1064 atp + 1156 ctp + 1155 gtp + 3 h2o + 1 transcr_elo_TU0-12827_cplx + 996 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-12827_DNA_neu + TU0-12827_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 4368 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207
tscr_elo_term_TU0-12830_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-12830	161 atp + 128 ctp + 150 gtp + 3 h2o + 1 transcr_elo_TU0-12830_cplx + 106 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-12830_DNA_neu + adp + 1 b0172_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 542 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.46E+02	2.46E+02	0	4.34E+02	433.6892	0	3.99E-01	0.399
tscr_elo_term_TU0-12833_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-12833	263 atp + 331 ctp + 415 gtp + 3 h2o + 1 transcr_elo_TU0-12833_cplx + 277 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-12833_DNA_neu + adp + 1 b0188_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1283 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.48E+01	9.48E+01	0	1.67E+02	167.2985	0	1.66E-01	0.166
tscr_elo_term_TU0-12921_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-12921 (, no_common_name_2917)	626 atp + 639 ctp + 727 gtp + 3 h2o + 1 transcr_elo_TU0-12921_cplx + 550 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-12921_DNA_neu + TU0-12921_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2539 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
tscr_elo_term_TU0-12928_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-12928	374 atp + 296 ctp + 363 gtp + 3 h2o + 1 transcr_elo_TU0-12928_cplx + 253 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-12928_DNA_neu + adp + 1 b0436_v1_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1283 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	3.08E-01	0.308
tscr_elo_term_TU0-13010_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13010 (, no_common_name_2829)	1365 atp + 1392 ctp + 1481 gtp + 3 h2o + 1 transcr_elo_TU0-13010_cplx + 1237 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13010_DNA_neu + TU0-13010_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 5472 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146
tscr_elo_term_TU0-13018_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13018	340 atp + 369 ctp + 397 gtp + 3 h2o + 1 transcr_elo_TU0-13018_cplx + 306 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13018_DNA_neu + adp + 1 b0661_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1409 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	8.54E+01	8.54E+01	0	1.51E+02	150.7476	0	1.92E-01	0.192
tscr_elo_term_TU0-13020_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13020	412 atp + 422 ctp + 444 gtp + 3 h2o + 1 transcr_elo_TU0-13020_cplx + 374 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13020_DNA_neu + adp + 1 b0680_v1_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1649 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	7.55E+01	7.55E+01	0	1.33E+02	133.2851	0	4.14E-01	0.414
tscr_elo_term_TU0-13034_stab	Transcription elongation and termination of TU0-13034 (stable RNA (, no_common_name_2805)	32 atp + 40 ctp + 38 gtp + 3 h2o + 1 transcr_elo_TU0-13034_cplx + 32 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-13034_DNA_neu + 1 TU0-13034_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 139 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
tscr_elo_term_TU0-13035_stab	Transcription elongation and termination of TU0-13035 (stable RNA (, no_common_name_2804)	18 atp + 15 ctp + 14 gtp + 3 h2o + 1 transcr_elo_TU0-13035_cplx + 16 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-13035_DNA_neu + 1 TU0-13035_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 60 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
tscr_elo_term_TU0-13036_stab	Transcription elongation and termination of TU0-13036 (stable RNA (, no_common_name_2803)	18 atp + 15 ctp + 14 gtp + 3 h2o + 1 transcr_elo_TU0-13036_cplx + 16 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-13036_DNA_neu + 1 TU0-13036_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 60 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
tscr_elo_term_TU0-13072_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13072 (, no_common_name_2767)	347 atp + 419 ctp + 463 gtp + 3 h2o + 1 transcr_elo_TU0-13072_cplx + 415 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13072_DNA_neu + TU0-13072_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1641 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	7.59E+01	7.59E+01	0	1.34E+02	133.9183	0	1.04E-01	0.104

tscr_elo_term_TU0-13080_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13080	322 atp + 314 ctp + 359 gtp + 3 h2o + 1 transcr_elo_TU0-13080_cplx + 285 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13080_DNA_neu + adp + 1 b0893_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1277 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.98E+01	9.98E+01	0	1.76E+02	176.1862	0	8.29E-01	0.829
tscr_elo_term_TU0-13093_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13093	320 atp + 348 ctp + 377 gtp + 3 h2o + 1 transcr_elo_TU0-13093_cplx + 343 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13093_DNA_neu + adp + 1 b0930_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1385 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.10E+01	9.10E+01	0	1.61E+02	160.6256	0	6.34E-01	0.634
tscr_elo_term_TU0-13104_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13104	97 atp + 61 ctp + 86 gtp + 3 h2o + 1 transcr_elo_TU0-13104_cplx + 73 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13104_DNA_neu + adp + 1 b0969_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 314 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.99E+02	4.99E+02	0	8.81E+02	880.9312	0	1.54E-01	0.154
tscr_elo_term_TU0-13134_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13134	237 atp + 209 ctp + 279 gtp + 3 h2o + 1 transcr_elo_TU0-13134_cplx + 222 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13134_DNA_neu + adp + 1 b1086_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 944 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.51E+02	1.51E+02	0	2.66E+02	265.9415	0	2.07E-01	0.207
tscr_elo_term_TU0-13139_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13139	804 atp + 901 ctp + 981 gtp + 3 h2o + 1 transcr_elo_TU0-13139_cplx + 748 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13139_DNA_neu + adp + 1 b1114_v2_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 3431 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
tscr_elo_term_TU0-13145_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13145 (, no_common_name_2694)	287 atp + 279 ctp + 286 gtp + 3 h2o + 1 transcr_elo_TU0-13145_cplx + 260 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13145_DNA_neu + TU0-13145_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1109 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	2.00E+02	199.9276	0	1.28E-01	0.128
tscr_elo_term_TU0-13195_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13195	197 atp + 202 ctp + 262 gtp + 3 h2o + 1 transcr_elo_TU0-13195_cplx + 202 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13195_DNA_neu + adp + 1 b1269_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 860 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.56E+02	1.56E+02	0	2.75E+02	275.0224	0	2.45E-01	0.245
tscr_elo_term_TU0-13225_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13225	252 atp + 206 ctp + 244 gtp + 3 h2o + 1 transcr_elo_TU0-13225_cplx + 221 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13225_DNA_neu + adp + 1 b1344_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 920 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.53E+02	1.53E+02	0	2.70E+02	269.7588	0	1.89E-01	0.189
tscr_elo_term_TU0-13421_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13421	196 atp + 193 ctp + 217 gtp + 3 h2o + 1 transcr_elo_TU0-13421_cplx + 191 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13421_DNA_neu + adp + 1 b1822_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 794 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.62E+02	1.62E+02	0	2.86E+02	286.1908	0	7.98E-02	0.0798
tscr_elo_term_TU0-13443_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13443 (, no_common_name_2396)	476 atp + 518 ctp + 573 gtp + 3 h2o + 1 transcr_elo_TU0-13443_cplx + 568 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13443_DNA_neu + TU0-13443_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2132 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158
tscr_elo_term_TU0-13444_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13444	444 atp + 433 ctp + 484 gtp + 3 h2o + 1 transcr_elo_TU0-13444_cplx + 360 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13444_DNA_neu + adp + 1 b1876_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1718 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	7.32E+01	7.32E+01	0	1.29E+02	129.311	0	3.26E-01	0.326
tscr_elo_term_TU0-13519_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13519	491 atp + 530 ctp + 541 gtp + 3 h2o + 1 transcr_elo_TU0-13519_cplx + 459 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13519_DNA_neu + adp + 1 b2114_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 2018 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.98E+01	5.98E+01	0	1.06E+02	105.5798	0	5.13E-01	0.513
tscr_elo_term_TU0-13534_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13534	222 atp + 212 ctp + 294 gtp + 3 h2o + 1 transcr_elo_TU0-13534_cplx + 207 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13534_DNA_neu + adp + 1 b2140_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 932 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	1.83E-01	0.183
tscr_elo_term_TU0-13555_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13555	159 atp + 177 ctp + 186 gtp + 3 h2o + 1 transcr_elo_TU0-13555_cplx + 161 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13555_DNA_neu + adp + 1 b2183_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 680 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.78E+02	1.78E+02	0	3.15E+02	314.9698	0	1.86E-01	0.186
tscr_elo_term_TU0-13557_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13557	83 atp + 69 ctp + 70 gtp + 3 h2o + 1 transcr_elo_TU0-13557_cplx + 50 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13557_DNA_neu + adp + 1 b2185_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 269 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	3.50E-01	0.35
tscr_elo_term_TU0-13573_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13573	225 atp + 233 ctp + 231 gtp + 3 h2o + 1 transcr_elo_TU0-13573_cplx + 216 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13573_DNA_neu + adp + 1 b2268_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 902 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.37E+02	1.37E+02	0	2.42E+02	241.9725	0	1.71E-01	0.171
tscr_elo_term_TU0-13593_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13593 (, no_common_name_2246)	1033 atp + 1181 ctp + 1259 gtp + 3 h2o + 1 transcr_elo_TU0-13593_cplx + 1064 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13593_DNA_neu + TU0-13593_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 4534 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
tscr_elo_term_TU0-13667_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13667 (, no_common_name_2172)	254 atp + 280 ctp + 344 gtp + 3 h2o + 1 transcr_elo_TU0-13667_cplx + 306 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13667_DNA_neu + TU0-13667_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1181 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	1.31E-01	0.131
tscr_elo_term_TU0-13675_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13675 (, no_common_name_2164)	387 atp + 424 ctp + 486 gtp + 3 h2o + 1 transcr_elo_TU0-13675_cplx + 399 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13675_DNA_neu + TU0-13675_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1693 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196

tscr_elo_term_TU0-13704_stab	Transcription elongation and termination of TU0-13704 (stable RNA (, no_common_name_2135)	17 atp + 16 ctp + 18 gtp + 3 h2o + 1 transcr_elo_TU0-13704_cplx + 12 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-13704_DNA_neu + 1 TU0-13704_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 60 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
tscr_elo_term_TU0-13717_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13717	624 atp + 633 ctp + 769 gtp + 3 h2o + 1 transcr_elo_TU0-13717_cplx + 592 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13717_DNA_neu + adp + 1 b2697_v1_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 2615 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.01E+01	5.01E+01	0	8.85E+01	88.508	0	5.39E-01	0.539
tscr_elo_term_TU0-13734_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13734 (, no_common_name_2105)	771 atp + 738 ctp + 800 gtp + 3 h2o + 1 transcr_elo_TU0-13734_cplx + 702 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13734_DNA_neu + TU0-13734_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3008 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.31E+01	4.31E+01	0	7.52E+01	75.1818	0	4.14E-01	0.414
tscr_elo_term_TU0-13735_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13735	330 atp + 317 ctp + 346 gtp + 3 h2o + 1 transcr_elo_TU0-13735_cplx + 296 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13735_DNA_neu + adp + 1 b2785_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1286 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.95E+01	9.95E+01	0	1.76E+02	175.6374	0	9.45E-02	0.0945
tscr_elo_term_TU0-13736_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13736 (, no_common_name_2103)	373 atp + 380 ctp + 454 gtp + 3 h2o + 1 transcr_elo_TU0-13736_cplx + 359 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13736_DNA_neu + TU0-13736_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1563 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
tscr_elo_term_TU0-13738_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13738	219 atp + 205 ctp + 205 gtp + 3 h2o + 1 transcr_elo_TU0-13738_cplx + 207 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13738_DNA_neu + adp + 1 b2794_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 833 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.71E+02	271.0557	0	1.04E-01	0.104
tscr_elo_term_TU0-13805_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13805 (, no_common_name_2034)	420 atp + 421 ctp + 471 gtp + 3 h2o + 1 transcr_elo_TU0-13805_cplx + 370 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13805_DNA_neu + TU0-13805_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1679 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
tscr_elo_term_TU0-13809_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13809 (, no_common_name_2030)	257 atp + 228 ctp + 304 gtp + 3 h2o + 1 transcr_elo_TU0-13809_cplx + 244 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13809_DNA_neu + TU0-13809_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1030 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.38E+02	1.38E+02	0	2.44E+02	244.0675	0	1.52E-01	0.152
tscr_elo_term_TU0-13915_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13915 (, no_common_name_1924)	411 atp + 426 ctp + 452 gtp + 3 h2o + 1 transcr_elo_TU0-13915_cplx + 461 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13915_DNA_neu + TU0-13915_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1747 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
tscr_elo_term_TU0-13931_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-13931	131 atp + 105 ctp + 124 gtp + 3 h2o + 1 transcr_elo_TU0-13931_cplx + 104 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-13931_DNA_neu + adp + 1 b3406_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 461 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.90E+02	2.90E+02	0	5.13E+02	512.5418	0	9.45E-02	0.0945
tscr_elo_term_TU0-14007_stab	Transcription elongation and termination of TU0-14007 (stable RNA (, no_common_name_1831)	14 atp + 25 ctp + 27 gtp + 3 h2o + 1 transcr_elo_TU0-14007_cplx + 16 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-14007_DNA_neu + 1 TU0-14007_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 79 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
tscr_elo_term_TU0-14021_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-14021	304 atp + 364 ctp + 399 gtp + 3 h2o + 1 transcr_elo_TU0-14021_cplx + 285 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-14021_DNA_neu + adp + 1 b3706_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1349 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	8.73E+01	8.73E+01	0	1.54E+02	154.0426	0	2.63E-01	0.263
tscr_elo_term_TU0-14029_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-14029 (, no_common_name_1808)	620 atp + 662 ctp + 695 gtp + 3 h2o + 1 transcr_elo_TU0-14029_cplx + 587 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-14029_DNA_neu + TU0-14029_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2561 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.48E+01	84.78135	0	2.07E-01	0.207
tscr_elo_term_TU0-14037_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-14037	301 atp + 326 ctp + 334 gtp + 3 h2o + 1 transcr_elo_TU0-14037_cplx + 292 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-14037_DNA_neu + adp + 1 b3780_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1250 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.34E+01	9.34E+01	0	1.59E+02	159.0788	0	3.26E-01	0.326
tscr_elo_term_TU0-14038_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-14038 (, no_common_name_1799)	376 atp + 366 ctp + 347 gtp + 3 h2o + 1 transcr_elo_TU0-14038_cplx + 344 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-14038_DNA_neu + TU0-14038_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1430 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
tscr_elo_term_TU0-14070_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-14070 (, no_common_name_1767)	656 atp + 718 ctp + 806 gtp + 3 h2o + 1 transcr_elo_TU0-14070_cplx + 693 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-14070_DNA_neu + TU0-14070_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2870 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
tscr_elo_term_TU0-14100_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-14100	285 atp + 306 ctp + 323 gtp + 3 h2o + 1 transcr_elo_TU0-14100_cplx + 258 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-14100_DNA_neu + adp + 1 b3980_v1_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1169 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.84E+02	183.6469	0	1.51E+00	1.51
tscr_elo_term_TU0-14118_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-14118	243 atp + 239 ctp + 311 gtp + 3 h2o + 1 transcr_elo_TU0-14118_cplx + 232 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-14118_DNA_neu + adp + 1 b4049_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1022 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.32E+02	1.32E+02	0	2.33E+02	232.9735	0	1.80E-01	0.18

tscr_elo_term_TU0-14151_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-14151	130 atp + 131 ctp + 158 gtp + 3 h2o + 1 transcr_elo_TU0-14151_cplx + 114 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-14151_DNA_neu + adp + 1 b4162_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 530 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.40E+02	2.40E+02	0	4.24E+02	423.9067	0	1.42E-01	0.142
tscr_elo_term_TU0-14215_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-14215	216 atp + 267 ctp + 301 gtp + 3 h2o + 1 transcr_elo_TU0-14215_cplx + 235 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-14215_DNA_neu + adp + 1 b4371_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1016 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.17E+02	1.17E+02	0	2.07E+02	207.2779	0	3.37E-01	0.337
tscr_elo_term_TU0-14216_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-14216 (, no_common_name_1620)	354 atp + 407 ctp + 411 gtp + 3 h2o + 1 transcr_elo_TU0-14216_cplx + 336 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-14216_DNA_neu + TU0-14216_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1505 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
tscr_elo_term_TU0-14217_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-14217	385 atp + 407 ctp + 445 gtp + 3 h2o + 1 transcr_elo_TU0-14217_cplx + 340 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-14217_DNA_neu + adp + 1 b4375_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1574 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	7.77E+01	7.77E+01	0	1.37E+02	137.1766	0	3.08E-01	0.308
tscr_elo_term_TU0-14252_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-14252	374 atp + 296 ctp + 363 gtp + 3 h2o + 1 transcr_elo_TU0-14252_cplx + 253 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-14252_DNA_neu + adp + 1 b0436_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1283 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	3.08E-01	0.308
tscr_elo_term_TU0-1881_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-1881 (iscRp, no_common_name_1548)	647 atp + 629 ctp + 703 gtp + 3 h2o + 1 transcr_elo_TU0-1881_cplx + 577 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-1881_DNA_neu + 1 TU0-1881_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2553 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
tscr_elo_term_TU0-1_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-1 (rpmFp, no_common_name_3093)	951 atp + 973 ctp + 1173 gtp + 3 h2o + 1 transcr_elo_TU0-1_cplx + 928 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-1_DNA_neu + 1 TU0-1_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 4022 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
tscr_elo_term_TU0-2081_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-2081	804 atp + 901 ctp + 981 gtp + 3 h2o + 1 transcr_elo_TU0-2081_cplx + 748 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-2081_DNA_neu + 3 adp + 1 b1114_v1_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 3431 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
tscr_elo_term_TU0-2082_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-2082	804 atp + 901 ctp + 981 gtp + 3 h2o + 1 transcr_elo_TU0-2082_cplx + 748 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-2082_DNA_neu + 3 adp + 1 b1114_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 3431 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
tscr_elo_term_TU0-2101_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-2101 (ybjCp, no_common_name_1535)	563 atp + 605 ctp + 711 gtp + 3 h2o + 1 transcr_elo_TU0-2101_cplx + 629 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-2101_DNA_neu + 1 TU0-2101_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2505 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.24E+01	5.24E+01	0	9.26E+01	92.57733	0	2.07E-01	0.207
tscr_elo_term_TU0-2121_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-2121 (rimKp, no_common_name_1534)	317 atp + 346 ctp + 424 gtp + 3 h2o + 1 transcr_elo_TU0-2121_cplx + 367 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-2121_DNA_neu + 1 TU0-2121_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1451 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.07E-01	0.207
tscr_elo_term_TU0-3304_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-3304	164 atp + 115 ctp + 143 gtp + 3 h2o + 1 transcr_elo_TU0-3304_cplx + 108 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-3304_DNA_neu + 3 adp + 1 b1718_v2_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 527 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.73E+02	2.73E+02	0	4.82E+02	481.8769	0	6.22E-01	0.622
tscr_elo_term_TU0-3305_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-3305	164 atp + 115 ctp + 143 gtp + 3 h2o + 1 transcr_elo_TU0-3305_cplx + 108 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-3305_DNA_neu + 3 adp + 1 b1718_v1_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 527 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.73E+02	2.73E+02	0	4.82E+02	481.8769	0	6.22E-01	0.622
tscr_elo_term_TU0-3364_stab	Transcription elongation and termination of TU0-3364 (stable RNA) (rrsBp2, no_common_name_1483)	1330 atp + 1136 ctp + 1564 gtp + 3 h2o + 1 transcr_elo_TU0-3364_cplx + 1055 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-3364_DNA_neu + 1 TU0-3364_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 5082 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	0	0	0	0	0
tscr_elo_term_TU0-3561_stab	Transcription elongation and termination of TU0-3561 (stable RNA) (asnWp, no_common_name_1467)	17 atp + 14 ctp + 19 gtp + 3 h2o + 1 transcr_elo_TU0-3561_cplx + 13 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-3561_DNA_neu + 1 TU0-3561_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 60 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
tscr_elo_term_TU0-3901_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-3901	49 atp + 30 ctp + 24 gtp + 3 h2o + 1 transcr_elo_TU0-3901_cplx + 22 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-3901_DNA_neu + 3 adp + 1 b1480_v1_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 122 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	3.10E+00	3.1
tscr_elo_term_TU0-4925_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-4925	285 atp + 306 ctp + 323 gtp + 3 h2o + 1 transcr_elo_TU0-4925_cplx + 258 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-4925_DNA_neu + 3 adp + 1 b3980_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1169 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	1.84E+02	183.6469	0	1.51E+00	1.51
tscr_elo_term_TU0-5003_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-5003	77 atp + 57 ctp + 81 gtp + 3 h2o + 1 transcr_elo_TU0-5003_cplx + 66 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-5003_DNA_neu + 3 adp + 1 b4142_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 278 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.32E+02	5.32E+02	0	9.40E+02	939.6599	0	6.22E-01	0.622

tscr_elo_term_TU0-5121_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-5121 (fusAp, no_common_name_1357)	856 atp + 832 ctp + 900 gtp + 3 h2o + 1 transcr_elo_TU0-5121_cplx + 769 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-5121_DNA_neu + 1 TU0-5121_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3354 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.82E+01	3.82E+01	0	6.74E+01	67.35913	0	7.58E-01	0.758
tscr_elo_term_TU0-5182_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-5182 (pdxBp, no_common_name_1354)	845 atp + 910 ctp + 1084 gtp + 3 h2o + 1 transcr_elo_TU0-5182_cplx + 918 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-5182_DNA_neu + 1 TU0-5182_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3754 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.50E+01	3.50E+01	0	6.18E+01	61.81973	0	9.45E-02	0.0945
tscr_elo_term_TU0-5183_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-5183 (usgp, no_common_name_1353)	582 atp + 625 ctp + 734 gtp + 3 h2o + 1 transcr_elo_TU0-5183_cplx + 614 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-5183_DNA_neu + 1 TU0-5183_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2552 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945
tscr_elo_term_TU0-5186_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-5186 (rsmAp, no_common_name_1351)	475 atp + 538 ctp + 561 gtp + 3 h2o + 1 transcr_elo_TU0-5186_cplx + 464 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-5186_DNA_neu + 1 TU0-5186_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2035 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.90E+01	5.90E+01	0	1.04E+02	104.2137	0	1.68E-01	0.168
tscr_elo_term_TU0-5201_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-5201 (pdxAp, no_common_name_1350)	677 atp + 814 ctp + 842 gtp + 3 h2o + 1 transcr_elo_TU0-5201_cplx + 691 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-5201_DNA_neu + 1 TU0-5201_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3021 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.90E+01	3.90E+01	0	6.89E+01	68.92371	0	1.68E-01	0.168
tscr_elo_term_TU0-5221_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-5221 (pdxAp, no_common_name_1348)	396 atp + 493 ctp + 494 gtp + 3 h2o + 1 transcr_elo_TU0-5221_cplx + 412 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-5221_DNA_neu + 1 TU0-5221_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1792 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.43E+01	6.43E+01	0	1.13E+02	113.4398	0	1.68E-01	0.168
tscr_elo_term_TU0-5522_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-5522 (yicRp, no_common_name_1339)	548 atp + 504 ctp + 605 gtp + 3 h2o + 1 transcr_elo_TU0-5522_cplx + 547 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-5522_DNA_neu + 1 TU0-5522_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2201 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.30E+01	6.30E+01	0	7.71E+01	77.08692	0	1.04E-01	0.104
tscr_elo_term_TU0-5543_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-5543 (rpmBp, no_common_name_1337)	332 atp + 304 ctp + 367 gtp + 3 h2o + 1 transcr_elo_TU0-5543_cplx + 316 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-5543_DNA_neu + 1 TU0-5543_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1316 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	1.92E-01	0.192
tscr_elo_term_TU0-5601	Transcription elongation and termination of TU0-5601 (yicRp, no_common_name_1329)	341 atp + 295 ctp + 333 gtp + 1 transcr_elo_TU0-5601_cplx + 325 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU0-5601_DNA_neu + 1 TU0-5601_mRNA + 1 hRNAP_inact + 1294 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	1.04E-01	0.104
tscr_elo_term_TU0-6223	Transcription elongation and termination of TU0-6223 (metYp1, no_common_name_1307)	2348 atp + 2236 ctp + 2608 gtp + 1 transcr_elo_TU0-6223_cplx + 2049 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU0-6223_DNA_neu + 1 TU0-6223_mRNA + 1 hRNAP_inact + 9241 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
tscr_elo_term_TU0-6405	Transcription elongation and termination of TU0-6405	699 atp + 758 ctp + 797 gtp + 1 transcr_elo_TU0-6405_cplx + 586 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + TU0-6405_DNA_neu + 1 b4258_v1_mRNA + 1 hRNAP_inact + 2840 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	7.43E+01	74.28142	0	4.90E-01	0.49
tscr_elo_term_TU0-6409_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-6409	343 atp + 351 ctp + 389 gtp + 3 h2o + 1 transcr_elo_TU0-6409_cplx + 320 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-6409_DNA_neu + 3 adp + 1 b2400_v2_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1400 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
tscr_elo_term_TU0-6423_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-6423	158 atp + 107 ctp + 122 gtp + 3 h2o + 1 transcr_elo_TU0-6423_cplx + 140 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-6423_DNA_neu + 3 adp + 1 b1427_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 524 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.93E+02	2.93E+02	0	4.97E+02	496.5524	0	1.15E-01	0.115
tscr_elo_term_TU0-6441_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-6441	624 atp + 633 ctp + 769 gtp + 3 h2o + 1 transcr_elo_TU0-6441_cplx + 592 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-6441_DNA_neu + 3 adp + 1 b2697_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 2615 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.01E+01	5.01E+01	0	8.85E+01	88.508	0	5.39E-01	0.539
tscr_elo_term_TU0-6504	Transcription elongation and termination of TU0-6504	409 atp + 422 ctp + 444 gtp + 1 transcr_elo_TU0-6504_cplx + 374 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + TU0-6504_DNA_neu + 1 b0680_mRNA + 1 hRNAP_inact + 1649 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	7.55E+01	7.55E+01	0	1.33E+02	133.2851	0	4.14E-01	0.414
tscr_elo_term_TU0-6506_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-6506	278 atp + 310 ctp + 382 gtp + 3 h2o + 1 transcr_elo_TU0-6506_cplx + 292 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-6506_DNA_neu + 3 adp + 1 b2514_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1259 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	5.99E-01	0.599
tscr_elo_term_TU0-6512	Transcription elongation and termination of TU0-6512 (rplKp, no_common_name_1269)	2786 atp + 2795 ctp + 3027 gtp + 1 transcr_elo_TU0-6512_cplx + 2503 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU0-6512_DNA_neu + 1 TU0-6512_mRNA + 1 hRNAP_inact + 11111 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
tscr_elo_term_TU0-6550_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-6550	343 atp + 351 ctp + 389 gtp + 3 h2o + 1 transcr_elo_TU0-6550_cplx + 320 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-6550_DNA_neu + 3 adp + 1 b2400_v1_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1400 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
tscr_elo_term_TU0-6551_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-6551	343 atp + 351 ctp + 389 gtp + 3 h2o + 1 transcr_elo_TU0-6551_cplx + 320 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-6551_DNA_neu + 3 adp + 1 b2400_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1400 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577

tscr_elo_term_TU0-6562	Transcription elongation and termination of TU0-6562	407 atp + 439 ctp + 491 gtp + 1 transcr_elo_TU0-6562_cplx + 366 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + TU0-6562_DNA_neu + 1 b0194_mRNA + 1 hRNAP_inact + 1703 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	7.21E+01	7.21E+01	0	1.27E+02	127.2677	0	2.07E-01	0.207
tscr_elo_term_TU0-6626	Transcription elongation and termination of TU0-6626 (pheMp, no_common_name_1244)	963 atp + 995 ctp + 1143 gtp + 1 transcr_elo_TU0-6626_cplx + 901 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU0-6626_DNA_neu + 1 TU0-6626_mRNA + 1 hRNAP_inact + 4002 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
tscr_elo_term_TU0-6654	Transcription elongation and termination of TU0-6654	526 atp + 556 ctp + 619 gtp + 1 transcr_elo_TU0-6654_cplx + 488 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + TU0-6654_DNA_neu + 1 b3164_v2_mRNA + 1 hRNAP_inact + 2189 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.71E+01	5.71E+01	0	1.00E+02	100.0923	0	6.46E-01	0.646
tscr_elo_term_TU0-6657	Transcription elongation and termination of TU0-6657	92 atp + 82 ctp + 82 gtp + 1 transcr_elo_TU0-6657_cplx + 85 utp --> GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU0-6657_DNA_neu + 1 b1716_v2_mRNA + 1 hRNAP_inact + 341 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	1.65E-01	0.165
tscr_elo_term_TU0-6658	Transcription elongation and termination of TU0-6658	205 atp + 214 ctp + 243 gtp + 1 transcr_elo_TU0-6658_cplx + 177 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + TU0-6658_DNA_neu + 1 b3461_v5_mRNA + 1 hRNAP_inact + 839 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_elo_term_TU0-6660	Transcription elongation and termination of TU0-6660 (rpsOp, no_common_name_1226)	637 atp + 667 ctp + 738 gtp + 1 transcr_elo_TU0-6660_cplx + 594 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + TU0-6660_DNA_neu + 1 TU0-6660_mRNA + 1 hRNAP_inact + 2636 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.77E+01	4.77E+01	0	7.03E+01	70.31333	0	4.81E-01	0.481
tscr_elo_term_TU0-6687	Transcription elongation and termination of TU0-6687	699 atp + 758 ctp + 797 gtp + 1 transcr_elo_TU0-6687_cplx + 586 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + TU0-6687_DNA_neu + 1 b4258_mRNA + 1 hRNAP_inact + 2840 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.21E+01	4.21E+01	0	7.43E+01	74.28142	0	4.90E-01	0.49
tscr_elo_term_TU0-6941_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-6941 (rhoLp, no_common_name_1208)	376 atp + 366 ctp + 347 gtp + 3 h2o + 1 transcr_elo_TU0-6941_cplx + 344 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-6941_DNA_neu + 1 TU0-6941_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1430 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
tscr_elo_term_TU0-7002	Transcription elongation and termination of TU0-7002 (rpoBp, no_common_name_1201)	2043 atp + 2140 ctp + 2291 gtp + 1 transcr_elo_TU0-7002_cplx + 1839 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU0-7002_DNA_neu + 1 TU0-7002_mRNA + 1 hRNAP_inact + 8313 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.49E+01	1.49E+01	0	2.63E+01	26.30872	0	1.89E-01	0.189
tscr_elo_term_TU0-7141_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-7141 (bdmp, no_common_name_1194)	137 atp + 100 ctp + 101 gtp + 3 h2o + 1 transcr_elo_TU0-7141_cplx + 104 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-7141_DNA_neu + 1 TU0-7141_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 439 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.03E+02	1.03E+02	0	8.29E+01	82.88	0	1.89E-01	0.189
tscr_elo_term_TU0-7281_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-7281 (yrdDp, no_common_name_1183)	523 atp + 505 ctp + 584 gtp + 3 h2o + 1 transcr_elo_TU0-7281_cplx + 572 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-7281_DNA_neu + 1 TU0-7281_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2181 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
tscr_elo_term_TU0-7842	Transcription elongation and termination of TU0-7842	83 atp + 64 ctp + 55 gtp + 1 transcr_elo_TU0-7842_cplx + 46 utp --> GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU0-7842_DNA_neu + 1 b0023_v1_mRNA + 1 hRNAP_inact + 248 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	2.92E+00	2.92
tscr_elo_term_TU0-7844	Transcription elongation and termination of TU0-7844	83 atp + 64 ctp + 55 gtp + 1 transcr_elo_TU0-7844_cplx + 46 utp --> GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU0-7844_DNA_neu + 1 b0023_mRNA + 1 hRNAP_inact + 248 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	2.92E+00	2.92
tscr_elo_term_TU0-8084	Transcription elongation and termination of TU0-8084	411 atp + 449 ctp + 499 gtp + 1 transcr_elo_TU0-8084_cplx + 398 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + TU0-8084_DNA_neu + 1 b1866_mRNA + 1 hRNAP_inact + 1757 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	7.08E+01	7.08E+01	0	1.25E+02	125.0102	0	1.04E-01	0.104
tscr_elo_term_TU0-8281_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-8281	145 atp + 137 ctp + 145 gtp + 3 h2o + 1 transcr_elo_TU0-8281_cplx + 145 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-8281_DNA_neu + 3 adp + 1 b1066_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 569 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.28E+02	2.28E+02	0	4.03E+02	402.7114	0	3.11E-01	0.311
tscr_elo_term_TU0-8464_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-8464	109 atp + 67 ctp + 97 gtp + 3 h2o + 1 transcr_elo_TU0-8464_cplx + 80 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-8464_DNA_neu + 3 adp + 1 b3986_v1_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 350 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.61E+02	3.61E+02	0	3.32E+02	331.52	0	1.70E+00	1.7
tscr_elo_term_TU0-8474	Transcription elongation and termination of TU0-8474	67 atp + 73 ctp + 61 gtp + 1 transcr_elo_TU0-8474_cplx + 53 utp --> GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU0-8474_DNA_neu + 1 b3165_v1_mRNA + 1 hRNAP_inact + 254 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	4.81E-01	0.481
tscr_elo_term_TU0-8476_stab	Transcription elongation and termination of TU0-8476 (stable RNA) (metYp2, no_common_name_1038)	16 atp + 22 ctp + 15 gtp + 3 h2o + 1 transcr_elo_TU0-8476_cplx + 11 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU0-8476_DNA_neu + 1 TU0-8476_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 61 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
tscr_elo_term_TU0-8477_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-8477	332 atp + 345 ctp + 406 gtp + 3 h2o + 1 transcr_elo_TU0-8477_cplx + 290 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-8477_DNA_neu + 3 adp + 1 b0526_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1370 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.76E-01	0.276

tscr_elo_term_TU0-8502_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-8502 (nsrRp, no_common_name_1013)	928 atp + 949 ctp + 1107 gtp + 3 h2o + 1 transcr_elo_TU0-8502_cplx + 820 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-8502_DNA_neu + 1 TU0-8502_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3801 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118
tscr_elo_term_TU0-8505_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-8505	242 atp + 202 ctp + 239 gtp + 3 h2o + 1 transcr_elo_TU0-8505_cplx + 177 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-8505_DNA_neu + 3 adp + 1 b4022_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 857 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.54E+02	1.54E+02	0	2.71E+02	271.0557	0	1.71E-01	0.171
tscr_elo_term_TU0-8506_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-8506	54 atp + 56 ctp + 46 gtp + 3 h2o + 1 transcr_elo_TU0-8506_cplx + 44 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-8506_DNA_neu + 3 adp + 1 b3936_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 197 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	3.72E-01	0.372
tscr_elo_term_TU0-8510_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-8510	53 atp + 63 ctp + 63 gtp + 3 h2o + 1 transcr_elo_TU0-8510_cplx + 54 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-8510_DNA_neu + 3 adp + 1 b3470_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 230 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.77E+02	4.77E+02	0	8.41E+02	841.4865	0	2.00E-01	0.2
tscr_elo_term_TU0-8529_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-8529	346 atp + 357 ctp + 396 gtp + 3 h2o + 1 transcr_elo_TU0-8529_cplx + 337 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-8529_DNA_neu + 3 adp + 1 b0423_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1433 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	8.92E+01	8.92E+01	0	1.57E+02	157.4849	0	1.86E-01	0.186
tscr_elo_term_TU0-8823_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-8823	457 atp + 475 ctp + 579 gtp + 3 h2o + 1 transcr_elo_TU0-8823_cplx + 483 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-8823_DNA_neu + 3 adp + 1 b2324_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1991 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.65E+01	6.65E+01	0	1.17E+02	117.4575	0	1.17E-01	0.117
tscr_elo_term_TU0-8855	Transcription elongation and termination of TU0-8855 (rplTp, no_common_name_685)	136 atp + 120 ctp + 112 gtp + 1 transcr_elo_TU0-8855_cplx + 140 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + TU0-8855_DNA_neu + 1 TU0-8855_mRNA + 1 hRNAP_inact + 508 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.02E+02	1.02E+02	0	8.29E+01	82.88	0	9.88E-02	0.0988
tscr_elo_term_TU0-8862_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-8862	253 atp + 240 ctp + 275 gtp + 3 h2o + 1 transcr_elo_TU0-8862_cplx + 224 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-8862_DNA_neu + 3 adp + 1 b3384_v6_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 989 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.30E+02	1.30E+02	0	2.30E+02	230.1208	0	1.89E-01	0.189
tscr_elo_term_TU0-8864_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-8864 (pdxHp, no_common_name_681)	728 atp + 713 ctp + 816 gtp + 3 h2o + 1 transcr_elo_TU0-8864_cplx + 712 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-8864_DNA_neu + 1 TU0-8864_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2966 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.46E+01	4.46E+01	0	7.87E+01	78.74245	0	1.04E-01	0.104
tscr_elo_term_TU0-8865_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU0-8865 (tyrSp, no_common_name_680)	540 atp + 521 ctp + 614 gtp + 3 h2o + 1 transcr_elo_TU0-8865_cplx + 509 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU0-8865_DNA_neu + 1 TU0-8865_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2181 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.09E+01	6.09E+01	0	1.08E+02	107.5946	0	2.24E-01	0.224
tscr_elo_term_TU00021_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00021 (dusBp, no_common_name_644)	338 atp + 309 ctp + 337 gtp + 3 h2o + 1 transcr_elo_TU00021_cplx + 291 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00021_DNA_neu + 1 TU00021_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1272 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	1.28E-01	0.128
tscr_elo_term_TU00083	Transcription elongation and termination of TU00083	205 atp + 214 ctp + 243 gtp + 1 transcr_elo_TU00083_cplx + 177 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00083_DNA_neu + 1 b3461_v4_mRNA + 1 hRNAP_inact + 839 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_elo_term_TU00084	Transcription elongation and termination of TU00084	205 atp + 214 ctp + 243 gtp + 1 transcr_elo_TU00084_cplx + 177 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00084_DNA_neu + 1 b3461_v3_mRNA + 1 hRNAP_inact + 839 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_elo_term_TU00221_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00221	396 atp + 338 ctp + 377 gtp + 3 h2o + 1 transcr_elo_TU00221_cplx + 394 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00221_DNA_neu + 3 adp + 1 b4129_v1_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1502 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.39E+01	9.39E+01	0	1.66E+02	165.8223	0	2.07E-01	0.207
tscr_elo_term_TU00236_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00236 (yjeFp1, no_common_name_432)	2407 atp + 2611 ctp + 2990 gtp + 3 h2o + 1 transcr_elo_TU00236_cplx + 2218 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00236_DNA_neu + 1 TU00236_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 10223 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
tscr_elo_term_TU00258_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00258 (defp, no_common_name_410)	384 atp + 350 ctp + 386 gtp + 3 h2o + 1 transcr_elo_TU00258_cplx + 339 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00258_DNA_neu + 1 TU00258_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1456 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.07E+01	9.07E+01	0	1.60E+02	160.1693	0	2.84E-01	0.284
tscr_elo_term_TU00260_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00260 (dnaKp1, no_common_name_408)	840 atp + 774 ctp + 868 gtp + 3 h2o + 1 transcr_elo_TU00260_cplx + 641 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00260_DNA_neu + 1 TU00260_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3120 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
tscr_elo_term_TU00277	Transcription elongation and termination of TU00277 (rrmJp1, no_common_name_392)	636 atp + 626 ctp + 762 gtp + 1 transcr_elo_TU00277_cplx + 624 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00277_DNA_neu + 1 TU00277_mRNA + 1 hRNAP_inact + 2648 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245

tscr_elo_term_TU00281	Transcription elongation and termination of TU00281 (glyQp, no_common_name_388)	676 atp + 793 ctp + 869 gtp + 1 transcr_elo_TU00281_cplx + 637 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00281_DNA_neu + 1 TU00281_mRNA + 1 hRNAP_inact + 2975 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.02E+01	4.02E+01	0	7.10E+01	71.00705	0	2.07E-01	0.207
tscr_elo_term_TU00291_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00291 (ribFp, no_common_name_379)	1325 atp + 1487 ctp + 1697 gtp + 3 h2o + 1 transcr_elo_TU00291_cplx + 1299 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00291_DNA_neu + 1 TU00291_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 5805 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
tscr_elo_term_TU00304_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00304 (mreBp, no_common_name_367)	1053 atp + 1157 ctp + 1390 gtp + 3 h2o + 1 transcr_elo_TU00304_cplx + 1149 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00304_DNA_neu + 1 TU00304_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 4746 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
tscr_elo_term_TU00309_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00309 (nlpDp1, no_common_name_362)	579 atp + 544 ctp + 594 gtp + 3 h2o + 1 transcr_elo_TU00309_cplx + 465 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00309_DNA_neu + 1 TU00309_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2179 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
tscr_elo_term_TU00311_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00311 (yhbCp, no_common_name_360)	1247 atp + 1105 ctp + 1347 gtp + 3 h2o + 1 transcr_elo_TU00311_cplx + 953 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00311_DNA_neu + 1 TU00311_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 4649 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
tscr_elo_term_TU00314	Transcription elongation and termination of TU00314 (yhdTp, no_common_name_357)	506 atp + 652 ctp + 741 gtp + 1 transcr_elo_TU00314_cplx + 662 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00314_DNA_neu + 1 TU00314_mRNA + 1 hRNAP_inact + 2561 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196
tscr_elo_term_TU00324_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00324 (prfBp, no_common_name_349)	664 atp + 678 ctp + 718 gtp + 3 h2o + 1 transcr_elo_TU00324_cplx + 553 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00324_DNA_neu + 1 TU00324_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2610 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.70E+01	4.70E+01	0	8.30E+01	83.03328	0	2.91E-01	0.291
tscr_elo_term_TU00332_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00332 (rncp, no_common_name_342)	408 atp + 385 ctp + 426 gtp + 3 h2o + 1 transcr_elo_TU00332_cplx + 351 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00332_DNA_neu + 1 TU00332_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1567 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	8.19E+01	8.19E+01	0	1.45E+02	144.5631	0	1.35E-01	0.135
tscr_elo_term_TU00333_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00333 (rntp, no_common_name_341)	1143 atp + 1484 ctp + 1529 gtp + 3 h2o + 1 transcr_elo_TU00333_cplx + 1188 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00333_DNA_neu + 1 TU00333_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 5341 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.14E+01	2.14E+01	0	3.79E+01	37.86407	0	1.71E-01	0.171
tscr_elo_term_TU00335	Transcription elongation and termination of TU00335 (rplJp, no_common_name_339)	2371 atp + 2419 ctp + 2616 gtp + 1 transcr_elo_TU00335_cplx + 2156 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00335_DNA_neu + 1 TU00335_mRNA + 1 hRNAP_inact + 9562 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.32E+01	1.32E+01	0	2.33E+01	23.27811	0	1.89E-01	0.189
tscr_elo_term_TU00336	Transcription elongation and termination of TU00336 (rplMp, no_common_name_338)	211 atp + 212 ctp + 214 gtp + 1 transcr_elo_TU00336_cplx + 184 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00336_DNA_neu + 1 TU00336_mRNA + 1 hRNAP_inact + 821 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.48E+01	9.48E+01	0	8.29E+01	82.88	0	4.68E-01	0.468
tscr_elo_term_TU00337_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00337 (rplNp, no_common_name_337)	1357 atp + 1295 ctp + 1494 gtp + 3 h2o + 1 transcr_elo_TU00337_cplx + 1373 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00337_DNA_neu + 1 TU00337_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 5516 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
tscr_elo_term_TU00338_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00338 (rplUp, no_common_name_336)	166 atp + 123 ctp + 158 gtp + 3 h2o + 1 transcr_elo_TU00338_cplx + 130 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00338_DNA_neu + 1 TU00338_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 574 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.01E+02	1.01E+02	0	8.29E+01	82.88	0	5.39E-01	0.539
tscr_elo_term_TU00339	Transcription elongation and termination of TU00339 (rpmBp, no_common_name_335)	125 atp + 95 ctp + 95 gtp + 1 transcr_elo_TU00339_cplx + 94 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00339_DNA_neu + 1 TU00339_mRNA + 1 hRNAP_inact + 409 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.41E-01	0.641
tscr_elo_term_TU00340_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00340 (rpmHp1, no_common_name_334)	112 atp + 146 ctp + 129 gtp + 3 h2o + 1 transcr_elo_TU00340_cplx + 117 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00340_DNA_neu + 1 TU00340_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 501 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
tscr_elo_term_TU00342_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00342 (rpoEp2, no_common_name_333)	652 atp + 664 ctp + 714 gtp + 3 h2o + 1 transcr_elo_TU00342_cplx + 648 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00342_DNA_neu + 1 TU00342_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2675 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
tscr_elo_term_TU00343_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00343	375 atp + 380 ctp + 371 gtp + 3 h2o + 1 transcr_elo_TU00343_cplx + 295 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00343_DNA_neu + 3 adp + 1 b3202_v1_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1418 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	8.36E+01	8.36E+01	0	1.48E+02	147.5906	0	2.07E-01	0.207

tscr_elo_term_TU00344_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00344 (rpoZp, no_common_name_331)	1249 atp + 1418 ctp + 1443 gtp + 3 h2o + 1 transcr_elo_TU00344_cplx + 1063 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00344_DNA_neu + 1 TU00344_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 5170 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
tscr_elo_term_TU00345_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00345 (rpsBp, no_common_name_330)	500 atp + 422 ctp + 498 gtp + 3 h2o + 1 transcr_elo_TU00345_cplx + 402 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00345_DNA_neu + 1 TU00345_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1819 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	7.50E+01	7.50E+01	0	8.09E+01	80.94127	0	5.18E-01	0.518
tscr_elo_term_TU00346_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00346 (rpsFp, no_common_name_329)	369 atp + 358 ctp + 375 gtp + 3 h2o + 1 transcr_elo_TU00346_cplx + 325 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00346_DNA_neu + 1 TU00346_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1424 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
tscr_elo_term_TU00347	Transcription elongation and termination of TU00347 (rpsJp, no_common_name_328)	1287 atp + 1185 ctp + 1362 gtp + 1 transcr_elo_TU00347_cplx + 1107 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00347_DNA_neu + 1 TU00347_mRNA + 1 hRNAP_inact + 4941 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
tscr_elo_term_TU00348_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00348 (rpsLp, no_common_name_327)	1124 atp + 1086 ctp + 1163 gtp + 3 h2o + 1 transcr_elo_TU00348_cplx + 1022 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00348_DNA_neu + 1 TU00348_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 4392 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.93E+01	2.93E+01	0	5.17E+01	51.7244	0	5.67E-01	0.567
tscr_elo_term_TU00349	Transcription elongation and termination of TU00349 (rpsMp, no_common_name_326)	707 atp + 689 ctp + 776 gtp + 1 transcr_elo_TU00349_cplx + 668 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00349_DNA_neu + 1 TU00349_mRNA + 1 hRNAP_inact + 2840 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
tscr_elo_term_TU00351_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00351 (rpsPp, no_common_name_325)	513 atp + 461 ctp + 552 gtp + 3 h2o + 1 transcr_elo_TU00351_cplx + 464 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00351_DNA_neu + 1 TU00351_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1987 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
tscr_elo_term_TU00352	Transcription elongation and termination of TU00352 (rpsUp1, no_common_name_324)	1072 atp + 1053 ctp + 1096 gtp + 1 transcr_elo_TU00352_cplx + 871 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00352_DNA_neu + 1 TU00352_mRNA + 1 hRNAP_inact + 4092 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
tscr_elo_term_TU00354_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00354 (secEp, no_common_name_322)	199 atp + 211 ctp + 275 gtp + 3 h2o + 1 transcr_elo_TU00354_cplx + 233 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00354_DNA_neu + 1 TU00354_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 915 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	2.39E-01	0.239
tscr_elo_term_TU00355_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00355 (selAp, no_common_name_321)	710 atp + 830 ctp + 981 gtp + 3 h2o + 1 transcr_elo_TU00355_cplx + 699 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00355_DNA_neu + 1 TU00355_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3217 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.70E+01	3.70E+01	0	1.37E+01	13.7	0	1.86E-01	0.186
tscr_elo_term_TU00362_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00362 (surAp, no_common_name_314)	1011 atp + 1161 ctp + 1189 gtp + 3 h2o + 1 transcr_elo_TU00362_cplx + 949 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00362_DNA_neu + 1 TU00362_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 4307 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.75E+01	2.75E+01	0	4.85E+01	48.51944	0	1.68E-01	0.168
tscr_elo_term_TU00366	Transcription elongation and termination of TU00366 (thrSp, no_common_name_310)	880 atp + 730 ctp + 816 gtp + 1 transcr_elo_TU00366_cplx + 736 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00366_DNA_neu + 1 TU00366_mRNA + 1 hRNAP_inact + 3162 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.35E+01	4.35E+01	0	6.79E+01	67.90817	0	1.65E-01	0.165
tscr_elo_term_TU00411_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00411	161 atp + 120 ctp + 174 gtp + 3 h2o + 1 transcr_elo_TU00411_cplx + 126 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00411_DNA_neu + 3 adp + 1 b2614_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 578 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.64E+02	2.64E+02	0	4.66E+02	465.9471	0	2.87E-01	0.287
tscr_elo_term_TU00414	Transcription elongation and termination of TU00414 (rrmJp2, no_common_name_264)	636 atp + 626 ctp + 762 gtp + 1 transcr_elo_TU00414_cplx + 624 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00414_DNA_neu + 1 TU00414_mRNA + 1 hRNAP_inact + 2648 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
tscr_elo_term_TU00415	Transcription elongation and termination of TU00415 (fliAp1, no_common_name_263)	596 atp + 500 ctp + 592 gtp + 1 transcr_elo_TU00415_cplx + 501 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00415_DNA_neu + 1 TU00415_mRNA + 1 hRNAP_inact + 2189 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
tscr_elo_term_TU00417_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00417 (dnaKp2, no_common_name_261)	840 atp + 774 ctp + 868 gtp + 3 h2o + 1 transcr_elo_TU00417_cplx + 641 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00417_DNA_neu + 1 TU00417_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3120 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
tscr_elo_term_TU00418_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00418 (dnaKp3, no_common_name_260)	840 atp + 774 ctp + 868 gtp + 3 h2o + 1 transcr_elo_TU00418_cplx + 641 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00418_DNA_neu + 1 TU00418_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3120 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431

tscr_elo_term_TU00426	Transcription elongation and termination of TU00426	205 atp + 214 ctp + 243 gtp + 1 transcr_elo_TU00426_cplx + 177 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00426_DNA_neu + 1 b3461_v2_mRNA + 1 hRNAP_inact + 839 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_elo_term_TU00427	Transcription elongation and termination of TU00427	205 atp + 214 ctp + 243 gtp + 1 transcr_elo_TU00427_cplx + 177 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00427_DNA_neu + 1 b3461_v1_mRNA + 1 hRNAP_inact + 839 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_elo_term_TU00429_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00429	396 atp + 338 ctp + 377 gtp + 3 h2o + 1 transcr_elo_TU00429_cplx + 394 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00429_DNA_neu + 3 adp + 1 b4129_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1502 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.39E+01	9.39E+01	0	1.66E+02	165.8223	0	2.07E-01	0.207
tscr_elo_term_TU00430_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00430	287 atp + 261 ctp + 289 gtp + 3 h2o + 1 transcr_elo_TU00430_cplx + 251 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00430_DNA_neu + 3 adp + 1 b3965_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1085 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.19E+02	1.19E+02	0	2.10E+02	209.5896	0	9.79E-02	0.0979
tscr_elo_term_TU00434	Transcription elongation and termination of TU00434 (rpsUp2, no_common_name_244)	1072 atp + 1053 ctp + 1096 gtp + 1 transcr_elo_TU00434_cplx + 871 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00434_DNA_neu + 1 TU00434_mRNA + 1 hRNAP_inact + 4092 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
tscr_elo_term_TU00435	Transcription elongation and termination of TU00435 (rpsUp3, no_common_name_243)	1072 atp + 1053 ctp + 1096 gtp + 1 transcr_elo_TU00435_cplx + 871 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00435_DNA_neu + 1 TU00435_mRNA + 1 hRNAP_inact + 4092 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
tscr_elo_term_TU00436	Transcription elongation and termination of TU00436	496 atp + 472 ctp + 495 gtp + 1 transcr_elo_TU00436_cplx + 363 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00436_DNA_neu + 1 b3067_v2_mRNA + 1 hRNAP_inact + 1826 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
tscr_elo_term_TU00437	Transcription elongation and termination of TU00437	496 atp + 472 ctp + 495 gtp + 1 transcr_elo_TU00437_cplx + 363 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00437_DNA_neu + 1 b3067_v1_mRNA + 1 hRNAP_inact + 1826 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
tscr_elo_term_TU00438	Transcription elongation and termination of TU00438	496 atp + 472 ctp + 495 gtp + 1 transcr_elo_TU00438_cplx + 363 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00438_DNA_neu + 1 b3067_mRNA + 1 hRNAP_inact + 1826 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
tscr_elo_term_TU00440_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00440 (nlpDp2, no_common_name_238)	579 atp + 544 ctp + 594 gtp + 3 h2o + 1 transcr_elo_TU00440_cplx + 465 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00440_DNA_neu + 1 TU00440_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2179 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
tscr_elo_term_TU00442_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00442	251 atp + 222 ctp + 288 gtp + 3 h2o + 1 transcr_elo_TU00442_cplx + 219 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00442_DNA_neu + 3 adp + 1 b2741_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 977 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.42E+02	1.42E+02	0	2.51E+02	250.576	0	2.31E-01	0.231
tscr_elo_term_TU00460_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00460 (feclp, no_common_name_220)	325 atp + 425 ctp + 412 gtp + 3 h2o + 1 transcr_elo_TU00460_cplx + 297 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00460_DNA_neu + 1 TU00460_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 1456 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tscr_elo_term_TU00471	Transcription elongation and termination of TU00471 (fliAp2, no_common_name_210)	596 atp + 500 ctp + 592 gtp + 1 transcr_elo_TU00471_cplx + 501 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00471_DNA_neu + 1 TU00471_mRNA + 1 hRNAP_inact + 2189 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
tscr_elo_term_TU00472	Transcription elongation and termination of TU00472	53 atp + 53 ctp + 53 gtp + 1 transcr_elo_TU00472_cplx + 41 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU00472_DNA_neu + 1 b3065_mRNA + 1 hRNAP_inact + 200 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	2.19E+00	2.19
tscr_elo_term_TU00487_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00487 (rpoNp, no_common_name_194)	913 atp + 905 ctp + 900 gtp + 3 h2o + 1 transcr_elo_TU00487_cplx + 791 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00487_DNA_neu + 1 TU00487_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3506 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
tscr_elo_term_TU00489_stab	Transcription elongation and termination of TU00489 (stable RNA) (aspV, no_common_name_192)	11 atp + 20 ctp + 20 gtp + 3 h2o + 1 transcr_elo_TU00489_cplx + 13 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00489_DNA_neu + 1 TU00489_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 61 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
tscr_elo_term_TU00490_stab	Transcription elongation and termination of TU00490 (stable RNA) (thrWp, no_common_name_191)	17 atp + 14 ctp + 17 gtp + 3 h2o + 1 transcr_elo_TU00490_cplx + 15 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00490_DNA_neu + 1 TU00490_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 60 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38

tscr_elo_term_TU00491_stab	Transcription elongation and termination of TU00491 (stable RNA) (argUp, no_common_name_190)	16 atp + 17 ctp + 20 gtp + 3 h2o + 1 transcr_elo_TU00491_cplx + 11 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00491_DNA_neu + 1 TU00491_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 61 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
tscr_elo_term_TU00492_stab	Transcription elongation and termination of TU00492 (stable RNA) (lysTp, no_common_name_189)	91 atp + 88 ctp + 96 gtp + 3 h2o + 1 transcr_elo_TU00492_cplx + 77 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00492_DNA_neu + 1 TU00492_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 349 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
tscr_elo_term_TU00493_stab	Transcription elongation and termination of TU00493 (stable RNA) (valVp, no_common_name_188)	29 atp + 37 ctp + 45 gtp + 3 h2o + 1 transcr_elo_TU00493_cplx + 34 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00493_DNA_neu + 1 TU00493_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 142 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
tscr_elo_term_TU00494_stab	Transcription elongation and termination of TU00494 (stable RNA) (proLp, no_common_name_187)	12 atp + 17 ctp + 22 gtp + 3 h2o + 1 transcr_elo_TU00494_cplx + 13 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00494_DNA_neu + 1 TU00494_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 61 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
tscr_elo_term_TU00495_stab	Transcription elongation and termination of TU00495 (stable RNA) (valUp, no_common_name_186)	89 atp + 103 ctp + 104 gtp + 3 h2o + 1 transcr_elo_TU00495_cplx + 89 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00495_DNA_neu + 1 TU00495_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 382 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
tscr_elo_term_TU00496_stab	Transcription elongation and termination of TU00496 (stable RNA) (metZp, no_common_name_185)	71 atp + 79 ctp + 82 gtp + 3 h2o + 1 transcr_elo_TU00496_cplx + 52 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00496_DNA_neu + 1 TU00496_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 281 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
tscr_elo_term_TU00497_stab	Transcription elongation and termination of TU00497 (stable RNA) (asnTp, no_common_name_184)	17 atp + 14 ctp + 19 gtp + 3 h2o + 1 transcr_elo_TU00497_cplx + 13 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00497_DNA_neu + 1 TU00497_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 60 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
tscr_elo_term_TU00498_stab	Transcription elongation and termination of TU00498 (stable RNA) (asnUp, no_common_name_183)	17 atp + 14 ctp + 19 gtp + 3 h2o + 1 transcr_elo_TU00498_cplx + 13 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00498_DNA_neu + 1 TU00498_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 60 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
tscr_elo_term_TU00499_stab	Transcription elongation and termination of TU00499 (stable RNA) (asnVp, no_common_name_182)	17 atp + 14 ctp + 19 gtp + 3 h2o + 1 transcr_elo_TU00499_cplx + 13 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00499_DNA_neu + 1 TU00499_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 60 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
tscr_elo_term_TU00500_stab	Transcription elongation and termination of TU00500 (stable RNA) (argWp, no_common_name_181)	18 atp + 16 ctp + 16 gtp + 3 h2o + 1 transcr_elo_TU00500_cplx + 12 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00500_DNA_neu + 1 TU00500_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 59 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
tscr_elo_term_TU00501_stab	Transcription elongation and termination of TU00501 (stable RNA) (pheVp, no_common_name_180)	15 atp + 16 ctp + 19 gtp + 3 h2o + 1 transcr_elo_TU00501_cplx + 13 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00501_DNA_neu + 1 TU00501_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 60 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	10	10	0	10	10
tscr_elo_term_TU00502_stab	Transcription elongation and termination of TU00502 (stable RNA) (ileXp, no_common_name_179)	16 atp + 16 ctp + 19 gtp + 3 h2o + 1 transcr_elo_TU00502_cplx + 12 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00502_DNA_neu + 1 TU00502_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 60 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
tscr_elo_term_TU00503_stab	Transcription elongation and termination of TU00503 (stable RNA) (argXp, no_common_name_178)	94 atp + 99 ctp + 126 gtp + 3 h2o + 1 transcr_elo_TU00503_cplx + 105 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00503_DNA_neu + 1 TU00503_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 421 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
tscr_elo_term_TU00504_stab	Transcription elongation and termination of TU00504 (stable RNA) (thrUp, no_common_name_177)	105 atp + 113 ctp + 115 gtp + 3 h2o + 1 transcr_elo_TU00504_cplx + 96 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00504_DNA_neu + 1 TU00504_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 426 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8

tscr_elo_term_TU00505_stab	Transcription elongation and termination of TU00505 (stable RNA) (glyVp, no_common_name_176)	68 atp + 77 ctp + 82 gtp + 3 h2o + 1 transcr_elo_TU00505_cplx + 59 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00505_DNA_neu + 1 TU00505_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 283 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
tscr_elo_term_TU00506_stab	Transcription elongation and termination of TU00506 (stable RNA) (leuXp, no_common_name_175)	21 atp + 19 ctp + 18 gtp + 3 h2o + 1 transcr_elo_TU00506_cplx + 14 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00506_DNA_neu + 1 TU00506_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 69 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
tscr_elo_term_TU00507_stab	Transcription elongation and termination of TU00507 (stable RNA) (metTp, no_common_name_174)	161 atp + 184 ctp + 176 gtp + 3 h2o + 1 transcr_elo_TU00507_cplx + 170 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00507_DNA_neu + 1 TU00507_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 688 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
tscr_elo_term_TU00508_stab	Transcription elongation and termination of TU00508 (stable RNA) (serWp, no_common_name_173)	19 atp + 22 ctp + 22 gtp + 3 h2o + 1 transcr_elo_TU00508_cplx + 12 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00508_DNA_neu + 1 TU00508_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 72 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
tscr_elo_term_TU00509_stab	Transcription elongation and termination of TU00509 (stable RNA) (serTp, no_common_name_172)	19 atp + 21 ctp + 21 gtp + 3 h2o + 1 transcr_elo_TU00509_cplx + 14 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00509_DNA_neu + 1 TU00509_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 72 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
tscr_elo_term_TU00510_stab	Transcription elongation and termination of TU00510 (stable RNA) (serXp, no_common_name_171)	19 atp + 22 ctp + 22 gtp + 3 h2o + 1 transcr_elo_TU00510_cplx + 12 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00510_DNA_neu + 1 TU00510_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 72 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
tscr_elo_term_TU00511_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00511 (tyrTp, no_common_name_170)	144 atp + 147 ctp + 135 gtp + 3 h2o + 1 transcr_elo_TU00511_cplx + 97 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00511_DNA_neu + 1 TU00511_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 520 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
tscr_elo_term_TU00512_stab	Transcription elongation and termination of TU00512 (stable RNA) (glyWp, no_common_name_169)	62 atp + 77 ctp + 85 gtp + 3 h2o + 1 transcr_elo_TU00512_cplx + 66 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00512_DNA_neu + 1 TU00512_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 287 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
tscr_elo_term_TU00513_stab	Transcription elongation and termination of TU00513 (stable RNA) (serUp, no_common_name_168)	19 atp + 25 ctp + 21 gtp + 3 h2o + 1 transcr_elo_TU00513_cplx + 12 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00513_DNA_neu + 1 TU00513_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 74 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
tscr_elo_term_TU00514_stab	Transcription elongation and termination of TU00514 (stable RNA) (alaWp, no_common_name_167)	42 atp + 48 ctp + 51 gtp + 3 h2o + 1 transcr_elo_TU00514_cplx + 37 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00514_DNA_neu + 1 TU00514_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 175 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
tscr_elo_term_TU00515_stab	Transcription elongation and termination of TU00515 (stable RNA) (serVp, no_common_name_166)	217 atp + 216 ctp + 229 gtp + 3 h2o + 1 transcr_elo_TU00515_cplx + 187 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00515_DNA_neu + 1 TU00515_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 846 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
tscr_elo_term_TU00516_stab	Transcription elongation and termination of TU00516 (stable RNA) (glyUp, no_common_name_165)	15 atp + 19 ctp + 14 gtp + 3 h2o + 1 transcr_elo_TU00516_cplx + 13 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00516_DNA_neu + 1 TU00516_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 58 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
tscr_elo_term_TU00517_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU00517 (metYp1, no_common_name_164)	1308 atp + 1170 ctp + 1415 gtp + 3 h2o + 1 transcr_elo_TU00517_cplx + 1042 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU00517_DNA_neu + 1 TU00517_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 4932 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
tscr_elo_term_TU00518_stab	Transcription elongation and termination of TU00518 (stable RNA) (leuUp, no_common_name_163)	17 atp + 19 ctp + 21 gtp + 3 h2o + 1 transcr_elo_TU00518_cplx + 17 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00518_DNA_neu + 1 TU00518_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 71 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	11	11

tscr_elo_term_TU00519_stab	Transcription elongation and termination of TU00519 (stable RNA) (proKp, no_common_name_162)	15 atp + 17 ctp + 19 gtp + 3 h2o + 1 transcr_elo_TU00519_cplx + 13 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00519_DNA_neu + 1 TU00519_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 61 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	13	13	0	13	13
tscr_elo_term_TU00520_stab	Transcription elongation and termination of TU00520 (stable RNA) (pheUp, no_common_name_161)	15 atp + 16 ctp + 19 gtp + 3 h2o + 1 transcr_elo_TU00520_cplx + 13 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00520_DNA_neu + 1 TU00520_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 60 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
tscr_elo_term_TU00521_stab	Transcription elongation and termination of TU00521 (stable RNA) (leuQp, no_common_name_160)	68 atp + 80 ctp + 93 gtp + 3 h2o + 1 transcr_elo_TU00521_cplx + 69 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU00521_DNA_neu + 1 TU00521_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 307 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
tscr_elo_term_TU221	Transcription elongation and termination of TU221	205 atp + 214 ctp + 243 gtp + 1 transcr_elo_TU221_cplx + 177 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU221_DNA_neu + 1 b3461_mRNA + 1 hRNAP_inact + 839 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_elo_term_TU281_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU281 (rpoEp1, no_common_name_129)	652 atp + 664 ctp + 714 gtp + 3 h2o + 1 transcr_elo_TU281_cplx + 648 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU281_DNA_neu + 1 TU281_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2675 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
tscr_elo_term_TU341	Transcription elongation and termination of TU341 (metYp2, no_common_name_123)	2348 atp + 2236 ctp + 2608 gtp + 1 transcr_elo_TU341_cplx + 2049 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU341_DNA_neu + 1 TU341_mRNA + 1 hRNAP_inact + 9241 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
tscr_elo_term_TU343_stab	Transcription elongation and termination of TU343 (stable RNA) (metYp1, no_common_name_122)	16 atp + 22 ctp + 15 gtp + 3 h2o + 1 transcr_elo_TU343_cplx + 11 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU343_DNA_neu + 1 TU343_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 61 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	11	11	0	11	11
tscr_elo_term_TU361_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU361 (cmkp, no_common_name_110)	639 atp + 588 ctp + 680 gtp + 3 h2o + 1 transcr_elo_TU361_cplx + 548 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU361_DNA_neu + 1 TU361_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2452 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.39E+01	5.39E+01	0	7.34E+01	73.37709	0	3.44E-01	0.344
tscr_elo_term_TU482	Transcription elongation and termination of TU482 (garPp, no_common_name_92)	1074 atp + 1137 ctp + 1366 gtp + 1 transcr_elo_TU482_cplx + 1099 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU482_DNA_neu + 1 TU482_mRNA + 1 hRNAP_inact + 4676 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
tscr_elo_term_TU483_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU483 (rncp, no_common_name_91)	848 atp + 858 ctp + 967 gtp + 3 h2o + 1 transcr_elo_TU483_cplx + 760 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU483_DNA_neu + 1 TU483_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3430 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
tscr_elo_term_TU543_stab	Transcription elongation and termination of TU543 (stable RNA) (rnpBp, no_common_name_71)	84 atp + 97 ctp + 127 gtp + 3 h2o + 1 transcr_elo_TU543_cplx + 56 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 1 TU543_DNA_neu + 1 TU543_RNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 361 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.81E+02	2.81E+02	0	1.08E+01	10.8	0	1.08E+01	10.8
tscr_elo_term_TU564_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU564 (rpsAp1, no_common_name_66)	568 atp + 503 ctp + 563 gtp + 3 h2o + 1 transcr_elo_TU564_cplx + 471 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU564_DNA_neu + 1 TU564_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2102 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
tscr_elo_term_TU565_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU565 (rpsAp3, no_common_name_65)	568 atp + 503 ctp + 563 gtp + 3 h2o + 1 transcr_elo_TU565_cplx + 471 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU565_DNA_neu + 1 TU565_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2102 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
tscr_elo_term_TU582	Transcription elongation and termination of TU582	466 atp + 517 ctp + 506 gtp + 1 transcr_elo_TU582_cplx + 430 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU582_DNA_neu + 1 b1286_v1_mRNA + 1 hRNAP_inact + 1919 pp	irreversible	Transcription	0.00E+00	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	4.90E-01	0.49
tscr_elo_term_TU583	Transcription elongation and termination of TU583	466 atp + 517 ctp + 506 gtp + 1 transcr_elo_TU583_cplx + 430 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU583_DNA_neu + 1 b1286_mRNA + 1 hRNAP_inact + 1919 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	4.90E-01	0.49
tscr_elo_term_TU601_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU601 (yceDp1, no_common_name_56)	187 atp + 186 ctp + 190 gtp + 3 h2o + 1 transcr_elo_TU601_cplx + 171 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU601_DNA_neu + 1 TU601_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 731 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
tscr_elo_term_TU602_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU602 (yceDp2, no_common_name_55)	187 atp + 186 ctp + 190 gtp + 3 h2o + 1 transcr_elo_TU602_cplx + 171 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU602_DNA_neu + 1 TU602_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 731 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455

tscr_elo_term_TU682_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU682 (rpmHp2, no_common_name_45)	112 atp + 146 ctp + 129 gtp + 3 h2o + 1 transcr_elo_TU682_cplx + 117 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU682_DNA_neu + 1 TU682_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 501 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
tscr_elo_term_TU743_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU743 (rpmHp3, no_common_name_35)	112 atp + 146 ctp + 129 gtp + 3 h2o + 1 transcr_elo_TU743_cplx + 117 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU743_DNA_neu + 1 TU743_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 501 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
tscr_elo_term_TU801_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU801 (yjeFp2, no_common_name_19)	2407 atp + 2611 ctp + 2990 gtp + 3 h2o + 1 transcr_elo_TU801_cplx + 2218 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU801_DNA_neu + 1 TU801_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 10223 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
tscr_elo_term_TU802_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU802 (yjeFp3, no_common_name_18)	2407 atp + 2611 ctp + 2990 gtp + 3 h2o + 1 transcr_elo_TU802_cplx + 2218 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU802_DNA_neu + 1 TU802_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 10223 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
tscr_elo_term_TU870	Transcription elongation and termination of TU870 (tgtp, no_common_name_9)	356 atp + 348 ctp + 395 gtp + 1 transcr_elo_TU870_cplx + 368 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 RpoZ_mono_inact + 1 TU870_DNA_neu + 1 TU870_mRNA + 1 hRNAP_inact + 1467 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	9.15E+01	9.15E+01	0	1.62E+02	161.5461	0	1.96E-01	0.196
tscr_elo_term_TU871_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU871	246 atp + 281 ctp + 291 gtp + 3 h2o + 1 transcr_elo_TU871_cplx + 240 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU871_DNA_neu + 3 adp + 1 b0405_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1055 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	3.39E-02	0.0339
tscr_elo_term_TU872_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU872 (aroKp1, no_common_name_7)	1575 atp + 1582 ctp + 1769 gtp + 3 h2o + 1 transcr_elo_TU872_cplx + 1492 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU872_DNA_neu + 1 TU872_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 6415 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
tscr_elo_term_TU873_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU873 (aroKp2, no_common_name_6)	1575 atp + 1582 ctp + 1769 gtp + 3 h2o + 1 transcr_elo_TU873_cplx + 1492 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU873_DNA_neu + 1 TU873_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 6415 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
tscr_elo_term_TU874_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU874 (damXp, no_common_name_5)	1168 atp + 1177 ctp + 1266 gtp + 3 h2o + 1 transcr_elo_TU874_cplx + 1049 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU874_DNA_neu + 1 TU874_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 4657 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	2.71E+01	2.71E+01	0	4.78E+01	47.81984	0	1.74E-01	0.174
tscr_elo_term_TU875_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU875 (damp1, no_common_name_4)	794 atp + 801 ctp + 884 gtp + 3 h2o + 1 transcr_elo_TU875_cplx + 788 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU875_DNA_neu + 1 TU875_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3264 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
tscr_elo_term_TU876_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU876 (damp2, no_common_name_3)	794 atp + 801 ctp + 884 gtp + 3 h2o + 1 transcr_elo_TU876_cplx + 788 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU876_DNA_neu + 1 TU876_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 3264 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
tscr_elo_term_TU877_rho_dep	Transcription elongation and RHO DEPENDENT termination of TU877 (rpep, no_common_name_2)	582 atp + 595 ctp + 668 gtp + 3 h2o + 1 transcr_elo_TU877_cplx + 568 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 1 TU877_DNA_neu + 1 TU877_mRNA + 3 adp + 3 h + 1 hRNAP_inact + 3 pi + 2410 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	5.36E+01	5.36E+01	0	9.46E+01	94.59664	0	1.89E-01	0.189
tscr_elo_term_b0144_rho_dep	Transcription elongation and RHO DEPENDENT termination of b0144	210 atp + 253 ctp + 236 gtp + 3 h2o + 1 transcr_elo_b0144_cplx + 215 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 3 adp + 1 b0144_DNA_neu + 1 b0144_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 911 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.23E+02	1.23E+02	0	2.18E+02	217.6818	0	2.03E-01	0.203
tscr_elo_term_b0206_stab	Transcription elongation and termination of b0206 (stable RNA) (, b0206)	11 atp + 20 ctp + 20 gtp + 3 h2o + 1 transcr_elo_b0206_cplx + 13 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 3 adp + 1 b0206_DNA_neu + 1 b0206_RNA_pre + 3 h + 1 hRNAP_inact + 3 pi + 61 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
tscr_elo_term_b0503_rho_dep	Transcription elongation and RHO DEPENDENT termination of b0503	252 atp + 270 ctp + 332 gtp + 3 h2o + 1 transcr_elo_b0503_cplx + 228 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 3 adp + 1 b0503_DNA_neu + 1 b0503_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1079 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.17E+02	1.17E+02	0	2.07E+02	206.5187	0	1.36E-01	0.136
tscr_elo_term_b1133_rho_dep	Transcription elongation and RHO DEPENDENT termination of b1133	259 atp + 279 ctp + 309 gtp + 3 h2o + 1 transcr_elo_b1133_cplx + 247 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 3 adp + 1 b1133_DNA_neu + 1 b1133_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1091 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	1.99E+02	199.2212	0	2.07E-01	0.207
tscr_elo_term_b1211_rho_dep	Transcription elongation and RHO DEPENDENT termination of b1211	275 atp + 272 ctp + 295 gtp + 3 h2o + 1 transcr_elo_b1211_cplx + 228 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 3 adp + 1 b1211_DNA_neu + 1 b1211_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1067 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.16E+02	1.16E+02	0	2.04E+02	204.2739	0	3.08E-01	0.308
tscr_elo_term_b1212_rho_dep	Transcription elongation and RHO DEPENDENT termination of b1212	177 atp + 216 ctp + 239 gtp + 3 h2o + 1 transcr_elo_b1212_cplx + 189 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 3 adp + 1 b1212_DNA_neu + 1 b1212_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 818 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	2.57E+02	257.4411	0	2.07E-01	0.207

tscr_elo_term_b1804_rho_dep	Transcription elongation and RHO DEPENDENT termination of b1804	254 atp + 287 ctp + 319 gtp + 3 h2o + 1 transcr_elo_b1804_cplx + 255 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 3 adp + 1 b1804_DNA_neu + 1 b1804_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1112 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.11E+02	1.11E+02	0	1.95E+02	195.0851	0	9.45E-02	0.0945
tscr_elo_term_b2745_rho_dep	Transcription elongation and RHO DEPENDENT termination of b2745	260 atp + 238 ctp + 306 gtp + 3 h2o + 1 transcr_elo_b2745_cplx + 233 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 3 adp + 1 b2745_DNA_neu + 1 b2745_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1034 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.34E+02	1.34E+02	0	2.37E+02	236.8891	0	2.29E-01	0.229
tscr_elo_term_b3289_rho_dep	Transcription elongation and RHO DEPENDENT termination of b3289	326 atp + 315 ctp + 322 gtp + 3 h2o + 1 transcr_elo_b3289_cplx + 314 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 3 adp + 1 b3289_DNA_neu + 1 b3289_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1274 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.01E+02	1.01E+02	0	1.78E+02	177.8536	0	3.17E-01	0.317
tscr_elo_term_b3760_stat	Transcription elongation and termination of b3760 (stable RNA) (, b3760)	11 atp + 20 ctp + 20 gtp + 3 h2o + 1 transcr_elo_b3760_cplx + 13 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 3 adp + 1 b3760_DNA_neu + 1 b3760_RNA_pre + 3 h + 1 hRNAP_inact + 3 pi + 61 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
tscr_elo_term_b3761_stat	Transcription elongation and termination of b3761 (stable RNA) (, b3761)	13 atp + 19 ctp + 18 gtp + 3 h2o + 1 transcr_elo_b3761_cplx + 13 utp -> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + NusA_mono_inact + 1 NusB_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RplC_mono_me_spmd + 1 RplD_mono + 1 RplM_mono + 1 RpoZ_mono_inact + 1 RpsD_mono_spmd + 1 RpsJ_mono + 3 adp + 1 b3761_DNA_neu + 1 b3761_RNA_pre + 3 h + 1 hRNAP_inact + 3 pi + 60 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
tscr_elo_term_b4143_rho_dep	Transcription elongation and RHO DEPENDENT termination of b4143	434 atp + 391 ctp + 472 gtp + 3 h2o + 1 transcr_elo_b4143_cplx + 337 utp --> 1 GreA_mono_inact + 1 GreB_mono_inact + 1 Mfd_mono_inact + 1 NusA_mono_inact + 1 NusG_mono_inact + 1 Rho_hexa_inact + 1 RpoZ_mono_inact + 3 adp + 1 b4143_DNA_neu + 1 b4143_mRNA + 3 h + 1 hRNAP_inact + 3 pi + 1631 ppi	irreversible	Transcription	0.00E+00	1.00E+09	0	8.11E+01	8.11E+01	0	1.43E+02	143.0954	0	3.12E-01	0.312
tscr_ini_TU-8389	Transcription initiation of TU-8389	1 RNAP_70 + 1 TU-8389_DNA_act + 8 atp + 3 ctp + 4 gtp + 1 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU-8389_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.81E+02	5.81E+02	0	1.03E+03	1025.084	0	6.81E+00	6.81
tscr_ini_TU-8390	Transcription initiation of TU-8390	1 RNAP_70 + 1 TU-8390_DNA_act + 8 atp + 3 ctp + 4 gtp + 1 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU-8390_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.81E+02	5.81E+02	0	1.03E+03	1025.084	0	6.81E+00	6.81
tscr_ini_TU-8392	Transcription initiation of TU-8392 (dsbCp2, no_common_name_3124)	1 RNAP_24 + 1 TU-8392_DNA_act + 7 atp + 4 gtp + 5 utp <==> 1 RpoE_mono_inact + 15 ppi + 1 transcr_ini_TU-8392_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.54E+01	3.54E+01	0	6.24E+01	62.43587	0	1.42E-01	0.142
tscr_ini_TU-8397	Transcription initiation of TU-8397	1 RNAP_24 + 1 TU-8397_DNA_act + 5 atp + 4 ctp + 3 gtp + 4 utp <==> 1 RpoE_mono_inact + 15 ppi + 1 transcr_ini_TU-8397_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.07E+02	3.07E+02	0	5.42E+02	542.1115	0	2.45E-01	0.245
tscr_ini_TU-8398	Transcription initiation of TU-8398 (lptBp, no_common_name_3119)	1 RNAP_24 + 1 TU-8398_DNA_act + 6 atp + 3 ctp + 3 gtp + 4 utp <==> 1 RpoE_mono_inact + 15 ppi + 1 transcr_ini_TU-8398_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.04E+01	3.04E+01	0	5.37E+01	53.74604	0	2.07E-01	0.207
tscr_ini_TU-8407	Transcription initiation of TU-8407	1 RNAP_70 + 1 TU-8407_DNA_act + 9 atp + 3 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU-8407_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.60E+01	3.60E+01	0	6.36E+01	63.56211	0	1.89E-01	0.189
tscr_ini_TU0-1	Transcription initiation of TU0-1 (rpmFp, no_common_name_3093)	1 RNAP_70 + 1 TU0-1_DNA_act + 6 atp + 4 ctp + 4 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-1_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.27E+01	3.27E+01	0	5.77E+01	57.70685	0	2.07E-01	0.207
tscr_ini_TU0-1181_stab	Transcription initiation of TU0-1181 (stable RNA) (rrnAp1, no_common_name_3075)	1 RNAP_38 + 1 TU0-1181_DNA_act + 7 atp + 4 gtp + 5 utp --> 1 RpoS_mono_inact + 15 ppi + 1 transcr_ini_TU0-1181_cplx	reversible	Transcription	0.00E+00	1.36E+01	0	1.12E+02	1.12E+02	0	1.36E+01	13.6	0	1.36E+01	13.6
tscr_ini_TU0-1182_stab	Transcription initiation of TU0-1182 (stable RNA) (rrsBp1, no_common_name_3074)	1 RNAP_32 + 1 TU0-1182_DNA_act + 7 atp + 4 gtp + 5 utp --> 1 RpoH_mono_inact + 15 ppi + 1 transcr_ini_TU0-1182_cplx	reversible	Transcription	0.00E+00	1.29E+01	0	1.11E+02	1.11E+02	0	1.29E+01	12.9	0	1.29E+01	12.9
tscr_ini_TU0-1183_stab	Transcription initiation of TU0-1183 (stable RNA) (rrnCp1, no_common_name_3073)	1 RNAP_70 + 1 TU0-1183_DNA_act + 7 atp + 4 gtp + 5 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-1183_cplx	reversible	Transcription	0.00E+00	1.42E+01	0	1.12E+02	1.12E+02	0	1.42E+01	14.2	0	1.42E+01	14.2
tscr_ini_TU0-1184_stab	Transcription initiation of TU0-1184 (stable RNA) (rrnCp2, no_common_name_3072)	1 RNAP_70 + 1 TU0-1184_DNA_act + 7 atp + 4 gtp + 5 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-1184_cplx	reversible	Transcription	0.00E+00	0.00E+00	0	1.12E+02	1.12E+02	0	0	0	0	0	0
tscr_ini_TU0-1186_stab	Transcription initiation of TU0-1186 (stable RNA) (rrnEp, no_common_name_3071)	1 RNAP_70 + 1 TU0-1186_DNA_act + 7 atp + 4 gtp + 5 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-1186_cplx	reversible	Transcription	0.00E+00	1.26E+01	0	1.13E+02	1.13E+02	0	1.26E+01	12.6	0	1.26E+01	12.6
tscr_ini_TU0-1187_stab	Transcription initiation of TU0-1187 (stable RNA) (rrsGp1, no_common_name_3070)	1 RNAP_70 + 1 TU0-1187_DNA_act + 7 atp + 4 gtp + 5 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-1187_cplx	reversible	Transcription	0.00E+00	8.54E+00	0	1.11E+02	1.11E+02	0	8.54E+00	8.54	0	8.54E+00	8.54
tscr_ini_TU0-1188_stab	Transcription initiation of TU0-1188 (stable RNA) (rrsGp2, no_common_name_3069)	1 RNAP_70 + 1 TU0-1188_DNA_act + 7 atp + 4 gtp + 5 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-1188_cplx	reversible	Transcription	0.00E+00	0.00E+00	0	1.11E+02	1.11E+02	0	0	0	0	0	0
tscr_ini_TU0-1189_stab	Transcription initiation of TU0-1189 (stable RNA) (rrsHp1, no_common_name_3068)	1 RNAP_70 + 1 TU0-1189_DNA_act + 7 atp + 4 gtp + 5 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-1189_cplx	reversible	Transcription	0.00E+00	9.54E+00	0	1.11E+02	1.11E+02	0	9.54E+00	9.54	0	9.54E+00	9.54
tscr_ini_TU0-1190_stab	Transcription initiation of TU0-1190 (stable RNA) (rrsHp2, no_common_name_3067)	1 RNAP_70 + 1 TU0-1190_DNA_act + 7 atp + 4 gtp + 5 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-1190_cplx	reversible	Transcription	0.00E+00	0.00E+00	0	1.11E+02	1.11E+02	0	0	0	0	0	0
tscr_ini_TU0-1191_stab	Transcription initiation of TU0-1191 (stable RNA) (rrnDp1, no_common_name_3066)	1 RNAP_70 + 1 TU0-1191_DNA_act + 7 atp + 4 gtp + 5 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-1191_cplx	reversible	Transcription	0.00E+00	1.15E+01	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
tscr_ini_TU0-1192_stab	Transcription initiation of TU0-1192 (stable RNA) (rrnDp2, no_common_name_3065)	1 RNAP_70 + 1 TU0-1192_DNA_act + 7 atp + 4 gtp + 5 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-1192_cplx	reversible	Transcription	0.00E+00	0.00E+00	0	1.06E+02	1.06E+02	0	0	0	0	0	0
tscr_ini_TU0-12803	Transcription initiation of TU0-12803 (, no_common_name_3037)	1 RNAP_70 + 1 TU0-12803_DNA_act + 3 atp + 4 ctp + 2 gtp + 7 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-12803_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.42E+01	3.42E+01	0	6.04E+01	60.36359	0	1.86E-01	0.186
tscr_ini_TU0-12827	Transcription initiation of TU0-12827 (, no_common_name_3012)	1 RNAP_70 + 1 TU0-12827_DNA_act + 5 atp + 4 ctp + 2 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-12827_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.75E+01	2.75E+01	0	4.86E+01	48.6031	0	2.07E-01	0.207
tscr_ini_TU0-12830	Transcription initiation of TU0-12830	1 RNAP_70 + 1 TU0-12830_DNA_act + 5 atp + 2 ctp + 4 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-12830_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.46E+02	2.46E+02	0	4.34E+02	433.6892	0	3.99E-01	0.399
tscr_ini_TU0-12833	Transcription initiation of TU0-12833	1 RNAP_70 + 1 TU0-12833_DNA_act + 5 atp + 6 ctp + 2 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-12833_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.48E+01	9.48E+01	0	1.67E+02	167.2985	0	1.66E-01	0.166
tscr_ini_TU0-12921	Transcription initiation of TU0-12921 (, no_common_name_2917)	1 RNAP_70 + 1 TU0-12921_DNA_act + 3 atp + 5 ctp + 2 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-12921_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.96E+01	4.96E+01	0	8.75E+01	87.54595	0	9.13E-02	0.0913
tscr_ini_TU0-12928	Transcription initiation of TU0-12928	1 RNAP_70 + 1 TU0-12928_DNA_act + 4 atp + 2 ctp + 4 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-12928_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	3.08E-01	0.308
tscr_ini_TU0-13010	Transcription initiation of TU0-13010 (, no_common_name_2829)	1 RNAP_70 + 1 TU0-13010_DNA_act + 7 atp + 4 ctp + 3 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13010_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.29E+01	2.29E+01	0	4.04E+01	40.38653	0	1.46E-01	0.146

tscr_ini_TU0-13018	Transcription initiation of TU0-13018	1 RNAP_70 + 1 TU0-13018_DNA_act + 8 atp + 5 ctp + 1 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13018_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.54E+01	8.54E+01	0	1.51E+02	150.7476	0	1.92E-01	0.192
tscr_ini_TU0-13020	Transcription initiation of TU0-13020	1 RNAP_70 + 1 TU0-13020_DNA_act + 6 atp + 1 ctp + 7 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13020_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.55E+01	7.55E+01	0	1.33E+02	133.2851	0	4.14E-01	0.414
tscr_ini_TU0-13034_stab	Transcription initiation of TU0-13034 (stable RNA) (, no_common_name_2805)	1 RNAP_70 + 1 TU0-13034_DNA_act + 3 atp + 3 ctp + 6 gtp + 4 utp > 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13034_cplx	reversible	Transcription	0.00E+00	7.51E+00	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
tscr_ini_TU0-13035_stab	Transcription initiation of TU0-13035 (stable RNA) (, no_common_name_2804)	1 RNAP_70 + 1 TU0-13035_DNA_act + 2 atp + 3 ctp + 6 gtp + 5 utp > 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13035_cplx	reversible	Transcription	0.00E+00	7.51E+00	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
tscr_ini_TU0-13036_stab	Transcription initiation of TU0-13036 (stable RNA) (, no_common_name_2803)	1 RNAP_70 + 1 TU0-13036_DNA_act + 2 atp + 3 ctp + 6 gtp + 5 utp > 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13036_cplx	reversible	Transcription	0.00E+00	7.51E+00	0	1.77E+03	1.77E+03	0	7.51E+00	7.51	0	7.51E+00	7.51
tscr_ini_TU0-13072	Transcription initiation of TU0-13072 (, no_common_name_2767)	1 RNAP_70 + 1 TU0-13072_DNA_act + 7 atp + 2 ctp + 5 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13072_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.59E+01	7.59E+01	0	1.34E+02	133.9183	0	1.04E-01	0.104
tscr_ini_TU0-13080	Transcription initiation of TU0-13080	1 RNAP_70 + 1 TU0-13080_DNA_act + 4 atp + 6 ctp + 2 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13080_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.98E+01	9.98E+01	0	1.76E+02	176.1862	0	8.29E-01	0.829
tscr_ini_TU0-13093	Transcription initiation of TU0-13093	1 RNAP_70 + 1 TU0-13093_DNA_act + 2 atp + 3 ctp + 6 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13093_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.10E+01	9.10E+01	0	1.61E+02	160.6256	0	6.34E-01	0.634
tscr_ini_TU0-13104	Transcription initiation of TU0-13104	1 RNAP_70 + 1 TU0-13104_DNA_act + 4 atp + 3 ctp + 4 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13104_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.99E+02	4.99E+02	0	8.81E+02	880.9312	0	1.54E-01	0.154
tscr_ini_TU0-13134	Transcription initiation of TU0-13134	1 RNAP_70 + 1 TU0-13134_DNA_act + 8 atp + 3 ctp + 3 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13134_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.51E+02	1.51E+02	0	2.66E+02	265.9415	0	2.07E-01	0.207
tscr_ini_TU0-13139	Transcription initiation of TU0-13139	1 RNAP_70 + 1 TU0-13139_DNA_act + 6 atp + 4 ctp + 2 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13139_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
tscr_ini_TU0-13145	Transcription initiation of TU0-13145 (, no_common_name_2694)	1 RNAP_70 + 1 TU0-13145_DNA_act + 6 atp + 3 ctp + 3 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13145_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	2.00E+02	199.9276	0	1.28E-01	0.128
tscr_ini_TU0-13195	Transcription initiation of TU0-13195	1 RNAP_70 + 1 TU0-13195_DNA_act + 7 atp + 3 ctp + 4 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13195_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.56E+02	1.56E+02	0	2.75E+02	275.0224	0	2.45E-01	0.245
tscr_ini_TU0-13225	Transcription initiation of TU0-13225	1 RNAP_70 + 1 TU0-13225_DNA_act + 9 atp + 3 ctp + 2 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13225_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.53E+02	1.53E+02	0	2.70E+02	269.7588	0	1.89E-01	0.189
tscr_ini_TU0-13421	Transcription initiation of TU0-13421	1 RNAP_70 + 1 TU0-13421_DNA_act + 1 atp + 4 ctp + 2 gtp + 9 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13421_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.62E+02	1.62E+02	0	2.86E+02	286.1908	0	7.98E-02	0.0798
tscr_ini_TU0-13443	Transcription initiation of TU0-13443 (, no_common_name_2396)	1 RNAP_70 + 1 TU0-13443_DNA_act + 3 atp + 3 ctp + 6 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13443_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	1.58E-01	0.158
tscr_ini_TU0-13444	Transcription initiation of TU0-13444	1 RNAP_70 + 1 TU0-13444_DNA_act + 4 atp + 3 ctp + 4 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13444_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.32E+01	7.32E+01	0	1.29E+02	129.311	0	3.26E-01	0.326
tscr_ini_TU0-13519	Transcription initiation of TU0-13519	1 RNAP_70 + 1 TU0-13519_DNA_act + 5 atp + 4 ctp + 4 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13519_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.98E+01	5.98E+01	0	1.06E+02	105.5798	0	5.13E-01	0.513
tscr_ini_TU0-13534	Transcription initiation of TU0-13534	1 RNAP_70 + 1 TU0-13534_DNA_act + 2 atp + 2 ctp + 6 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13534_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	1.83E-01	0.183
tscr_ini_TU0-13555	Transcription initiation of TU0-13555	1 RNAP_70 + 1 TU0-13555_DNA_act + 6 atp + 2 ctp + 3 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13555_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.78E+02	1.78E+02	0	3.15E+02	314.9698	0	1.86E-01	0.186
tscr_ini_TU0-13557	Transcription initiation of TU0-13557	1 RNAP_70 + 1 TU0-13557_DNA_act + 5 atp + 3 ctp + 2 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13557_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	3.50E-01	0.35
tscr_ini_TU0-13573	Transcription initiation of TU0-13573	1 RNAP_70 + 1 TU0-13573_DNA_act + 5 atp + 2 gtp + 9 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13573_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.37E+02	1.37E+02	0	2.42E+02	241.9725	0	1.71E-01	0.171
tscr_ini_TU0-13593	Transcription initiation of TU0-13593 (, no_common_name_2246)	1 RNAP_70 + 1 TU0-13593_DNA_act + 5 atp + 1 ctp + 4 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13593_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.70E+01	2.70E+01	0	4.77E+01	47.69847	0	8.76E-02	0.0876
tscr_ini_TU0-13667	Transcription initiation of TU0-13667 (, no_common_name_2172)	1 RNAP_70 + 1 TU0-13667_DNA_act + 4 atp + 5 ctp + 4 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13667_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	1.31E-01	0.131
tscr_ini_TU0-13675	Transcription initiation of TU0-13675 (, no_common_name_2164)	1 RNAP_70 + 1 TU0-13675_DNA_act + 6 atp + 4 ctp + 4 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13675_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
tscr_ini_TU0-13704_stab	Transcription initiation of TU0-13704 (stable RNA) (, no_common_name_2135)	1 RNAP_70 + 1 TU0-13704_DNA_act + 2 atp + 5 ctp + 4 gtp + 5 utp > 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13704_cplx	reversible	Transcription	0.00E+00	8.74E+00	0	1.52E+03	1.52E+03	0	8.74E+00	8.740001	0	8.74E+00	8.740001
tscr_ini_TU0-13717	Transcription initiation of TU0-13717	1 RNAP_70 + 1 TU0-13717_DNA_act + 6 atp + 4 ctp + 5 gtp + 1 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13717_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.01E+01	5.01E+01	0	8.85E+01	88.508	0	5.39E-01	0.539
tscr_ini_TU0-13734	Transcription initiation of TU0-13734 (, no_common_name_2105)	1 RNAP_70 + 1 TU0-13734_DNA_act + 8 atp + 3 ctp + 2 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13734_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.31E+01	4.31E+01	0	7.52E+01	75.1818	0	4.14E-01	0.414
tscr_ini_TU0-13735	Transcription initiation of TU0-13735	1 RNAP_70 + 1 TU0-13735_DNA_act + 4 atp + 4 ctp + 3 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13735_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.95E+01	9.95E+01	0	1.76E+02	175.6374	0	9.45E-02	0.0945
tscr_ini_TU0-13736	Transcription initiation of TU0-13736 (, no_common_name_2103)	1 RNAP_70 + 1 TU0-13736_DNA_act + 5 atp + 6 ctp + 2 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13736_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.27E+01	8.27E+01	0	1.46E+02	146.0611	0	1.89E-01	0.189
tscr_ini_TU0-13738	Transcription initiation of TU0-13738	1 RNAP_70 + 1 TU0-13738_DNA_act + 4 atp + 3 ctp + 2 gtp + 7 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13738_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.54E+02	1.54E+02	0	2.71E+02	271.0557	0	1.04E-01	0.104
tscr_ini_TU0-13805	Transcription initiation of TU0-13805 (, no_common_name_2034)	1 RNAP_70 + 1 TU0-13805_DNA_act + 3 atp + 7 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13805_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.46E+01	7.46E+01	0	1.32E+02	131.728	0	1.96E-01	0.196
tscr_ini_TU0-13809	Transcription initiation of TU0-13809 (, no_common_name_2030)	1 RNAP_70 + 1 TU0-13809_DNA_act + 8 atp + 3 ctp + 3 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13809_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.38E+02	1.38E+02	0	2.44E+02	244.0675	0	1.52E-01	0.152
tscr_ini_TU0-13915	Transcription initiation of TU0-13915 (, no_common_name_1924)	1 RNAP_70 + 1 TU0-13915_DNA_act + 2 atp + 4 ctp + 4 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13915_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.43E+01	7.43E+01	0	1.31E+02	131.1153	0	1.12E-01	0.112
tscr_ini_TU0-13931	Transcription initiation of TU0-13931	1 RNAP_70 + 1 TU0-13931_DNA_act + 5 atp + 5 ctp + 4 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-13931_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.90E+02	2.90E+02	0	5.13E+02	512.5418	0	9.45E-02	0.0945
tscr_ini_TU0-14007_stab	Transcription initiation of TU0-14007 (stable RNA) (, no_common_name_1831)	1 RNAP_70 + 1 TU0-14007_DNA_act + 3 atp + 4 ctp + 5 gtp + 4 utp > 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-14007_cplx	reversible	Transcription	0.00E+00	1.37E+01	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
tscr_ini_TU0-14021	Transcription initiation of TU0-14021	1 RNAP_70 + 1 TU0-14021_DNA_act + 7 atp + 2 ctp + 4 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-14021_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.73E+01	8.73E+01	0	1.54E+02	154.0426	0	2.63E-01	0.263
tscr_ini_TU0-14029	Transcription initiation of TU0-14029 (, no_common_name_1808)	1 RNAP_70 + 1 TU0-14029_DNA_act + 3 atp + 3 ctp + 3 gtp + 7 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-14029_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.48E+01	84.78135	0	2.07E-01	0.207

tscr_ini_TU0-14037	Transcription initiation of TU0-14037	1 RNAP_70 + 1 TU0-14037_DNA_act + 8 atp + 3 ctp + 2 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-14037_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.34E+01	9.34E+01	0	1.59E+02	159.0788	0	3.26E-01	0.326
tscr_ini_TU0-14038	Transcription initiation of TU0-14038 (, no_common_name_1799)	1 RNAP_70 + 1 TU0-14038_DNA_act + 7 atp + 2 ctp + 5 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-14038_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
tscr_ini_TU0-14070	Transcription initiation of TU0-14070 (, no_common_name_1767)	1 RNAP_70 + 1 TU0-14070_DNA_act + 3 atp + 3 ctp + 2 gtp + 8 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-14070_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.43E+01	4.43E+01	0	7.82E+01	78.19639	0	1.04E-01	0.104
tscr_ini_TU0-14100	Transcription initiation of TU0-14100	1 RNAP_70 + 1 TU0-14100_DNA_act + 8 atp + 1 ctp + 3 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-14100_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	1.84E+02	183.6469	0	1.51E+00	1.51
tscr_ini_TU0-14118	Transcription initiation of TU0-14118	1 RNAP_70 + 1 TU0-14118_DNA_act + 4 atp + 3 ctp + 4 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-14118_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.32E+02	1.32E+02	0	2.33E+02	232.9735	0	1.80E-01	0.18
tscr_ini_TU0-14151	Transcription initiation of TU0-14151	1 RNAP_70 + 1 TU0-14151_DNA_act + 7 atp + 2 ctp + 4 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-14151_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.40E+02	2.40E+02	0	4.24E+02	423.9067	0	1.42E-01	0.142
tscr_ini_TU0-14215	Transcription initiation of TU0-14215	1 RNAP_70 + 1 TU0-14215_DNA_act + 3 atp + 5 ctp + 2 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-14215_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.17E+02	1.17E+02	0	2.07E+02	207.2779	0	3.37E-01	0.337
tscr_ini_TU0-14216	Transcription initiation of TU0-14216 (, no_common_name_1620)	1 RNAP_70 + 1 TU0-14216_DNA_act + 5 atp + 5 ctp + 4 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-14216_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.75E+01	7.75E+01	0	1.37E+02	136.8437	0	9.29E-02	0.0929
tscr_ini_TU0-14217	Transcription initiation of TU0-14217	1 RNAP_70 + 1 TU0-14217_DNA_act + 2 atp + 4 ctp + 3 gtp + 7 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-14217_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.77E+01	7.77E+01	0	1.37E+02	137.1766	0	3.08E-01	0.308
tscr_ini_TU0-14252	Transcription initiation of TU0-14252	1 RNAP_70 + 1 TU0-14252_DNA_act + 4 atp + 2 ctp + 4 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-14252_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	3.08E-01	0.308
tscr_ini_TU0-1881	Transcription initiation of TU0-1881 (iscRp, no_common_name_1548)	1 RNAP_70 + 1 TU0-1881_DNA_act + 6 atp + 3 ctp + 3 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-1881_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.05E+01	5.05E+01	0	8.92E+01	89.20822	0	1.68E-01	0.168
tscr_ini_TU0-2081	Transcription initiation of TU0-2081	1 RNAP_70 + 1 TU0-2081_DNA_act + 6 atp + 4 ctp + 2 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-2081_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
tscr_ini_TU0-2082	Transcription initiation of TU0-2082	1 RNAP_70 + 1 TU0-2082_DNA_act + 6 atp + 4 ctp + 2 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-2082_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.53E+01	3.53E+01	0	6.23E+01	62.29789	0	2.07E-01	0.207
tscr_ini_TU0-2101	Transcription initiation of TU0-2101 (ybjCp, no_common_name_1535)	1 RNAP_70 + 1 TU0-2101_DNA_act + 3 atp + 4 ctp + 6 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-2101_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.24E+01	5.24E+01	0	9.26E+01	92.57733	0	2.07E-01	0.207
tscr_ini_TU0-2121	Transcription initiation of TU0-2121 (rimKp, no_common_name_1534)	1 RNAP_70 + 1 TU0-2121_DNA_act + 6 atp + 2 ctp + 3 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-2121_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.07E-01	0.207
tscr_ini_TU0-3304	Transcription initiation of TU0-3304	1 RNAP_70 + 1 TU0-3304_DNA_act + 8 atp + 2 ctp + 4 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-3304_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.73E+02	2.73E+02	0	4.82E+02	481.8769	0	6.22E-01	0.622
tscr_ini_TU0-3305	Transcription initiation of TU0-3305	1 RNAP_70 + 1 TU0-3305_DNA_act + 8 atp + 2 ctp + 4 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-3305_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.73E+02	2.73E+02	0	4.82E+02	481.8769	0	6.22E-01	0.622
tscr_ini_TU0-3364_stab	Transcription initiation of TU0-3364 (stable RNA) (rrsBp2, no_common_name_1483)	1 RNAP_54 + 1 TU0-3364_DNA_act + 7 atp + 4 gtp + 5 utp --> 1 RpoN_mono_inact + 15 ppi + 1 transcr_ini_TU0-3364_cplx	reversible	Transcription	0.00E+00	0.00E+00	0	1.11E+02	1.11E+02	0	0	0	0	0	0
tscr_ini_TU0-3561_stab	Transcription initiation of TU0-3561 (stable RNA) (asnWp, no_common_name_1467)	1 RNAP_70 + 1 TU0-3561_DNA_act + 2 atp + 4 ctp + 3 gtp + 7 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-3561_cplx	reversible	Transcription	0.00E+00	6.40E+00	0	1.77E+03	1.77E+03	0	6.40E+00	6.4	0	6.40E+00	6.4
tscr_ini_TU0-3901	Transcription initiation of TU0-3901	1 RNAP_70 + 1 TU0-3901_DNA_act + 6 atp + 4 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-3901_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.09E+02	1.09E+02	0	8.29E+01	82.88	0	3.10E+00	3.1
tscr_ini_TU0-4925	Transcription initiation of TU0-4925	1 RNAP_70 + 1 TU0-4925_DNA_act + 8 atp + 1 ctp + 3 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-4925_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	1.84E+02	183.6469	0	1.51E+00	1.51
tscr_ini_TU0-5003	Transcription initiation of TU0-5003	1 RNAP_54 + 1 TU0-5003_DNA_act + 5 atp + 3 ctp + 2 gtp + 6 utp <==> 1 RpoN_mono_inact + 15 ppi + 1 transcr_ini_TU0-5003_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.32E+02	5.32E+02	0	9.40E+02	939.6599	0	6.22E-01	0.622
tscr_ini_TU0-5121	Transcription initiation of TU0-5121 (fusAp, no_common_name_1357)	1 RNAP_70 + 1 TU0-5121_DNA_act + 5 atp + 5 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-5121_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.82E+01	3.82E+01	0	6.74E+01	67.35913	0	7.58E-01	0.758
tscr_ini_TU0-5182	Transcription initiation of TU0-5182 (pdxBp, no_common_name_1354)	1 RNAP_70 + 1 TU0-5182_DNA_act + 4 atp + 2 ctp + 4 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-5182_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.50E+01	3.50E+01	0	6.18E+01	61.81973	0	9.45E-02	0.0945
tscr_ini_TU0-5183	Transcription initiation of TU0-5183 (usgp, no_common_name_1353)	1 RNAP_70 + 1 TU0-5183_DNA_act + 4 atp + 2 ctp + 6 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-5183_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.99E+01	89.91961	0	9.45E-02	0.0945
tscr_ini_TU0-5186	Transcription initiation of TU0-5186 (rsmAp, no_common_name_1351)	1 RNAP_70 + 1 TU0-5186_DNA_act + 6 atp + 3 ctp + 3 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-5186_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.90E+01	5.90E+01	0	1.04E+02	104.2137	0	1.68E-01	0.168
tscr_ini_TU0-5201	Transcription initiation of TU0-5201 (pdxAp, no_common_name_1350)	1 RNAP_70 + 1 TU0-5201_DNA_act + 7 atp + 4 ctp + 2 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-5201_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.90E+01	3.90E+01	0	6.89E+01	68.92371	0	1.68E-01	0.168
tscr_ini_TU0-5221	Transcription initiation of TU0-5221 (pdxAp, no_common_name_1348)	1 RNAP_70 + 1 TU0-5221_DNA_act + 7 atp + 4 ctp + 2 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-5221_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.43E+01	6.43E+01	0	1.13E+02	113.4398	0	1.68E-01	0.168
tscr_ini_TU0-5522	Transcription initiation of TU0-5522 (yicRp, no_common_name_1339)	1 RNAP_70 + 1 TU0-5522_DNA_act + 8 atp + 3 ctp + 2 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-5522_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.30E+01	6.30E+01	0	7.71E+01	77.08692	0	1.04E-01	0.104
tscr_ini_TU0-5543	Transcription initiation of TU0-5543 (rpmBp, no_common_name_1337)	1 RNAP_70 + 1 TU0-5543_DNA_act + 2 atp + 6 ctp + 4 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-5543_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.85E+01	8.85E+01	0	8.29E+01	82.88	0	1.92E-01	0.192
tscr_ini_TU0-5601	Transcription initiation of TU0-5601 (yicRp, no_common_name_1329)	1 RNAP_70 + 1 TU0-5601_DNA_act + 8 atp + 3 ctp + 2 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-5601_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.92E+01	8.92E+01	0	8.29E+01	82.88	0	1.04E-01	0.104
tscr_ini_TU0-6223	Transcription initiation of TU0-6223 (metYp1, no_common_name_1307)	1 RNAP_70 + 1 TU0-6223_DNA_act + 2 atp + 4 ctp + 9 gtp + 1 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6223_cplx	reversible	Transcription	0.00E+00	1.10E+01	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
tscr_ini_TU0-6405	Transcription initiation of TU0-6405	1 RNAP_70 + 1 TU0-6405_DNA_act + 9 atp + 1 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6405_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.21E+01	4.21E+01	0	7.43E+01	74.28142	0	4.90E-01	0.49
tscr_ini_TU0-6409	Transcription initiation of TU0-6409	1 RNAP_70 + 1 TU0-6409_DNA_act + 9 atp + 3 ctp + 1 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6409_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
tscr_ini_TU0-6423	Transcription initiation of TU0-6423	1 RNAP_70 + 1 TU0-6423_DNA_act + 8 atp + 2 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6423_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.93E+02	2.93E+02	0	4.97E+02	496.5524	0	1.15E-01	0.115
tscr_ini_TU0-6441	Transcription initiation of TU0-6441	1 RNAP_70 + 1 TU0-6441_DNA_act + 6 atp + 4 ctp + 5 gtp + 1 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6441_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.01E+01	5.01E+01	0	8.85E+01	88.508	0	5.39E-01	0.539
tscr_ini_TU0-6504	Transcription initiation of TU0-6504	1 RNAP_70 + 1 TU0-6504_DNA_act + 6 atp + 1 ctp + 7 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6504_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.55E+01	7.55E+01	0	1.33E+02	133.2851	0	4.14E-01	0.414
tscr_ini_TU0-6506	Transcription initiation of TU0-6506	1 RNAP_38 + 1 TU0-6506_DNA_act + 7 atp + 3 ctp + 3 gtp + 3 utp <==> 1 RpoS_mono_inact + 15 ppi + 1 transcr_ini_TU0-6506_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	5.99E-01	0.599

tscr_ini_TU0-6512	Transcription initiation of TU0-6512 (rplKp, no_common_name_1269)	1 RNAP_70 + 1 TU0-6512_DNA_act + 7 atp + 2 ctp + 4 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6512_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.14E+01	1.14E+01	0	2.02E+01	20.15717	0	1.89E-01	0.189
tscr_ini_TU0-6550	Transcription initiation of TU0-6550	1 RNAP_70 + 1 TU0-6550_DNA_act + 9 atp + 3 ctp + 1 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6550_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
tscr_ini_TU0-6551	Transcription initiation of TU0-6551	1 RNAP_70 + 1 TU0-6551_DNA_act + 9 atp + 3 ctp + 1 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6551_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.02E+01	9.02E+01	0	1.59E+02	159.2644	0	5.77E-01	0.577
tscr_ini_TU0-6562	Transcription initiation of TU0-6562	1 RNAP_70 + 1 TU0-6562_DNA_act + 5 atp + 4 ctp + 3 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6562_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.21E+01	7.21E+01	0	1.27E+02	127.2677	0	2.07E-01	0.207
tscr_ini_TU0-6626	Transcription initiation of TU0-6626 (pheMp, no_common_name_1244)	1 RNAP_70 + 1 TU0-6626_DNA_act + 4 atp + 2 ctp + 3 gtp + 7 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6626_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.20E+01	3.20E+01	0	5.65E+01	56.54924	0	9.88E-02	0.0988
tscr_ini_TU0-6654	Transcription initiation of TU0-6654	1 RNAP_70 + 1 TU0-6654_DNA_act + 5 atp + 3 ctp + 6 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6654_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.71E+01	5.71E+01	0	1.00E+02	100.0923	0	6.46E-01	0.646
tscr_ini_TU0-6657	Transcription initiation of TU0-6657	1 RNAP_70 + 1 TU0-6657_DNA_act + 5 atp + 4 ctp + 4 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6657_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.05E+02	1.05E+02	0	8.29E+01	82.88	0	1.65E-01	0.165
tscr_ini_TU0-6658	Transcription initiation of TU0-6658	1 RNAP_70 + 1 TU0-6658_DNA_act + 7 atp + 3 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6658_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_ini_TU0-6660	Transcription initiation of TU0-6660 (rpsOp, no_common_name_1226)	1 RNAP_70 + 1 TU0-6660_DNA_act + 4 atp + 3 ctp + 3 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6660_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.77E+01	4.77E+01	0	7.03E+01	70.31333	0	4.81E-01	0.481
tscr_ini_TU0-6687	Transcription initiation of TU0-6687	1 RNAP_38 + 1 TU0-6687_DNA_act + 9 atp + 1 ctp + 3 gtp + 3 utp <==> 1 RpoS_mono_inact + 15 ppi + 1 transcr_ini_TU0-6687_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.21E+01	4.21E+01	0	7.43E+01	74.28142	0	4.90E-01	0.49
tscr_ini_TU0-6941	Transcription initiation of TU0-6941 (rhoLp, no_common_name_1208)	1 RNAP_70 + 1 TU0-6941_DNA_act + 7 atp + 2 ctp + 5 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-6941_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.68E+01	8.68E+01	0	1.53E+02	153.2054	0	2.07E-01	0.207
tscr_ini_TU0-7002	Transcription initiation of TU0-7002 (rpoBp, no_common_name_1201)	1 RNAP_70 + 1 TU0-7002_DNA_act + 4 atp + 3 ctp + 2 gtp + 7 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-7002_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.49E+01	1.49E+01	0	2.63E+01	26.30872	0	1.89E-01	0.189
tscr_ini_TU0-7141	Transcription initiation of TU0-7141 (bdmp, no_common_name_1194)	1 RNAP_70 + 1 TU0-7141_DNA_act + 4 atp + 2 ctp + 1 gtp + 9 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-7141_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.03E+02	1.03E+02	0	8.29E+01	82.88	0	1.89E-01	0.189
tscr_ini_TU0-7281	Transcription initiation of TU0-7281 (yrdDp, no_common_name_1183)	1 RNAP_70 + 1 TU0-7281_DNA_act + 6 atp + 4 ctp + 4 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-7281_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.27E+01	6.27E+01	0	1.11E+02	110.7654	0	1.22E-01	0.122
tscr_ini_TU0-7842	Transcription initiation of TU0-7842	1 RNAP_70 + 1 TU0-7842_DNA_act + 6 atp + 2 ctp + 2 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-7842_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	2.92E+00	2.92
tscr_ini_TU0-7844	Transcription initiation of TU0-7844	1 RNAP_70 + 1 TU0-7844_DNA_act + 6 atp + 2 ctp + 2 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-7844_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	2.92E+00	2.92
tscr_ini_TU0-8084	Transcription initiation of TU0-8084	1 RNAP_70 + 1 TU0-8084_DNA_act + 6 atp + 2 ctp + 3 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8084_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.08E+01	7.08E+01	0	1.25E+02	125.0102	0	1.04E-01	0.104
tscr_ini_TU0-8281	Transcription initiation of TU0-8281	1 RNAP_70 + 1 TU0-8281_DNA_act + 3 atp + 3 ctp + 4 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8281_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.28E+02	2.28E+02	0	4.03E+02	402.7114	0	3.11E-01	0.311
tscr_ini_TU0-8464	Transcription initiation of TU0-8464	1 RNAP_70 + 1 TU0-8464_DNA_act + 6 atp + 3 ctp + 2 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8464_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.61E+02	3.61E+02	0	3.32E+02	331.52	0	1.70E+00	1.7
tscr_ini_TU0-8474	Transcription initiation of TU0-8474	1 RNAP_70 + 1 TU0-8474_DNA_act + 4 atp + 3 ctp + 3 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8474_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.06E+02	1.06E+02	0	8.29E+01	82.88	0	4.81E-01	0.481
tscr_ini_TU0-8476_stab	Transcription initiation of TU0-8476 (stable RNA) (metYp2, no_common_name_1038)	1 RNAP_70 + 1 TU0-8476_DNA_act + 2 atp + 4 ctp + 9 gtp + 1 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8476_cplx	reversible	Transcription	0.00E+00	1.10E+01	0	1.23E+03	1.23E+03	0	11	11	0	11	11
tscr_ini_TU0-8477	Transcription initiation of TU0-8477	1 RNAP_70 + 1 TU0-8477_DNA_act + 7 atp + 3 ctp + 1 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8477_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.18E+01	9.18E+01	0	1.62E+02	162.0103	0	2.76E-01	0.276
tscr_ini_TU0-8502	Transcription initiation of TU0-8502 (nsrRp, no_common_name_1013)	1 RNAP_70 + 1 TU0-8502_DNA_act + 4 atp + 2 ctp + 5 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8502_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.36E+01	3.36E+01	0	5.93E+01	59.28454	0	1.18E-01	0.118
tscr_ini_TU0-8505	Transcription initiation of TU0-8505	1 RNAP_70 + 1 TU0-8505_DNA_act + 3 atp + 6 ctp + 3 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8505_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.54E+02	1.54E+02	0	2.71E+02	271.0557	0	1.71E-01	0.171
tscr_ini_TU0-8506	Transcription initiation of TU0-8506	1 RNAP_70 + 1 TU0-8506_DNA_act + 9 atp + 1 ctp + 2 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8506_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	3.72E-01	0.372
tscr_ini_TU0-8510	Transcription initiation of TU0-8510	1 RNAP_70 + 1 TU0-8510_DNA_act + 3 atp + 4 ctp + 2 gtp + 7 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8510_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.77E+02	4.77E+02	0	8.41E+02	841.4865	0	2.00E-01	0.2
tscr_ini_TU0-8529	Transcription initiation of TU0-8529	1 RNAP_70 + 1 TU0-8529_DNA_act + 6 atp + 1 ctp + 2 gtp + 7 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8529_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.92E+01	8.92E+01	0	1.57E+02	157.4849	0	1.86E-01	0.186
tscr_ini_TU0-8823	Transcription initiation of TU0-8823	1 RNAP_70 + 1 TU0-8823_DNA_act + 6 atp + 5 ctp + 2 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8823_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.65E+01	6.65E+01	0	1.17E+02	117.4575	0	1.17E-01	0.117
tscr_ini_TU0-8855	Transcription initiation of TU0-8855 (rplTp, no_common_name_685)	1 RNAP_70 + 1 TU0-8855_DNA_act + 5 atp + 4 ctp + 4 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8855_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.02E+02	1.02E+02	0	8.29E+01	82.88	0	9.88E-02	0.0988
tscr_ini_TU0-8862	Transcription initiation of TU0-8862	1 RNAP_70 + 1 TU0-8862_DNA_act + 5 atp + 5 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8862_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.30E+02	1.30E+02	0	2.30E+02	230.1208	0	1.89E-01	0.189
tscr_ini_TU0-8864	Transcription initiation of TU0-8864 (pdxHp, no_common_name_681)	1 RNAP_70 + 1 TU0-8864_DNA_act + 5 atp + 3 ctp + 4 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8864_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.46E+01	4.46E+01	0	7.87E+01	78.74245	0	1.04E-01	0.104
tscr_ini_TU0-8865	Transcription initiation of TU0-8865 (tyrSp, no_common_name_680)	1 RNAP_70 + 1 TU0-8865_DNA_act + 6 atp + 3 ctp + 4 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU0-8865_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.09E+01	6.09E+01	0	1.08E+02	107.5946	0	2.24E-01	0.224
tscr_ini_TU00021	Transcription initiation of TU00021 (dusBp, no_common_name_644)	1 RNAP_70 + 1 TU00021_DNA_act + 5 atp + 4 ctp + 4 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00021_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.02E+02	1.02E+02	0	1.80E+02	180.1265	0	1.28E-01	0.128
tscr_ini_TU00083	Transcription initiation of TU00083	1 RNAP_70 + 1 TU00083_DNA_act + 7 atp + 3 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00083_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_ini_TU00084	Transcription initiation of TU00084	1 RNAP_70 + 1 TU00084_DNA_act + 7 atp + 3 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00084_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_ini_TU00221	Transcription initiation of TU00221	1 RNAP_70 + 1 TU00221_DNA_act + 8 atp + 2 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00221_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.39E+01	9.39E+01	0	1.66E+02	165.8223	0	2.07E-01	0.207
tscr_ini_TU00236	Transcription initiation of TU00236 (yjeFp1, no_common_name_432)	1 RNAP_70 + 1 TU00236_DNA_act + 7 atp + 4 ctp + 3 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00236_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
tscr_ini_TU00258	Transcription initiation of TU00258 (defp, no_common_name_410)	1 RNAP_70 + 1 TU00258_DNA_act + 4 atp + 2 ctp + 4 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00258_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.07E+01	9.07E+01	0	1.60E+02	160.1693	0	2.84E-01	0.284

tscr_ini_TU00260	Transcription initiation of TU00260 (dnaKp1, no_common_name_408)	1 RNAP_32 + 1 TU00260_DNA_act + 7 atp + 4 gtp + 5 utp <==> 1 RpoH_mono_inact + 15 ppi + 1 transcr_ini_TU00260_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
tscr_ini_TU00277	Transcription initiation of TU00277 (rrmJp1, no_common_name_392)	1 RNAP_70 + 1 TU00277_DNA_act + 7 atp + 2 ctp + 5 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00277_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
tscr_ini_TU00281	Transcription initiation of TU00281 (glyQp, no_common_name_388)	1 RNAP_70 + 1 TU00281_DNA_act + 7 atp + 1 ctp + 3 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00281_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.02E+01	4.02E+01	0	7.10E+01	71.00705	0	2.07E-01	0.207
tscr_ini_TU00291	Transcription initiation of TU00291 (ribFp, no_common_name_379)	1 RNAP_70 + 1 TU00291_DNA_act + 5 atp + 3 ctp + 5 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00291_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.14E+01	2.14E+01	0	3.78E+01	37.83865	0	9.45E-02	0.0945
tscr_ini_TU00304	Transcription initiation of TU00304 (mreBp, no_common_name_367)	1 RNAP_70 + 1 TU00304_DNA_act + 7 atp + 1 ctp + 2 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00304_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.76E+01	2.76E+01	0	4.87E+01	48.68704	0	1.04E-01	0.104
tscr_ini_TU00309	Transcription initiation of TU00309 (nlpDp1, no_common_name_362)	1 RNAP_70 + 1 TU00309_DNA_act + 4 atp + 4 ctp + 7 gtp + 1 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00309_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
tscr_ini_TU00311	Transcription initiation of TU00311 (yhbCp, no_common_name_360)	1 RNAP_70 + 1 TU00311_DNA_act + 4 atp + 4 ctp + 3 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00311_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.88E+01	2.88E+01	0	5.08E+01	50.83823	0	1.50E-01	0.15
tscr_ini_TU00314	Transcription initiation of TU00314 (yhdTp, no_common_name_357)	1 RNAP_70 + 1 TU00314_DNA_act + 3 atp + 3 ctp + 4 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00314_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.88E+01	4.88E+01	0	8.61E+01	86.07572	0	1.96E-01	0.196
tscr_ini_TU00324	Transcription initiation of TU00324 (prfBp, no_common_name_349)	1 RNAP_70 + 1 TU00324_DNA_act + 6 atp + 1 ctp + 2 gtp + 7 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00324_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.70E+01	4.70E+01	0	8.30E+01	83.03328	0	2.91E-01	0.291
tscr_ini_TU00332	Transcription initiation of TU00332 (rncp, no_common_name_342)	1 RNAP_70 + 1 TU00332_DNA_act + 6 atp + 5 ctp + 2 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00332_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.19E+01	8.19E+01	0	1.45E+02	144.5631	0	1.35E-01	0.135
tscr_ini_TU00333	Transcription initiation of TU00333 (rntp, no_common_name_341)	1 RNAP_70 + 1 TU00333_DNA_act + 4 atp + 5 ctp + 3 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00333_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.14E+01	2.14E+01	0	3.79E+01	37.86407	0	1.71E-01	0.171
tscr_ini_TU00335	Transcription initiation of TU00335 (rplJp, no_common_name_339)	1 RNAP_70 + 1 TU00335_DNA_act + 4 atp + 3 ctp + 2 gtp + 7 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00335_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.32E+01	1.32E+01	0	2.33E+01	23.27811	0	1.89E-01	0.189
tscr_ini_TU00336	Transcription initiation of TU00336 (rplMp, no_common_name_338)	1 RNAP_70 + 1 TU00336_DNA_act + 7 atp + 2 ctp + 2 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00336_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.48E+01	9.48E+01	0	8.29E+01	82.88	0	4.68E-01	0.468
tscr_ini_TU00337	Transcription initiation of TU00337 (rplNp, no_common_name_337)	1 RNAP_70 + 1 TU00337_DNA_act + 8 atp + 3 ctp + 3 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00337_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.46E+01	2.46E+01	0	4.34E+01	43.43574	0	1.46E-01	0.146
tscr_ini_TU00338	Transcription initiation of TU00338 (rplUp, no_common_name_336)	1 RNAP_70 + 1 TU00338_DNA_act + 2 atp + 4 ctp + 4 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00338_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.01E+02	1.01E+02	0	8.29E+01	82.88	0	5.39E-01	0.539
tscr_ini_TU00339	Transcription initiation of TU00339 (rpmBp, no_common_name_335)	1 RNAP_70 + 1 TU00339_DNA_act + 2 atp + 6 ctp + 4 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00339_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.04E+02	1.04E+02	0	8.29E+01	82.88	0	6.41E-01	0.641
tscr_ini_TU00340	Transcription initiation of TU00340 (rpmHp1, no_common_name_334)	1 RNAP_70 + 1 TU00340_DNA_act + 5 atp + 4 ctp + 2 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00340_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
tscr_ini_TU00342	Transcription initiation of TU00342 (rpoEp2, no_common_name_333)	1 RNAP_70 + 1 TU00342_DNA_act + 6 atp + 2 ctp + 5 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00342_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
tscr_ini_TU00343	Transcription initiation of TU00343	1 RNAP_70 + 1 TU00343_DNA_act + 5 atp + 2 ctp + 5 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00343_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.36E+01	8.36E+01	0	1.48E+02	147.5906	0	2.07E-01	0.207
tscr_ini_TU00344	Transcription initiation of TU00344 (rpoZp, no_common_name_331)	1 RNAP_70 + 1 TU00344_DNA_act + 4 atp + 4 ctp + 5 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00344_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.25E+01	2.25E+01	0	3.96E+01	39.6481	0	1.92E-01	0.192
tscr_ini_TU00345	Transcription initiation of TU00345 (rpsBp, no_common_name_330)	1 RNAP_70 + 1 TU00345_DNA_act + 4 atp + 4 ctp + 3 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00345_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	7.50E+01	7.50E+01	0	8.09E+01	80.94127	0	5.18E-01	0.518
tscr_ini_TU00346	Transcription initiation of TU00346 (rpsFp, no_common_name_329)	1 RNAP_70 + 1 TU00346_DNA_act + 6 atp + 3 ctp + 3 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00346_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.54E+01	8.54E+01	0	8.29E+01	82.88	0	2.89E-01	0.289
tscr_ini_TU00347	Transcription initiation of TU00347 (rpsJp, no_common_name_328)	1 RNAP_38 + 1 TU00347_DNA_act + 9 atp + 3 ctp + 3 gtp + 1 utp <==> 1 RpoS_mono_inact + 15 ppi + 1 transcr_ini_TU00347_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.69E+01	2.69E+01	0	4.75E+01	47.45757	0	1.72E-01	0.172
tscr_ini_TU00348	Transcription initiation of TU00348 (rpsLp, no_common_name_327)	1 RNAP_70 + 1 TU00348_DNA_act + 6 atp + 4 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00348_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.93E+01	2.93E+01	0	5.17E+01	51.7244	0	5.67E-01	0.567
tscr_ini_TU00349	Transcription initiation of TU00349 (rpsMp, no_common_name_326)	1 RNAP_70 + 1 TU00349_DNA_act + 3 atp + 4 ctp + 6 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00349_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.61E+01	4.61E+01	0	6.94E+01	69.42961	0	4.02E-01	0.402
tscr_ini_TU00351	Transcription initiation of TU00351 (rpsPp, no_common_name_325)	1 RNAP_70 + 1 TU00351_DNA_act + 4 atp + 2 ctp + 3 gtp + 7 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00351_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.90E+01	6.90E+01	0	7.91E+01	79.13389	0	2.79E-01	0.279
tscr_ini_TU00352	Transcription initiation of TU00352 (rpsUp1, no_common_name_324)	1 RNAP_70 + 1 TU00352_DNA_act + 6 atp + 2 ctp + 4 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00352_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
tscr_ini_TU00354	Transcription initiation of TU00354 (secEp, no_common_name_322)	1 RNAP_70 + 1 TU00354_DNA_act + 5 atp + 3 ctp + 5 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00354_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.49E+02	1.49E+02	0	2.63E+02	263.456	0	2.39E-01	0.239
tscr_ini_TU00355	Transcription initiation of TU00355 (selAp, no_common_name_321)	1 RNAP_70 + 1 TU00355_DNA_act + 7 atp + 5 ctp + 3 gtp + 1 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00355_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.70E+01	3.70E+01	0	1.37E+01	13.7	0	1.86E-01	0.186
tscr_ini_TU00362	Transcription initiation of TU00362 (surAp, no_common_name_314)	1 RNAP_70 + 1 TU00362_DNA_act + 9 atp + 1 ctp + 4 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00362_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.75E+01	2.75E+01	0	4.85E+01	48.51944	0	1.68E-01	0.168
tscr_ini_TU00366	Transcription initiation of TU00366 (thrSp, no_common_name_310)	1 RNAP_70 + 1 TU00366_DNA_act + 4 atp + 4 ctp + 2 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00366_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.35E+01	4.35E+01	0	6.79E+01	67.90817	0	1.65E-01	0.165
tscr_ini_TU00411	Transcription initiation of TU00411	1 RNAP_32 + 1 TU00411_DNA_act + 8 atp + 1 ctp + 4 gtp + 3 utp <==> 1 RpoH_mono_inact + 15 ppi + 1 transcr_ini_TU00411_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.64E+02	2.64E+02	0	4.66E+02	465.9471	0	2.87E-01	0.287
tscr_ini_TU00414	Transcription initiation of TU00414 (rrmJp2, no_common_name_264)	1 RNAP_32 + 1 TU00414_DNA_act + 7 atp + 2 ctp + 5 gtp + 2 utp <==> 1 RpoH_mono_inact + 15 ppi + 1 transcr_ini_TU00414_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.09E+01	5.09E+01	0	8.98E+01	89.77642	0	2.45E-01	0.245
tscr_ini_TU00415	Transcription initiation of TU00415 (fliAp1, no_common_name_263)	1 RNAP_70 + 1 TU00415_DNA_act + 5 atp + 3 ctp + 2 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00415_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
tscr_ini_TU00417	Transcription initiation of TU00417 (dnaKp2, no_common_name_261)	1 RNAP_32 + 1 TU00417_DNA_act + 7 atp + 4 gtp + 5 utp <==> 1 RpoH_mono_inact + 15 ppi + 1 transcr_ini_TU00417_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
tscr_ini_TU00418	Transcription initiation of TU00418 (dnaKp3, no_common_name_260)	1 RNAP_32 + 1 TU00418_DNA_act + 7 atp + 4 gtp + 5 utp <==> 1 RpoH_mono_inact + 15 ppi + 1 transcr_ini_TU00418_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.13E+01	4.13E+01	0	7.28E+01	72.84185	0	4.31E-01	0.431
tscr_ini_TU00426	Transcription initiation of TU00426	1 RNAP_70 + 1 TU00426_DNA_act + 7 atp + 3 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00426_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_ini_TU00427	Transcription initiation of TU00427	1 RNAP_38 + 1 TU00427_DNA_act + 7 atp + 3 ctp + 3 gtp + 3 utp <==> 1 RpoS_mono_inact + 15 ppi + 1 transcr_ini_TU00427_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299

tscr_ini_TU00429	Transcription initiation of TU00429	1 RNAP_70 + 1 TU00429_DNA_act + 8 atp + 2 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00429_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.39E+01	9.39E+01	0	1.66E+02	165.8223	0	2.07E-01	0.207
tscr_ini_TU00430	Transcription initiation of TU00430	1 RNAP_70 + 1 TU00430_DNA_act + 5 atp + 8 ctp + 2 gtp + 1 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00430_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.19E+02	1.19E+02	0	2.10E+02	209.5896	0	9.79E-02	0.0979
tscr_ini_TU00434	Transcription initiation of TU00434 (rpsUp2, no_common_name_244)	1 RNAP_70 + 1 TU00434_DNA_act + 6 atp + 2 ctp + 4 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00434_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
tscr_ini_TU00435	Transcription initiation of TU00435 (rpsUp3, no_common_name_243)	1 RNAP_70 + 1 TU00435_DNA_act + 6 atp + 2 ctp + 4 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00435_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.03E+01	3.03E+01	0	5.34E+01	53.44037	0	2.45E-01	0.245
tscr_ini_TU00436	Transcription initiation of TU00436	1 RNAP_32 + 1 TU00436_DNA_act + 6 atp + 5 ctp + 4 gtp + 1 utp <==> 1 RpoH_mono_inact + 15 ppi + 1 transcr_ini_TU00436_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
tscr_ini_TU00437	Transcription initiation of TU00437	1 RNAP_70 + 1 TU00437_DNA_act + 6 atp + 5 ctp + 4 gtp + 1 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00437_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
tscr_ini_TU00438	Transcription initiation of TU00438	1 RNAP_32 + 1 TU00438_DNA_act + 6 atp + 5 ctp + 4 gtp + 1 utp <==> 1 RpoH_mono_inact + 15 ppi + 1 transcr_ini_TU00438_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.70E+01	6.70E+01	0	1.18E+02	118.1962	0	3.99E-01	0.399
tscr_ini_TU00440	Transcription initiation of TU00440 (nlpDp2, no_common_name_238)	1 RNAP_70 + 1 TU00440_DNA_act + 4 atp + 4 ctp + 7 gtp + 1 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00440_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.83E+01	5.83E+01	0	1.03E+02	102.8825	0	2.31E-01	0.231
tscr_ini_TU00442	Transcription initiation of TU00442	1 RNAP_70 + 1 TU00442_DNA_act + 6 atp + 3 ctp + 4 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00442_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.42E+02	1.42E+02	0	2.51E+02	250.576	0	2.31E-01	0.231
tscr_ini_TU00460	Transcription initiation of TU00460 (feclp, no_common_name_220)	1 RNAP_70 + 1 TU00460_DNA_act + 3 atp + 6 ctp + 4 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00460_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tscr_ini_TU00471	Transcription initiation of TU00471 (fliAp2, no_common_name_210)	1 RNAP_70 + 1 TU00471_DNA_act + 5 atp + 3 ctp + 2 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00471_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.35E+01	6.35E+01	0	1.12E+02	112.0867	0	1.61E-01	0.161
tscr_ini_TU00472	Transcription initiation of TU00472	1 RNAP_70 + 1 TU00472_DNA_act + 6 atp + 2 ctp + 4 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00472_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.07E+02	1.07E+02	0	8.29E+01	82.88	0	2.19E+00	2.19
tscr_ini_TU00487	Transcription initiation of TU00487 (rpoNp, no_common_name_194)	1 RNAP_70 + 1 TU00487_DNA_act + 5 atp + 2 ctp + 5 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00487_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.52E+01	3.52E+01	0	6.22E+01	62.16052	0	2.07E-01	0.207
tscr_ini_TU00489_stab	Transcription initiation of TU00489 (stable RNA) (aspV, no_common_name_192)	1 RNAP_70 + 1 TU00489_DNA_act + 3 atp + 2 ctp + 7 gtp + 4 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00489_cplx	reversible	Transcription	0.00E+00	9.48E+00	0	1.45E+03	1.45E+03	0	9.48E+00	9.48	0	9.48E+00	9.48
tscr_ini_TU00490_stab	Transcription initiation of TU00490 (stable RNA) (thrWp, no_common_name_191)	1 RNAP_70 + 1 TU00490_DNA_act + 4 atp + 4 ctp + 4 gtp + 4 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00490_cplx	reversible	Transcription	0.00E+00	9.38E+00	0	1.77E+03	1.77E+03	0	9.38E+00	9.38	0	9.38E+00	9.38
tscr_ini_TU00491_stab	Transcription initiation of TU00491 (stable RNA) (argUp, no_common_name_190)	1 RNAP_70 + 1 TU00491_DNA_act + 2 atp + 6 ctp + 4 gtp + 4 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00491_cplx	reversible	Transcription	0.00E+00	8.24E+00	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
tscr_ini_TU00492_stab	Transcription initiation of TU00492 (stable RNA) (lysTp, no_common_name_189)	1 RNAP_70 + 1 TU00492_DNA_act + 2 atp + 3 ctp + 6 gtp + 5 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00492_cplx	reversible	Transcription	0.00E+00	7.52E+00	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
tscr_ini_TU00493_stab	Transcription initiation of TU00493 (stable RNA) (valVp, no_common_name_188)	1 RNAP_70 + 1 TU00493_DNA_act + 3 atp + 4 ctp + 4 gtp + 5 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00493_cplx	reversible	Transcription	0.00E+00	5.60E+00	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
tscr_ini_TU00494_stab	Transcription initiation of TU00494 (stable RNA) (proLp, no_common_name_187)	1 RNAP_70 + 1 TU00494_DNA_act + 3 atp + 6 ctp + 6 gtp + 1 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00494_cplx	reversible	Transcription	0.00E+00	7.06E+00	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
tscr_ini_TU00495_stab	Transcription initiation of TU00495 (stable RNA) (valUp, no_common_name_186)	1 RNAP_70 + 1 TU00495_DNA_act + 3 atp + 3 ctp + 6 gtp + 4 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00495_cplx	reversible	Transcription	0.00E+00	7.81E+00	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
tscr_ini_TU00496_stab	Transcription initiation of TU00496 (stable RNA) (metZp, no_common_name_185)	1 RNAP_70 + 1 TU00496_DNA_act + 2 atp + 4 ctp + 9 gtp + 1 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00496_cplx	reversible	Transcription	0.00E+00	9.37E+00	0	3.85E+02	3.85E+02	0	9.37E+00	9.37	0	9.37E+00	9.37
tscr_ini_TU00497_stab	Transcription initiation of TU00497 (stable RNA) (asnTp, no_common_name_184)	1 RNAP_70 + 1 TU00497_DNA_act + 2 atp + 4 ctp + 3 gtp + 7 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00497_cplx	reversible	Transcription	0.00E+00	6.36E+00	0	1.77E+03	1.77E+03	0	6.36E+00	6.36	0	6.36E+00	6.36
tscr_ini_TU00498_stab	Transcription initiation of TU00498 (stable RNA) (asnUp, no_common_name_183)	1 RNAP_70 + 1 TU00498_DNA_act + 2 atp + 4 ctp + 3 gtp + 7 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00498_cplx	reversible	Transcription	0.00E+00	6.41E+00	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
tscr_ini_TU00499_stab	Transcription initiation of TU00499 (stable RNA) (asnVp, no_common_name_182)	1 RNAP_70 + 1 TU00499_DNA_act + 2 atp + 4 ctp + 3 gtp + 7 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00499_cplx	reversible	Transcription	0.00E+00	6.41E+00	0	1.77E+03	1.77E+03	0	6.41E+00	6.41	0	6.41E+00	6.41
tscr_ini_TU00500_stab	Transcription initiation of TU00500 (stable RNA) (argWp, no_common_name_181)	1 RNAP_70 + 1 TU00500_DNA_act + 4 atp + 3 ctp + 2 gtp + 7 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00500_cplx	reversible	Transcription	0.00E+00	7.62E+00	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
tscr_ini_TU00501_stab	Transcription initiation of TU00501 (stable RNA) (pheVp, no_common_name_180)	1 RNAP_70 + 1 TU00501_DNA_act + 3 atp + 5 ctp + 5 gtp + 3 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00501_cplx	reversible	Transcription	0.00E+00	1.00E+01	0	1.52E+03	1.52E+03	0	10	10	0	10	10
tscr_ini_TU00502_stab	Transcription initiation of TU00502 (stable RNA) (ileXp, no_common_name_179)	1 RNAP_70 + 1 TU00502_DNA_act + 2 atp + 6 ctp + 4 gtp + 4 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00502_cplx	reversible	Transcription	0.00E+00	1.05E+01	0	1.45E+03	1.45E+03	0	1.05E+01	10.5	0	1.05E+01	10.5
tscr_ini_TU00503_stab	Transcription initiation of TU00503 (stable RNA) (argXp, no_common_name_178)	1 RNAP_70 + 1 TU00503_DNA_act + 2 atp + 7 ctp + 5 gtp + 2 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00503_cplx	reversible	Transcription	0.00E+00	1.39E+01	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
tscr_ini_TU00504_stab	Transcription initiation of TU00504 (stable RNA) (thrUp, no_common_name_177)	1 RNAP_70 + 1 TU00504_DNA_act + 3 atp + 5 ctp + 4 gtp + 4 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00504_cplx	reversible	Transcription	0.00E+00	1.28E+01	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
tscr_ini_TU00505_stab	Transcription initiation of TU00505 (stable RNA) (glyVp, no_common_name_176)	1 RNAP_70 + 1 TU00505_DNA_act + 4 atp + 3 ctp + 6 gtp + 3 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00505_cplx	reversible	Transcription	0.00E+00	1.17E+01	0	3.99E+02	3.99E+02	0	1.17E+01	11.7	0	1.17E+01	11.7
tscr_ini_TU00506_stab	Transcription initiation of TU00506 (stable RNA) (leuXp, no_common_name_175)	1 RNAP_70 + 1 TU00506_DNA_act + 5 atp + 3 ctp + 6 gtp + 2 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00506_cplx	reversible	Transcription	0.00E+00	1.12E+01	0	1.45E+03	1.45E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
tscr_ini_TU00507_stab	Transcription initiation of TU00507 (stable RNA) (metTp, no_common_name_174)	1 RNAP_70 + 1 TU00507_DNA_act + 3 atp + 4 ctp + 5 gtp + 4 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00507_cplx	reversible	Transcription	0.00E+00	7.79E+00	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
tscr_ini_TU00508_stab	Transcription initiation of TU00508 (stable RNA) (serWp, no_common_name_173)	1 RNAP_70 + 1 TU00508_DNA_act + 2 atp + 2 ctp + 8 gtp + 4 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00508_cplx	reversible	Transcription	0.00E+00	7.06E+00	0	1.33E+03	1.33E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
tscr_ini_TU00509_stab	Transcription initiation of TU00509 (stable RNA) (serTp, no_common_name_172)	1 RNAP_70 + 1 TU00509_DNA_act + 3 atp + 3 ctp + 8 gtp + 2 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00509_cplx	reversible	Transcription	0.00E+00	6.75E+00	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
tscr_ini_TU00510_stab	Transcription initiation of TU00510 (stable RNA) (serXp, no_common_name_171)	1 RNAP_70 + 1 TU00510_DNA_act + 2 atp + 2 ctp + 8 gtp + 4 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00510_cplx	reversible	Transcription	0.00E+00	6.56E+00	0	1.33E+03	1.33E+03	0	6.56E+00	6.56	0	6.56E+00	6.56
tscr_ini_TU00511	Transcription initiation of TU00511 (tyrTp, no_common_name_170)	1 RNAP_70 + 1 TU00511_DNA_act + 1 atp + 4 ctp + 8 gtp + 3 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00511_cplx	reversible	Transcription	0.00E+00	6.05E+00	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
tscr_ini_TU00512_stab	Transcription initiation of TU00512 (stable RNA) (glyWp, no_common_name_169)	1 RNAP_24 + 1 TU00512_DNA_act + 4 atp + 3 ctp + 6 gtp + 3 utp --> 1 RpoE_mono_inact + 15 ppi + 1 transcr_ini_TU00512_cplx	reversible	Transcription	0.00E+00	6.22E+00	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
tscr_ini_TU00513_stab	Transcription initiation of TU00513 (stable RNA) (serUp, no_common_name_168)	1 RNAP_70 + 1 TU00513_DNA_act + 4 atp + 3 ctp + 8 gtp + 1 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00513_cplx	reversible	Transcription	0.00E+00	6.36E+00	0	1.14E+03	1.14E+03	0	6.36E+00	6.36	0	6.36E+00	6.36

tscr_ini_TU00514_stab	Transcription initiation of TU00514 (stable RNA) (alaWp, no_common_name_167)	1 RNAP_70 + 1 TU00514_DNA_act + 3 atp + 4 ctp + 6 gtp + 3 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00514_cplx	reversible	Transcription	0.00E+00	7.80E+00	0	6.14E+02	6.14E+02	0	7.80E+00	7.8	0	7.80E+00	7.8
tscr_ini_TU00515_stab	Transcription initiation of TU00515 (stable RNA) (serVp, no_common_name_166)	1 RNAP_70 + 1 TU00515_DNA_act + 3 atp + 2 ctp + 9 gtp + 2 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00515_cplx	reversible	Transcription	0.00E+00	8.87E+00	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
tscr_ini_TU00516_stab	Transcription initiation of TU00516 (stable RNA) (glyUp, no_common_name_165)	1 RNAP_70 + 1 TU00516_DNA_act + 3 atp + 3 ctp + 6 gtp + 4 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00516_cplx	reversible	Transcription	0.00E+00	9.58E+00	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
tscr_ini_TU00517	Transcription initiation of TU00517 (metYp1, no_common_name_164)	1 RNAP_70 + 1 TU00517_DNA_act + 2 atp + 4 ctp + 9 gtp + 1 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00517_cplx	reversible	Transcription	0.00E+00	1.10E+01	0	2.72E+01	2.72E+01	0	4.80E+01	48.0235	0	1.50E-01	0.15
tscr_ini_TU00518_stab	Transcription initiation of TU00518 (stable RNA) (leuUp, no_common_name_163)	1 RNAP_70 + 1 TU00518_DNA_act + 3 atp + 2 ctp + 8 gtp + 3 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00518_cplx	reversible	Transcription	0.00E+00	1.10E+01	0	1.52E+03	1.52E+03	0	11	11	0	11	11
tscr_ini_TU00519_stab	Transcription initiation of TU00519 (stable RNA) (proKp, no_common_name_162)	1 RNAP_70 + 1 TU00519_DNA_act + 2 atp + 4 ctp + 7 gtp + 3 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00519_cplx	reversible	Transcription	0.00E+00	1.30E+01	0	1.52E+03	1.52E+03	0	13	13	0	13	13
tscr_ini_TU00520_stab	Transcription initiation of TU00520 (stable RNA) (pheUp, no_common_name_161)	1 RNAP_70 + 1 TU00520_DNA_act + 3 atp + 5 ctp + 5 gtp + 3 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00520_cplx	reversible	Transcription	0.00E+00	1.18E+01	0	1.52E+03	1.52E+03	0	1.18E+01	11.8	0	1.18E+01	11.8
tscr_ini_TU00521_stab	Transcription initiation of TU00521 (stable RNA) (leuQp, no_common_name_160)	1 RNAP_70 + 1 TU00521_DNA_act + 4 atp + 2 ctp + 8 gtp + 2 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU00521_cplx	reversible	Transcription	0.00E+00	1.07E+01	0	3.89E+02	3.89E+02	0	1.07E+01	10.7	0	1.07E+01	10.7
tscr_ini_TU221	Transcription initiation of TU221	1 RNAP_70 + 1 TU221_DNA_act + 7 atp + 3 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU221_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.47E+02	1.47E+02	0	2.60E+02	259.8138	0	2.99E-01	0.299
tscr_ini_TU281	Transcription initiation of TU281 (rpoEp1, no_common_name_129)	1 RNAP_70 + 1 TU281_DNA_act + 6 atp + 2 ctp + 5 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU281_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	4.80E+01	4.80E+01	0	8.47E+01	84.65405	0	2.99E-01	0.299
tscr_ini_TU341	Transcription initiation of TU341 (metYp2, no_common_name_123)	1 RNAP_70 + 1 TU341_DNA_act + 2 atp + 4 ctp + 9 gtp + 1 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU341_cplx	reversible	Transcription	0.00E+00	1.10E+01	0	1.43E+01	1.43E+01	0	2.52E+01	25.16946	0	1.46E-01	0.146
tscr_ini_TU343_stab	Transcription initiation of TU343 (stable RNA) (metYp1, no_common_name_122)	1 RNAP_70 + 1 TU343_DNA_act + 2 atp + 4 ctp + 9 gtp + 1 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU343_cplx	reversible	Transcription	0.00E+00	1.10E+01	0	1.23E+03	1.23E+03	0	11	11	0	11	11
tscr_ini_TU361	Transcription initiation of TU361 (cmkp, no_common_name_110)	1 RNAP_70 + 1 TU361_DNA_act + 4 atp + 5 ctp + 4 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU361_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.39E+01	5.39E+01	0	7.34E+01	73.37709	0	3.44E-01	0.344
tscr_ini_TU482	Transcription initiation of TU482 (garPp, no_common_name_92)	1 RNAP_70 + 1 TU482_DNA_act + 4 atp + 4 ctp + 4 gtp + 4 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU482_cplx	reversible	Transcription	0.00E+00	1.08E+01	0	2.80E+01	2.80E+01	0	4.94E+01	49.41244	0	4.99E-02	0.0499
tscr_ini_TU483	Transcription initiation of TU483 (rncp, no_common_name_91)	1 RNAP_70 + 1 TU483_DNA_act + 6 atp + 5 ctp + 2 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU483_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.70E+01	3.70E+01	0	6.53E+01	65.32977	0	1.06E-01	0.106
tscr_ini_TU543_stab	Transcription initiation of TU543 (stable RNA) (rnpBp, no_common_name_71)	1 RNAP_70 + 1 TU543_DNA_act + 6 atp + 4 ctp + 5 gtp + 1 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU543_cplx	reversible	Transcription	0.00E+00	1.08E+01	0	2.81E+02	2.81E+02	0	1.08E+01	10.8	0	1.08E+01	10.8
tscr_ini_TU564	Transcription initiation of TU564 (rpsAp1, no_common_name_66)	1 RNAP_70 + 1 TU564_DNA_act + 4 atp + 2 ctp + 3 gtp + 7 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU564_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
tscr_ini_TU565	Transcription initiation of TU565 (rpsAp3, no_common_name_65)	1 RNAP_70 + 1 TU565_DNA_act + 4 atp + 2 ctp + 3 gtp + 7 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU565_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.32E+01	6.32E+01	0	7.72E+01	77.17767	0	4.73E-01	0.473
tscr_ini_TU582	Transcription initiation of TU582	1 RNAP_70 + 1 TU582_DNA_act + 5 atp + 4 ctp + 3 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU582_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	4.90E-01	0.49
tscr_ini_TU583	Transcription initiation of TU583	1 RNAP_70 + 1 TU583_DNA_act + 5 atp + 4 ctp + 3 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU583_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	6.13E+01	6.13E+01	0	1.08E+02	108.2142	0	4.90E-01	0.49
tscr_ini_TU601	Transcription initiation of TU601 (yceDp1, no_common_name_56)	1 RNAP_70 + 1 TU601_DNA_act + 9 atp + 1 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU601_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
tscr_ini_TU602	Transcription initiation of TU602 (yceDp2, no_common_name_55)	1 RNAP_70 + 1 TU602_DNA_act + 9 atp + 1 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU602_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.68E+01	9.68E+01	0	8.29E+01	82.88	0	4.55E-01	0.455
tscr_ini_TU682	Transcription initiation of TU682 (rpmHp2, no_common_name_45)	1 RNAP_70 + 1 TU682_DNA_act + 5 atp + 4 ctp + 2 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU682_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
tscr_ini_TU743	Transcription initiation of TU743 (rpmHp3, no_common_name_35)	1 RNAP_70 + 1 TU743_DNA_act + 5 atp + 4 ctp + 2 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU743_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.23E+01	9.23E+01	0	5.24E+01	52.37149	0	3.26E-01	0.326
tscr_ini_TU801	Transcription initiation of TU801 (yjeFp2, no_common_name_19)	1 RNAP_70 + 1 TU801_DNA_act + 7 atp + 4 ctp + 3 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU801_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
tscr_ini_TU802	Transcription initiation of TU802 (yjeFp3, no_common_name_18)	1 RNAP_70 + 1 TU802_DNA_act + 7 atp + 4 ctp + 3 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU802_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.22E+01	1.22E+01	0	2.16E+01	21.56007	0	1.04E-01	0.104
tscr_ini_TU870	Transcription initiation of TU870 (tgtp, no_common_name_9)	1 RNAP_70 + 1 TU870_DNA_act + 6 atp + 1 ctp + 4 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU870_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	9.15E+01	9.15E+01	0	1.62E+02	161.5461	0	1.96E-01	0.196
tscr_ini_TU871	Transcription initiation of TU871	1 RNAP_70 + 1 TU871_DNA_act + 3 atp + 4 ctp + 4 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU871_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.12E+02	1.12E+02	0	1.98E+02	197.8231	0	3.39E-02	0.0339
tscr_ini_TU872	Transcription initiation of TU872 (aroKp1, no_common_name_7)	1 RNAP_70 + 1 TU872_DNA_act + 7 atp + 3 ctp + 5 gtp + 1 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU872_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
tscr_ini_TU873	Transcription initiation of TU873 (aroKp2, no_common_name_6)	1 RNAP_70 + 1 TU873_DNA_act + 7 atp + 3 ctp + 5 gtp + 1 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU873_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.01E+01	2.01E+01	0	3.56E+01	35.57072	0	1.04E-01	0.104
tscr_ini_TU874	Transcription initiation of TU874 (damXp, no_common_name_5)	1 RNAP_70 + 1 TU874_DNA_act + 7 atp + 2 ctp + 3 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU874_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	2.71E+01	2.71E+01	0	4.78E+01	47.81984	0	1.74E-01	0.174
tscr_ini_TU875	Transcription initiation of TU875 (damp1, no_common_name_4)	1 RNAP_70 + 1 TU875_DNA_act + 8 atp + 2 ctp + 4 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU875_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
tscr_ini_TU876	Transcription initiation of TU876 (damp2, no_common_name_3)	1 RNAP_70 + 1 TU876_DNA_act + 8 atp + 2 ctp + 4 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU876_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	3.98E+01	3.98E+01	0	7.02E+01	70.2112	0	1.74E-01	0.174
tscr_ini_TU877	Transcription initiation of TU877 (rpep, no_common_name_2)	1 RNAP_70 + 1 TU877_DNA_act + 7 atp + 1 ctp + 3 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_TU877_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	5.36E+01	5.36E+01	0	9.46E+01	94.59664	0	1.89E-01	0.189
tscr_ini_b0144	Transcription initiation of b0144	1 RNAP_70 + 2 atp + 1 b0144_DNA_act + 6 ctp + 2 gtp + 6 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_b0144_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.23E+02	1.23E+02	0	2.18E+02	217.6818	0	2.03E-01	0.203
tscr_ini_b0206_stab	Transcription initiation of b0206 (stable RNA) (, b0206)	1 RNAP_70 + 3 atp + 1 b0206_DNA_act + 2 ctp + 7 gtp + 4 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_b0206_cplx	reversible	Transcription	0.00E+00	9.52E+00	0	1.45E+03	1.45E+03	0	9.52E+00	9.52	0	9.52E+00	9.52
tscr_ini_b0503	Transcription initiation of b0503	1 RNAP_70 + 8 atp + 1 b0503_DNA_act + 3 ctp + 4 gtp + 1 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_b0503_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.17E+02	1.17E+02	0	2.07E+02	206.5187	0	1.36E-01	0.136
tscr_ini_b1133	Transcription initiation of b1133	1 RNAP_70 + 6 atp + 1 b1133_DNA_act + 4 ctp + 3 gtp + 3 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_b1133_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.13E+02	1.13E+02	0	1.99E+02	199.2212	0	2.07E-01	0.207

tscr_ini_b1211	Transcription initiation of b1211	1 RNAP_70 + 4 atp + 1 b1211_DNA_act + 4 ctp + 3 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_b1211_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.16E+02	1.16E+02	0	2.04E+02	204.2739	0	3.08E-01	0.308
tscr_ini_b1212	Transcription initiation of b1212	1 RNAP_70 + 7 atp + 1 b1212_DNA_act + 3 ctp + 2 gtp + 4 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_b1212_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.46E+02	1.46E+02	0	2.57E+02	257.4411	0	2.07E-01	0.207
tscr_ini_b1804	Transcription initiation of b1804	1 RNAP_70 + 7 atp + 1 b1804_DNA_act + 2 ctp + 2 gtp + 5 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_b1804_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.11E+02	1.11E+02	0	1.95E+02	195.0851	0	9.45E-02	0.0945
tscr_ini_b2745	Transcription initiation of b2745	1 RNAP_70 + 5 atp + 1 b2745_DNA_act + 4 gtp + 7 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_b2745_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.34E+02	1.34E+02	0	2.37E+02	236.8891	0	2.29E-01	0.229
tscr_ini_b3289	Transcription initiation of b3289	1 RNAP_70 + 10 atp + 1 b3289_DNA_act + 2 ctp + 2 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_b3289_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	1.01E+02	1.01E+02	0	1.78E+02	177.8536	0	3.17E-01	0.317
tscr_ini_b3760_stab	Transcription initiation of b3760 (stable RNA) (, b3760)	1 RNAP_70 + 3 atp + 1 b3760_DNA_act + 2 ctp + 7 gtp + 4 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_b3760_cplx	reversible	Transcription	0.00E+00	1.41E+01	0	1.45E+03	1.45E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
tscr_ini_b3761_stab	Transcription initiation of b3761 (stable RNA) (, b3761)	1 RNAP_70 + 4 atp + 1 b3761_DNA_act + 2 ctp + 6 gtp + 4 utp --> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_b3761_cplx	reversible	Transcription	0.00E+00	1.41E+01	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
tscr_ini_b4143	Transcription initiation of b4143	1 RNAP_70 + 6 atp + 1 b4143_DNA_act + 3 ctp + 5 gtp + 2 utp <==> 1 RpoD_mono_inact + 15 ppi + 1 transcr_ini_b4143_cplx	reversible	Transcription	-1.00E+09	1.00E+09	0	8.11E+01	8.11E+01	0	1.43E+02	143.0954	0	3.12E-01	0.312
tyr-Dt	transport of tyr-D	1 tyr-D <==> 1 tyr-D[e]	reversible	Transport	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
tyr1_tRNA2_CHARGa	charging tyr1_tRNA (tyr-D)	1 Tyr_RS_tyr-D_amp + 1 tyr1_tRNA --> 1 Tyr_RS_dim_inact + 1 amp + 1 tyr1_tRNA_tyr-D	irreversible	tRNA charging	0.00E+00	1.00E+09	0	7.10E+06	7.10E+06	0	7.41E+06	7412071	0	7.41E+06	7412071
tyr1_tRNA2_CHARGb	charging tyr1_tRNA (tyr-D)	1 Tyr_RS_2tyr-D_2amp + 2 tyr1_tRNA --> 1 Tyr_RS_dim_inact + 2 amp + 2 tyr1_tRNA_tyr-D	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.55E+06	3.55E+06	0	3.71E+06	3706036	0	3.71E+06	3706036
tyr1_tRNA_CHARGa	charging tyr1_tRNA	1 Tyr_RS_tyr_amp + 1 tyr1_tRNA --> 1 Tyr_RS_dim_inact + 1 amp + 1 tyr1_tRNA_tyr	irreversible	tRNA charging	0.00E+00	1.00E+09	0	1.27E+05	1.27E+05	0	1.29E+05	128875	0	1.17E+05	116854.6
tyr1_tRNA_CHARGb	charging tyr1_tRNA	1 Tyr_RS_2tyr_2amp + 2 tyr1_tRNA --> 1 Tyr_RS_dim_inact + 2 amp + 2 tyr1_tRNA_tyr	irreversible	tRNA charging	0.00E+00	1.00E+09	0	6.35E+04	6.35E+04	0	6.44E+04	64437.48	0	5.84E+04	58427.28
tyrT_to_tyr1	tyrT_to_tyr1	1 tyrT_tRNA --> 1 tyr1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
tyrU_to_tyr1	tyrU_to_tyr1	1 tyrU_tRNA --> 1 tyr1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
tyrV_to_tyr1	tyrV_to_tyr1	1 tyrV_tRNA --> 1 tyr1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	2.11E+02	2.11E+02	0	3.73E+02	373.3748	0	2.07E-01	0.207
udp_exch	udp transport	1 udp[e] <==> 1 udp	reversible	Transport	-1.00E+09	1.00E+09	0	0	0.00E+00	0	0	0	0	0	0
ump_exch	ump transport	1 ump[e] <==> 1 ump	reversible	Transport	-1.00E+09	1.00E+09	-5.05E+04	-8.44E+03	4.21E+04	-7.78E+04	-6.67E+03	71153.83	-2.86E+04	-6.67E+03	21935.62
utp_exch	utp transport	1 utp[e] <==> 1 utp	reversible	Transport	-1.00E+09	1.00E+09	8.76E+04	1.31E+05	4.35E+04	6.54E+04	1.36E+05	71006.98	6.54E+04	1.17E+05	51524.48
val1_tRNA_CHARG	charging val1_tRNA	1 Val_RS_val_amp + 1 val1_tRNA --> 1 ValS_mono_inact + 1 amp + 1 val1_tRNA_val	irreversible	tRNA charging	0.00E+00	1.00E+09	2.99E+04	2.02E+05	1.72E+05	2.20E+04	2.18E+05	195531.36	2.20E+04	1.73E+05	150984.96
val2_tRNA_CHARG	charging val2_tRNA	1 Val_RS_val_amp + 1 val2_tRNA --> 1 ValS_mono_inact + 1 amp + 1 val2_tRNA_val	irreversible	tRNA charging	0.00E+00	1.00E+09	6.50E+03	9.11E+04	8.46E+04	4.79E+03	1.06E+05	101600.58	4.79E+03	7.33E+04	68522.62
val3_tRNA_CHARG	charging val3_tRNA	1 Val_RS_val_amp + 1 val3_tRNA --> 1 ValS_mono_inact + 1 amp + 1 val3_tRNA_val	irreversible	tRNA charging	0.00E+00	1.00E+09	3.69E+04	1.59E+05	1.22E+05	2.72E+04	1.63E+05	135578.28	2.72E+04	1.54E+05	126576.38
valT_to_val1	valT_to_val1	1 valT_tRNA --> 1 val1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
valT_to_val3	valT_to_val3	1 valT_tRNA --> 1 val3_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.51E+02	3.51E+02	0	7.52E+00	7.52	0	7.52E+00	7.52
valU_to_val1	valU_to_val1	1 valU_tRNA --> 1 val1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
valU_to_val3	valU_to_val3	1 valU_tRNA --> 1 val3_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
valV_to_val2	valV_to_val2	1 valV_tRNA --> 1 val2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
valV_to_val3	valV_to_val3	1 valV_tRNA --> 1 val3_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
valW_to_val2	valW_to_val2	1 valW_tRNA --> 1 val2_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
valW_to_val3	valW_to_val3	1 valW_tRNA --> 1 val3_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	5.60E+00	5.6	0	5.60E+00	5.6
valX_to_val1	valX_to_val1	1 valX_tRNA --> 1 val1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
valX_to_val3	valX_to_val3	1 valX_tRNA --> 1 val3_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
valY_to_val1	valY_to_val1	1 valY_tRNA --> 1 val1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
valY_to_val3	valY_to_val3	1 valY_tRNA --> 1 val3_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	7.81E+00	7.81	0	7.81E+00	7.81
valZ_to_val1	valZ_to_val1	1 valZ_tRNA --> 1 val1_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
valZ_to_val3	valZ_to_val3	1 valZ_tRNA --> 1 val3_tRNA	irreversible	tRNA charging	0.00E+00	1.00E+09	0	7.43E+02	7.43E+02	0	7.51E+00	7.51	0	7.51E+00	7.51
AcT_EF-TU_RECYCL	recycling of AcT_EF-TU	1 AcT_EF-TU_inact --> 1 AcT_EF-TU	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	4.90E+03	4.90E+03	0	5.33E+03	5328.195	0	2.57E+03	2566.064
AcT_tRNA_pos_34_ac4C_RECYCL	recycling of AcT_tRNA_pos_34_ac4C	1 AcT_tRNA_pos_34_ac4C_inact --> 1 AcT_tRNA_pos_34_ac4C	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	3.40E+02	3.40E+02	0	1.56E+01	15.58	0	1.56E+01	15.58
AcpT_tRNA_pos_47_acp3U_RECYCL	recycling of AcpT_tRNA_pos_47_acp3U	1 AcpT_tRNA_pos_47_acp3U_inact --> 1 AcpT_tRNA_pos_47_acp3U	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.81E+03	1.81E+03	1.39E+01	1.83E+02	169.4	1.39E+01	1.83E+02	169.4
Ala_RS_tetra_RECYCL	recycling of Ala_RS_tetra	1 Ala_RS_tetra_inact --> 1 Ala_RS_tetra	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.58E+04	4.74E+05	3.88E+05	6.32E+04	4.79E+05	415453.04	6.32E+04	4.33E+05	369977.64
ArgS_mono_RECYCL	recycling of ArgS_mono	1 ArgS_mono_inact --> 1 ArgS_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	6.29E+04	2.75E+05	2.12E+05	4.63E+04	2.77E+05	230699.9	4.63E+04	2.73E+05	226306.7
Asn_RS_dim_RECYCL	recycling of Asn_RS_dim	1 Asn_RS_dim_inact --> 1 Asn_RS_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	2.64E+04	1.77E+05	1.51E+05	1.95E+04	1.89E+05	169232.42	1.95E+04	1.63E+05	143663.82
Asp_RS_dim_RECYCL	recycling of Asp_RS_dim	1 Asp_RS_dim_inact --> 1 Asp_RS_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	1.78E+04	2.21E+05	2.03E+05	1.31E+04	2.21E+05	207956.12	1.31E+04	2.21E+05	207669.72
CysS_mono_RECYCL	recycling of CysS_mono	1 CysS_mono_inact --> 1 CysS_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	3.38E+03	6.85E+04	6.51E+04	2.49E+03	7.80E+04	75550.35	2.49E+03	5.61E+04	53616.26
DU_23S_2449_RECYCL	recycling of DU_23S_2449	1 DU_23S_2449_inact --> 1 DU_23S_2449	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
Def_mono_RECYCL	recycling of Def_mono	1 Def_mono_inact --> 1 Def_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	5.23E+03	2.30E+04	1.78E+04	3.85E+03	2.37E+04	19852.92	3.85E+03	2.14E+04	17593.9
DnaJ_dim_RECYCL	recycling of DnaJ_dim	1 DnaJ_dim_inact --> 1 DnaJ_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	8.13E+03	8.13E+03	0	9.80E+03	9804.974	0	6.54E+03	6535.45
DnaK_mono.ATP_RECYCL	recycling of DnaK_mono.ATP	1 DnaK_mono.ATP_inact --> 1 DnaK_mono.ATP	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	8.28E+03	8.28E+03	0	9.96E+03	9959.294	0	6.77E+03	6766.174
Dtd_dim_RECYCL	recycling of Dtd_dim	1 Dtd_dim_inact --> 1 Dtd_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	7.10E+06	7.10E+06	0	7.41E+06	7412071	0	7.41E+06	7412071
Dus_gen_RECYCL	recycling of Dus_gen	1 Dus_gen_inact --> 1 Dus_gen	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	6.32E+03	6.32E+03	4.18E+01	1.38E+03	1343.08	4.18E+01	1.38E+03	1343.08
EF-Ts_RECYCL	recycling of EF-Ts	1 EF-Ts_inact --> 1 EF-Ts	irreversible	Protein Recycling	0.00E+00	1.00E+09	7.64E+05	4.24E+06	3.48E+06	5.62E+05	4.31E+06	3743156.3	5.62E+05	4.01E+06	3444862.3
EoR_tRNA_pos34_Q_RECYCL	recycling of EoR_tRNA_pos34_Q	1 EoR_tRNA_pos34_Q_inact --> 1 EoR_tRNA_pos34_Q	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.90E+02	789.686	0	8.58E+01	85.794
Fmt_mono_RECYCL	recycling of Fmt_mono	1 Fmt_mono_inact --> 1 Fmt_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	5.23E+03	2.30E+04	1.78E+04	3.85E+03	2.37E+04	19852.92	3.85E+03	2.15E+04	17644.16
GidA_mono_RECYCL	recycling of GidA_mono	1 GidA_mono_inact --> 1 GidA_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.86E+03	1.86E+03	2.75E+01	1.09E+02	81.96	2.75E+01	1.09E+02	81.96
GlnS_mono_RECYCL	recycling of GlnS_mono	1 GlnS_mono_inact --> 1 GlnS_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	2.64E+04	2.42E+05	2.16E+05	1.95E+04	2.45E+05	225156.12	1.95E+04	2.16E+05	196962.32
GltX_mono_RECYCL	recycling of GltX_mono	1 GltX_mono_inact --> 1 GltX_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	5.91E+04	2.44E+05	1.85E+05	4.35E+04	2.46E+05	202239.9	4.35E+04	2.41E+05	197591.3
Gly_RS_tetra_RECYCL	recycling of Gly_RS_tetra	1 Gly_RS_tetra_inact --> 1 Gly_RS_tetra	irreversible	Protein Recycling	0.00E+00	1.00E+09	3.04E+04	3.74E+05	3.44E+05	2.24E+04	3.97E+05	374284.1	2.24E+04	3.33E+05	310687.1

GreA_mono_RECYCL	recycling of GreA_mono	1 GreA_mono_inact --> 1 GreA_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.86E+03	1.77E+03	6.22E+01	1.28E+03	1213.559	6.22E+01	5.30E+02	467.3445
GreB_mono_RECYCL	recycling of GreB_mono	1 GreB_mono_inact --> 1 GreB_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.86E+03	1.77E+03	6.22E+01	1.28E+03	1213.559	6.22E+01	5.30E+02	467.3445
GrpE_dim_RECYCL	recycling of GrpE_dim	1 GrpE_dim_inact --> 1 GrpE_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	8.13E+03	8.13E+03	0	9.80E+03	9804.974	0	6.54E+03	6535.45
His_RS_dim_RECYCL	recycling of His_RS_dim	1 His_RS_dim_inact --> 1 His_RS_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	7.22E+03	8.97E+04	8.24E+04	5.31E+03	9.17E+04	86371.18	5.31E+03	8.70E+04	81718.93
HyL_tRNA_pos_34_ho5U_RECYCL	recycling of HyL_tRNA_pos_34_ho5U	1 HyL_tRNA_pos_34_ho5U_inact --> 1 HyL_tRNA_pos_34_ho5U	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.38E+03	1.38E+03	1.39E+01	9.38E+01	79.83	1.39E+01	9.38E+01	79.83
IF1_RECYCL	recycling of IF1	1 IF1_inact --> 1 IF1	irreversible	Protein Recycling	0.00E+00	1.00E+09	5.23E+03	2.30E+04	1.78E+04	3.85E+03	2.37E+04	19852.92	3.85E+03	2.14E+04	17593.9
IF3_RECYCL	recycling of IF3	1 IF3_inact --> 1 IF3	irreversible	Protein Recycling	0.00E+00	1.00E+09	5.23E+03	2.30E+04	1.78E+04	3.85E+03	2.37E+04	19852.92	3.85E+03	2.14E+04	17593.9
IleS_mono_RECYCL	recycling of IleS_mono	1 IleS_mono_inact --> 1 IleS_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	4.25E+04	2.68E+05	2.26E+05	3.13E+04	2.70E+05	238579.52	3.13E+04	2.51E+05	219614.72
KsgA_mono_RECYCL	recycling of KsgA_mono	1 KsgA_mono_inact --> 1 KsgA_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	1.69E+02	2.25E+02	5.63E+01	1.24E+02	1.66E+02	41.44	1.24E+02	1.66E+02	41.44
LeuS_mono_RECYCL	recycling of LeuS_mono	1 LeuS_mono_inact --> 1 LeuS_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	5.32E+04	4.21E+05	3.68E+05	3.92E+04	4.25E+05	385360.1	3.92E+04	4.17E+05	377769.6
LysII_RS_dim_RECYCL	recycling of LysII_RS_dim	1 LysII_RS_dim_inact --> 1 LysII_RS_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	2.81E+05	2.81E+05	0	3.00E+05	299732.5	0	2.46E+05	246432.4
LysI_RS_dim_RECYCL	recycling of LysI_RS_dim	1 LysI_RS_dim_inact --> 1 LysI_RS_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	2.81E+05	2.81E+05	0	3.00E+05	299732.5	0	2.46E+05	246432.4
Map_mono_RECYCL	recycling of Map_mono	1 Map_mono_inact --> 1 Map_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	2.96E+03	2.01E+04	1.71E+04	2.18E+03	2.13E+04	19154.39	2.18E+03	1.85E+04	16299.88
MeST_S12_RECYCL	recycling of MeST_S12	1 MeST_S12_inact --> 1 MeST_S12	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_16S_1402_RECYCL	recycling of MeT_16S_1402	1 MeT_16S_1402_inact --> 1 MeT_16S_1402	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_16S_1407_RECYCL	recycling of MeT_16S_1407	1 MeT_16S_1407_inact --> 1 MeT_16S_1407	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_16S_1516_RECYCL	recycling of MeT_16S_1516	1 MeT_16S_1516_inact --> 1 MeT_16S_1516	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_16S_527_RECYCL	recycling of MeT_16S_527	1 MeT_16S_527_inact --> 1 MeT_16S_527	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_16S_966_RECYCL	recycling of MeT_16S_966	1 MeT_16S_966_inact --> 1 MeT_16S_966	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_23S_1618_RECYCL	recycling of MeT_23S_1618	1 MeT_23S_1618_inact --> 1 MeT_23S_1618	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_23S_1835_RECYCL	recycling of MeT_23S_1835	1 MeT_23S_1835_inact --> 1 MeT_23S_1835	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_23S_1962_RECYCL	recycling of MeT_23S_1962	1 MeT_23S_1962_inact --> 1 MeT_23S_1962	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_23S_2030_RECYCL	recycling of MeT_23S_2030	1 MeT_23S_2030_inact --> 1 MeT_23S_2030	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_23S_2069_RECYCL	recycling of MeT_23S_2069	1 MeT_23S_2069_inact --> 1 MeT_23S_2069	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_23S_2445_RECYCL	recycling of MeT_23S_2445	1 MeT_23S_2445_inact --> 1 MeT_23S_2445	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_23S_2498_RECYCL	recycling of MeT_23S_2498	1 MeT_23S_2498_inact --> 1 MeT_23S_2498	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_23S_2503_RECYCL	recycling of MeT_23S_2503	1 MeT_23S_2503_inact --> 1 MeT_23S_2503	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_EF-TU_RECYCL	recycling of MeT_EF-TU	1 MeT_EF-TU_inact --> 1 MeT_EF-TU	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	4.90E+03	4.90E+03	0	5.33E+03	5328.195	0	2.57E+03	2566.064
MeT_L16_RECYCL	recycling of MeT_L16	1 MeT_L16_inact --> 1 MeT_L16	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_L33_RECYCL	recycling of MeT_L33	1 MeT_L33_inact --> 1 MeT_L33	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_L7/L12_RECYCL	recycling of MeT_L7/L12	1 MeT_L7/L12_inact --> 1 MeT_L7/L12	irreversible	Protein Recycling	0.00E+00	1.00E+09	1.69E+02	2.25E+02	5.63E+01	1.24E+02	1.66E+02	41.44	1.24E+02	1.66E+02	41.44
MeT_S11_RECYCL	recycling of MeT_S11	1 MeT_S11_inact --> 1 MeT_S11	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
MeT_tRNA_pos_32_Cm_RECYCL	recycling of MeT_tRNA_pos_32_Cm	1 MeT_tRNA_pos_32_Cm_inact --> 1 MeT_tRNA_pos_32_Cm	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.24E+02	124.3653	0	7.82E+01	78.17
MeT_tRNA_pos_32_Um_RECYCL	recycling of MeT_tRNA_pos_32_Um	1 MeT_tRNA_pos_32_Um_inact --> 1 MeT_tRNA_pos_32_Um	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	5.81E+01	58.06	0	5.81E+01	58.06
MeT_tRNA_pos_37_m2A_RECYCL	recycling of MeT_tRNA_pos_37_m2A	1 MeT_tRNA_pos_37_m2A_inact --> 1 MeT_tRNA_pos_37_m2A	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.54E+03	1.54E+03	2.75E+01	1.62E+02	134.36	2.75E+01	1.62E+02	134.36
MeT_tRNA_pos_37_m6A_RECYCL	recycling of MeT_tRNA_pos_37_m6A	1 MeT_tRNA_pos_37_m6A_inact --> 1 MeT_tRNA_pos_37_m6A	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	9.04E+02	9.04E+02	0	3.85E+01	38.46	0	3.85E+01	38.46
MeT_tRNA_pos_37_m6t6A_RECYCL	recycling of MeT_tRNA_pos_37_m6t6A	1 MeT_tRNA_pos_37_m6t6A_inact --> 1 MeT_tRNA_pos_37_m6t6A	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	4.65E+01	46.48	0	4.65E+01	46.48
Met_RS_dim_RECYCL	recycling of Met_RS_dim	1 Met_RS_dim_inact --> 1 Met_RS_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	9.79E+03	8.20E+04	7.22E+04	7.21E+03	8.74E+04	80190.45	7.21E+03	7.28E+04	65580.71
Mfd_mono_RECYCL	recycling of Mfd_mono	1 Mfd_mono_inact --> 1 Mfd_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.86E+03	1.77E+03	6.22E+01	1.28E+03	1213.559	6.22E+01	5.30E+02	467.3445
MiaA_dim_RECYCL	recycling of MiaA_dim	1 MiaA_dim_inact --> 1 MiaA_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.03E+02	803.4932	0	9.96E+01	99.564
MiaB_mono_RECYCL	recycling of MiaB_mono	1 MiaB_mono_inact --> 1 MiaB_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	7.95E+02	795.0555	0	8.59E+01	85.864
NusA_mono_RECYCL	recycling of NusA_mono	1 NusA_mono_inact --> 1 NusA_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.86E+03	1.77E+03	6.22E+01	1.28E+03	1213.559	6.22E+01	5.30E+02	467.3445
NusB_mono_RECYCL	recycling of NusB_mono	1 NusB_mono_inact --> 1 NusB_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.86E+03	1.77E+03	6.22E+01	4.80E+02	417.46	6.22E+01	4.80E+02	417.46
NusG_mono_RECYCL	recycling of NusG_mono	1 NusG_mono_inact --> 1 NusG_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.86E+03	1.77E+03	6.22E+01	1.28E+03	1213.559	6.22E+01	5.30E+02	467.3445
Orn_dim_RECYCL	recycling of Orn_dim	1 Orn_dim_inact --> 1 Orn_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	6.27E+02	6.27E+02	0	1.06E+03	1058.989	0	8.49E+01	84.8739
Phe_RS_tetra_RECYCL	recycling of Phe_RS_tetra	1 Phe_RS_tetra_inact --> 1 Phe_RS_tetra	irreversible	Protein Recycling	0.00E+00	1.00E+09	2.17E+04	1.73E+05	1.52E+05	1.60E+04	1.76E+05	159664.48	1.60E+04	1.63E+05	147228.38
PrmA_mono_RECYCL	recycling of PrmA_mono	1 PrmA_mono_inact --> 1 PrmA_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
PrmB_mono_RECYCL	recycling of PrmB_mono	1 PrmB_mono_inact --> 1 PrmB_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
PrmC_mono_RECYCL	recycling of PrmC_mono	1 PrmC_mono_inact --> 1 PrmC_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	2.60E+03	2.60E+03	0	4.46E+03	4462.582	0	1.85E+02	185.409
Pro_RS_dim_RECYCL	recycling of Pro_RS_dim	1 Pro_RS_dim_inact --> 1 Pro_RS_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	1.17E+04	2.07E+05	1.95E+05	8.64E+03	2.09E+05	200793.16	8.64E+03	2.01E+05	192052.26
QueA_mono_RECYCL	recycling of QueA_mono	1 QueA_mono_inact --> 1 QueA_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.90E+02	789.686	0	8.58E+01	85.794
QueF_dim_RECYCL	recycling of QueF_dim	1 QueF_dim_inact --> 1 QueF_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.90E+02	789.686	0	8.58E+01	85.794
RF1_mono_RECYCL	recycling of RF1_mono	1 RF1_mono_inact --> 1 RF1_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	4.22E+02	2.26E+04	2.22E+04	3.11E+02	2.32E+04	22937.61	3.11E+02	2.10E+04	20698.44
RF2_mono_RECYCL	recycling of RF2_mono	1 RF2_mono_inact --> 1 RF2_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.92E+04	1.92E+04	0	1.98E+04	19769.28	0	1.77E+04	17735.68
RF3_mono.GDP_RECYCL	recycling of RF3_mono.GDP	1 RF3_mono.GDP_inact --> 1 RF3_mono.GDP	irreversible	Protein Recycling	0.00E+00	1.00E+09	5.23E+03	2.30E+04	1.78E+04	3.85E+03	2.37E+04	19852.92	3.85E+03	2.14E+04	17593.9
RNase_E_tetra_RECYCL	recycling of RNase_E_tetra	1 RNase_E_tetra_inact --> 1 RNase_E_tetra	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.86E+03	1.77E+03	6.22E+01	1.01E+03	945.301	6.22E+01	4.69E+02	407.2739
RNase_G_dim_RECYCL	recycling of RNase_G_dim	1 RNase_G_dim_inact --> 1 RNase_G_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	8.63E+02	7.79E+02	6.22E+01	2.00E+02	138.31	6.22E+01	2.00E+02	138.31

RNase_Gen_RECYCL	recycling of RNase_Gen	1 RNase_Gen_inact --> 1 RNase_Gen	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.86E+03	1.77E+03	6.22E+01	1.01E+03	945.301	6.22E+01	4.69E+02	407.2739
RNase_III_dim_RECYCL	recycling of RNase_III_dim	1 RNase_III_dim_inact --> 1 RNase_III_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	8.63E+02	7.79E+02	6.22E+01	5.45E+02	483.1259	6.22E+01	2.27E+02	165.3245
RNase_P_cplx_RECYCL	recycling of RNase_P_cplx	1 RNase_P_cplx_inact --> 1 RNase_P_cplx	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.86E+03	1.77E+03	6.22E+01	1.01E+03	945.301	6.22E+01	4.69E+02	407.2739
RNase_T_dim_RECYCL	recycling of RNase_T_dim	1 RNase_T_dim_inact --> 1 RNase_T_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	8.63E+02	7.79E+02	6.22E+01	2.00E+02	138.31	6.22E+01	2.00E+02	138.31
RNase_m16_RECYCL	recycling of RNase_m16	1 RNase_m16_inact --> 1 RNase_m16	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	8.63E+02	7.79E+02	6.22E+01	2.00E+02	138.31	6.22E+01	2.00E+02	138.31
RNase_m23_RECYCL	recycling of RNase_m23	1 RNase_m23_inact --> 1 RNase_m23	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	8.63E+02	7.79E+02	6.22E+01	2.00E+02	138.31	6.22E+01	2.00E+02	138.31
RNase_m5_RECYCL	recycling of RNase_m5	1 RNase_m5_inact --> 1 RNase_m5	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	8.63E+02	7.79E+02	6.22E+01	2.00E+02	138.31	6.22E+01	2.00E+02	138.31
RbfA_mono_RECYCL	recycling of RbfA_mono	1 RbfA_mono_inact --> 1 RbfA_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
Rho_hexa_RECYCL	recycling of Rho_hexa	1 Rho_hexa_inact --> 1 Rho_hexa	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.86E+03	1.77E+03	6.22E+01	1.21E+03	1144.822	6.22E+01	5.14E+02	451.4529
RimI_mono_RECYCL	recycling of RimI_mono	1 RimI_mono_inact --> 1 RimI_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RimJ_mono_RECYCL	recycling of RimJ_mono	1 RimJ_mono_inact --> 1 RimJ_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RimK_mono_RECYCL	recycling of RimK_mono	1 RimK_mono_inact --> 1 RimK_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RimL_mono_RECYCL	recycling of RimL_mono	1 RimL_mono_inact --> 1 RimL_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	1.69E+02	2.25E+02	5.63E+01	1.24E+02	1.66E+02	41.44	1.24E+02	1.66E+02	41.44
RimM_mono_RECYCL	recycling of RimM_mono	1 RimM_mono_inact --> 1 RimM_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RlmB_dim_RECYCL	recycling of RlmB_dim	1 RlmB_dim_inact --> 1 RlmB_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RluA_mono_RECYCL	recycling of RluA_mono	1 RluA_mono_inact --> 1 RluA_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.61E+03	1.52E+03	6.22E+01	1.17E+02	54.96	6.22E+01	1.17E+02	54.96
RluB_mono_RECYCL	recycling of RluB_mono	1 RluB_mono_inact --> 1 RluB_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RluC_mono_RECYCL	recycling of RluC_mono	1 RluC_mono_inact --> 1 RluC_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	2.53E+02	3.38E+02	8.44E+01	1.86E+02	2.49E+02	62.16	1.86E+02	2.49E+02	62.16
RluD_mono_RECYCL	recycling of RluD_mono	1 RluD_mono_inact --> 1 RluD_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	2.53E+02	3.38E+02	8.44E+01	1.86E+02	2.49E+02	62.16	1.86E+02	2.49E+02	62.16
RpoD_mono_RECYCL	recycling of RpoD_mono	1 RpoD_mono_inact --> 1 RpoD_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.86E+03	1.86E+03	3.57E+01	1.26E+03	1222.624	3.57E+01	4.97E+02	460.9116
RpoE_mono_RECYCL	recycling of RpoE_mono	1 RpoE_mono_inact --> 1 RpoE_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	5.44E+02	543.5469	0	6.81E+00	6.814
RpoH_mono_RECYCL	recycling of RpoH_mono	1 RpoH_mono_inact --> 1 RpoH_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	3.37E+02	3.37E+02	0	4.79E+02	478.8246	0	1.43E+01	14.262
RpoN_mono_RECYCL	recycling of RpoN_mono	1 RpoN_mono_inact --> 1 RpoN_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	5.93E+02	5.93E+02	0	9.40E+02	939.6599	0	6.22E-01	0.622
RpoS_mono_RECYCL	recycling of RpoS_mono	1 RpoS_mono_inact --> 1 RpoS_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	2.28E+02	2.28E+02	0	2.73E+02	273.4138	0	1.52E+01	15.16
RpoZ_mono_RECYCL	recycling of RpoZ_mono	1 RpoZ_mono_inact --> 1 RpoZ_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.86E+03	1.77E+03	6.22E+01	1.28E+03	1213.559	6.22E+01	5.30E+02	467.3445
Rrf_mono_RECYCL	recycling of Rrf_mono	1 Rrf_mono_inact --> 1 Rrf_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	5.23E+03	2.30E+04	1.78E+04	3.85E+03	2.37E+04	19852.92	3.85E+03	2.14E+04	17593.9
RrmA_dim_RECYCL	recycling of RrmA_dim	1 RrmA_dim_inact --> 1 RrmA_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RrmJ_mono_RECYCL	recycling of RrmJ_mono	1 RrmJ_mono_inact --> 1 RrmJ_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RsmB_mono_RECYCL	recycling of RsmB_mono	1 RsmB_mono_inact --> 1 RsmB_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RsmC_mono_RECYCL	recycling of RsmC_mono	1 RsmC_mono_inact --> 1 RsmC_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RsuA_mono_RECYCL	recycling of RsuA_mono	1 RsuA_mono_inact --> 1 RsuA_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RumA_mono_RECYCL	recycling of RumA_mono	1 RumA_mono_inact --> 1 RumA_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
RumB_mono_RECYCL	recycling of RumB_mono	1 RumB_mono_inact --> 1 RumB_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
SelA_deca_RECYCL	recycling of SelA_deca	1 SelA_deca_inact --> 1 SelA_deca	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
Ser_RS_dim_RECYCL	recycling of Ser_RS_dim	1 Ser_RS_dim_inact --> 1 Ser_RS_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	1.73E+04	2.06E+05	1.88E+05	1.27E+04	2.10E+05	196899.08	1.27E+04	2.00E+05	187665.88
TadA_dim_RECYCL	recycling of TadA_dim	1 TadA_dim_inact --> 1 TadA_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	5.86E+02	5.86E+02	0	3.55E+01	35.48	0	3.55E+01	35.48
Tgt_hexa_RECYCL	recycling of Tgt_hexa	1 Tgt_hexa_inact --> 1 Tgt_hexa	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	7.90E+02	789.686	0	8.58E+01	85.794
ThiI_mono_RECYCL	recycling of ThiI_mono	1 ThiI_mono_inact --> 1 ThiI_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	9.71E+02	971.3409	0	3.95E+02	394.674
Thr_RS_dim_RECYCL	recycling of Thr_RS_dim	1 Thr_RS_dim_inact --> 1 Thr_RS_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	1.89E+04	2.36E+05	2.17E+05	1.39E+04	2.38E+05	223617.96	1.39E+04	2.34E+05	219656.76
TilS_mono_RECYCL	recycling of TilS_mono	1 TilS_mono_inact --> 1 TilS_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.92E+01	19.24	0	1.92E+01	19.24
TrmA_mono_RECYCL	recycling of TrmA_mono	1 TrmA_mono_inact --> 1 TrmA_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.90E+03	1.81E+03	7.61E+01	1.28E+03	1201.852	7.61E+01	7.94E+02	718.134
TrmC_mono_RECYCL	recycling of TrmC_mono	1 TrmC_mono_inact --> 1 TrmC_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.86E+03	1.86E+03	2.75E+01	1.09E+02	81.96	2.75E+01	1.09E+02	81.96
TrmD_dim_RECYCL	recycling of TrmD_dim	1 TrmD_dim_inact --> 1 TrmD_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	4.79E+01	47.86	0	4.79E+01	47.86
TrmE_dim_RECYCL	recycling of TrmE_dim	1 TrmE_dim_inact --> 1 TrmE_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.86E+03	1.86E+03	2.75E+01	1.09E+02	81.96	2.75E+01	1.09E+02	81.96
TrmH_dim_RECYCL	recycling of TrmH_dim	1 TrmH_dim_inact --> 1 TrmH_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	8.50E+02	849.8831	0	1.88E+02	188.134
TrmU_mono_RECYCL	recycling of TrmU_mono	1 TrmU_mono_inact --> 1 TrmU_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.86E+03	1.86E+03	2.75E+01	9.36E+01	66.1	2.75E+01	9.36E+01	66.1
Trp_RS_dim_RECYCL	recycling of Trp_RS_dim	1 Trp_RS_dim_inact --> 1 Trp_RS_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	1.82E+03	5.38E+04	5.20E+04	1.34E+03	5.48E+04	53431.84	1.34E+03	5.25E+04	51181.6
TruA_dim_RECYCL	recycling of TruA_dim	1 TruA_dim_inact --> 1 TruA_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	2.34E+03	2.34E+03	0	9.97E+02	997.3965	0	3.79E+02	378.684
TruB_mono_RECYCL	recycling of TruB_mono	1 TruB_mono_inact --> 1 TruB_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.90E+03	1.81E+03	7.61E+01	1.29E+03	1217.578	7.61E+01	8.13E+02	737.124
TruD_mono_RECYCL	recycling of TruD_mono	1 TruD_mono_inact --> 1 TruD_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	2.75E+01	4.82E+01	20.72	2.75E+01	4.82E+01	20.72
Tyr_RS_dim_RECYCL	recycling of Tyr_RS_dim	1 Tyr_RS_dim_inact --> 1 Tyr_RS_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	6.37E+03	7.12E+06	7.11E+06	4.69E+03	7.42E+06	7416763.92	4.69E+03	7.42E+06	7416763.9
Up_tRNA_pos_37_t6A_RECYCL	recycling of Up_tRNA_pos_37_t6A	1 Up_tRNA_pos_37_t6A_inact --> 1 Up_tRNA_pos_37_t6A	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.81E+03	1.81E+03	1.39E+01	2.12E+02	197.71	1.39E+01	2.12E+02	197.71
ValS_mono_RECYCL	recycling of ValS_mono	1 ValS_mono_inact --> 1 ValS_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	7.33E+04	3.77E+05	3.04E+05	5.40E+04	3.90E+05	335576.92	5.40E+04	3.39E+05	285093.62
YbbB_dim_RECYCL	recycling of YbbB_dim	1 YbbB_dim_inact --> 1 YbbB_dim	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.86E+03	1.86E+03	0	9.36E+01	93.62	0	9.36E+01	93.62
YccK_mono_RECYCL	recycling of YccK_mono	1 YccK_mono_inact --> 1 YccK_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.86E+03	1.86E+03	2.75E+01	9.36E+01	66.1	2.75E+01	9.36E+01	66.1
YdaO_mono_RECYCL	recycling of YdaO_mono	1 YdaO_mono_inact --> 1 YdaO_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.68E+03	1.68E+03	0	3.86E+01	38.63	0	3.86E+01	38.63
YecO_mono_RECYCL	recycling of YecO_mono	1 YecO_mono_inact --> 1 YecO_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.38E+03	1.38E+03	1.39E+01	9.38E+01	79.83	1.39E+01	9.38E+01	79.83

YecP_mono_RECYCL	recycling of YecP_mono	1 YecP_mono_inact --> 1 YecP_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.38E+03	1.38E+03	1.39E+01	9.38E+01	79.83	1.39E+01	9.38E+01	79.83
YggH_mono_RECYCL	recycling of YggH_mono	1 YggH_mono_inact --> 1 YggH_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.90E+03	1.90E+03	2.78E+01	5.22E+02	494.63	2.78E+01	5.22E+02	494.63
YggJ_mono_RECYCL	recycling of YggJ_mono	1 YggJ_mono_inact --> 1 YggJ_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
YheLMN_cplx_RECYCL	recycling of YheLMN_cplx	1 YheLMN_cplx_inact --> 1 YheLMN_cplx	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.86E+03	1.86E+03	2.75E+01	9.36E+01	66.1	2.75E+01	9.36E+01	66.1
YhhP_mono_RECYCL	recycling of YhhP_mono	1 YhhP_mono_inact --> 1 YhhP_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.86E+03	1.86E+03	2.75E+01	9.36E+01	66.1	2.75E+01	9.36E+01	66.1
YjbC_mono_RECYCL	recycling of YjbC_mono	1 YjbC_mono_inact --> 1 YjbC_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
YmfC_mono_RECYCL	recycling of YmfC_mono	1 YmfC_mono_inact --> 1 YmfC_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
YqcB_mono_RECYCL	recycling of YqcB_mono	1 YqcB_mono_inact --> 1 YqcB_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	1.50E+03	1.50E+03	1.39E+01	8.16E+01	67.72	1.39E+01	8.16E+01	67.72
YrdC_mono_RECYCL	recycling of YrdC_mono	1 YrdC_mono_inact --> 1 YrdC_mono	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
degradosome_RECYCL	recycling of degradosome	1 degradosome_inact --> 1 degradosome	irreversible	Protein Recycling	0.00E+00	1.00E+09	0	6.27E+02	6.27E+02	0	1.06E+03	1058.989	0	8.49E+01	84.8739
hRNAP_RECYCL	recycling of hRNAP	1 hRNAP_inact --> 1 hRNAP	irreversible	Protein Recycling	0.00E+00	1.00E+09	8.44E+01	1.86E+03	1.77E+03	6.22E+01	1.28E+03	1213.559	6.22E+01	5.30E+02	467.3445
rib_30_ini_RECYCL	recycling of rib_30_ini	1 rib_30_ini_inact --> 1 rib_30_ini	irreversible	Protein Recycling	0.00E+00	1.00E+09	5.32E+03	2.31E+04	1.78E+04	3.92E+03	2.38E+04	19852.92	3.92E+03	2.15E+04	17614.62
rib_50_RECYCL	recycling of rib_50	1 rib_50_inact --> 1 rib_50	irreversible	Protein Recycling	0.00E+00	1.00E+09	5.40E+03	2.32E+04	1.78E+04	3.98E+03	2.38E+04	19852.92	3.98E+03	2.16E+04	17635.34
DM_Ala_RS_tetra	Demand function for Ala_RS_tetra	1 Ala_RS_tetra -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.64E+02	6.64E+02	0	7.70E+02	770.0907	0	3.14E+01	31.35225
DM_ArgS_mono	Demand function for ArgS_mono	1 ArgS_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.51E+03	2.51E+03	0	4.11E+03	4107.15	0	1.02E+02	101.508
DM_Asn_RS_dim	Demand function for Asn_RS_dim	1 Asn_RS_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.29E+03	1.29E+03	0	2.23E+03	2233.246	0	7.34E+01	73.359
DM_Asp_RS_dim	Demand function for Asp_RS_dim	1 Asp_RS_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.24E+03	1.24E+03	0	2.11E+03	2114.115	0	3.93E+01	39.338
DM_CysS_mono	Demand function for CysS_mono	1 CysS_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.57E+03	2.57E+03	0	4.46E+03	4461.759	0	9.49E+01	94.932
DM_Def_mono	Demand function for Def_mono	1 Def_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	9.25E+02	9.25E+02	0	1.55E+03	1550.424	0	1.11E+02	111.456
DM_degradosome	Demand function for degradosome	1 degradosome -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.20E+02	2.20E+02	0	2.39E+02	238.7058	0	2.88E+01	28.8145
DM_DnaJ_dim	Demand function for DnaJ_dim	1 DnaJ_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.98E+02	4.98E+02	0	8.45E+02	844.9304	0	4.84E+01	48.411
DM_DnaK_mono.ATP	Demand function for DnaK_mono.ATP	1 DnaK_mono.ATP -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.76E+03	1.76E+03	0	2.93E+03	2933.059	0	2.54E+02	253.857
DM_Dtd_dim	Demand function for Dtd_dim	1 Dtd_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.16E+02	2.16E+02	0	3.51E+02	351.3855	0	3.90E+01	39.016
DM_Dus_gen	Demand function for Dus_gen	1 Dus_gen -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.93E+03	2.93E+03	0	4.99E+03	4987.569	0	2.55E+02	254.558
DM_EF-G.GTP	Demand function for EF-G.GTP	1 EF-G.GTP -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.04E+03	2.04E+03	0	3.14E+03	3140.993	0	5.11E+02	510.778
DM_EF-Ts	Demand function for EF-Ts	1 EF-Ts -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.54E+03	1543.06	0	2.56E+02	256.288
DM_EF-Tu.GTP	Demand function for EF-Tu.GTP	1 EF-Tu.GTP -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.90E+03	4.90E+03	0	5.33E+03	5328.195	0	2.57E+03	2566.064
DM_ala1_tRNA	Demand function for ala1_tRNA	1 ala1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	1.39E+01	3.46E+01	20.72	1.39E+01	3.46E+01	20.72
DM_ala2_tRNA	Demand function for ala2_tRNA	1 ala2_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	1.56E+01	15.6	0	1.56E+01	15.6
DM_argU_tRNA	Demand function for argU_tRNA	1 argU_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	8.24E+00	8.24	0	8.24E+00	8.24
DM_argW_tRNA	Demand function for argW_tRNA	1 argW_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.68E+03	1.68E+03	0	7.62E+00	7.62	0	7.62E+00	7.62
DM_arg1_tRNA	Demand function for arg1_tRNA	1 arg1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.86E+02	5.86E+02	0	3.55E+01	35.48	0	3.55E+01	35.48
DM_argX_tRNA	Demand function for argX_tRNA	1 argX_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
DM_asn1_tRNA	Demand function for asn1_tRNA	1 asn1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	2.56E+01	25.58	0	2.56E+01	25.58
DM_asp1_tRNA	Demand function for asp1_tRNA	1 asp1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	3.31E+01	33.1	0	3.31E+01	33.1
DM_cysT_tRNA	Demand function for cysT_tRNA	1 cysT_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
DM_gln2_tRNA	Demand function for gln2_tRNA	1 gln2_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.40E+02	3.40E+02	0	1.56E+01	15.58	0	1.56E+01	15.58
DM_gln1_tRNA	Demand function for gln1_tRNA	1 gln1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.40E+02	3.40E+02	0	1.56E+01	15.58	0	1.56E+01	15.58
DM_glu1_tRNA	Demand function for glu1_tRNA	1 glu1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	2.75E+01	4.82E+01	20.72	2.75E+01	4.82E+01	20.72
DM_gly1_tRNA	Demand function for gly1_tRNA	1 gly1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.20E+03	1.20E+03	0	4.13E+01	41.32	0	4.13E+01	41.32
DM_glyT_tRNA	Demand function for glyT_tRNA	1 glyT_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
DM_glyU_tRNA	Demand function for glyU_tRNA	1 glyU_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	9.58E+00	9.58	0	9.58E+00	9.58
DM_hisR_tRNA	Demand function for hisR_tRNA	1 hisR_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9
DM_ile1_tRNA	Demand function for ile1_tRNA	1 ile1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.12E+02	1.12E+02	1.39E+01	3.46E+01	20.72	1.39E+01	3.46E+01	20.72
DM_ile2_tRNA	Demand function for ile2_tRNA	1 ile2_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.92E+01	19.24	0	1.92E+01	19.24
DM_leu1_tRNA	Demand function for leu1_tRNA	1 leu1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.17E+03	1.17E+03	0	5.38E+01	53.79	0	5.38E+01	53.79
DM_leu2_tRNA	Demand function for leu2_tRNA	1 leu2_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.45E+03	1.45E+03	0	1.74E+01	17.42	0	1.74E+01	17.42
DM_leuU_tRNA	Demand function for leuU_tRNA	1 leuU_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	11	11	0	1.10E+01	11
DM_leuW_tRNA	Demand function for leuW_tRNA	1 leuW_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	7.79E+00	7.79	0	7.79E+00	7.79
DM_leuZ_tRNA	Demand function for leuZ_tRNA	1 leuZ_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.99E+02	3.99E+02	0	6.22E+00	6.22	0	6.22E+00	6.22
DM_lys1_tRNA	Demand function for lys1_tRNA	1 lys1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	4.54E+01	45.38	0	4.54E+01	45.38
DM_met1_tRNA	Demand function for met1_tRNA	1 met1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.40E+02	3.40E+02	0	1.56E+01	15.58	0	1.56E+01	15.58
DM_phe1_tRNA	Demand function for phe1_tRNA	1 phe1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	2.18E+01	21.8	0	2.18E+01	21.8
DM_pro1_tRNA	Demand function for pro1_tRNA	1 pro1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	2.69E+01	26.9	0	2.69E+01	26.9
DM_pro2_tRNA	Demand function for pro2_tRNA	1 pro2_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	2.10E+01	20.96	0	2.10E+01	20.96
DM_proL_tRNA	Demand function for proL_tRNA	1 proL_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.39E+03	1.39E+03	0	7.06E+00	7.06	0	7.06E+00	7.06
DM_proM_tRNA	Demand function for proM_tRNA	1 proM_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	1.39E+01	13.9	0	1.39E+01	13.9

DM_ser1_tRNA	Demand function for ser1_tRNA	1 ser1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	1.36E+01	13.62	0	1.36E+01	13.62
DM_ser2_tRNA	Demand function for ser2_tRNA	1 ser2_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	2.04E+01	20.37	0	2.04E+01	20.37
DM_ser3_tRNA	Demand function for ser3_tRNA	1 ser3_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	1.31E+01	13.11	0	1.31E+01	13.11
DM_serT_tRNA	Demand function for serT_tRNA	1 serT_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	6.75E+00	6.75	0	6.75E+00	6.75
DM_serV_tRNA	Demand function for serV_tRNA	1 serV_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.46E+02	1.46E+02	0	8.87E+00	8.87	0	8.87E+00	8.87
DM_thr1_tRNA	Demand function for thr1_tRNA	1 thr1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.01E+02	3.01E+02	0	2.43E+01	24.3	0	2.43E+01	24.3
DM_thr2_tRNA	Demand function for thr2_tRNA	1 thr2_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.41E+02	5.41E+02	0	3.71E+01	37.1	0	3.71E+01	37.1
DM_thr3_tRNA	Demand function for thr3_tRNA	1 thr3_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.77E+03	1.77E+03	0	2.22E+01	22.18	0	2.22E+01	22.18
DM_thrU_tRNA	Demand function for thrU_tRNA	1 thrU_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.71E+02	2.71E+02	0	1.28E+01	12.8	0	1.28E+01	12.8
DM_trpT_tRNA	Demand function for trpT_tRNA	1 trpT_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.41E+01	14.1	0	1.41E+01	14.1
DM_tyr1_tRNA	Demand function for tyr1_tRNA	1 tyr1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.23E+02	4.23E+02	0	7.47E+02	746.7496	0	1.32E+01	13.214
DM_val1_tRNA	Demand function for val1_tRNA	1 val1_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	9.04E+02	9.04E+02	0	3.85E+01	38.46	0	3.85E+01	38.46
DM_val2_tRNA	Demand function for val2_tRNA	1 val2_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.56E+03	1.56E+03	0	1.12E+01	11.2	0	1.12E+01	11.2
DM_val3_tRNA	Demand function for val3_tRNA	1 val3_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.56E+03	1.56E+03	0	4.97E+01	49.66	0	4.97E+01	49.66
DM_ElaC_mono	Demand function for ElaC_mono	1 ElaC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.42E+03	2.42E+03	0	4.20E+03	4201.933	0	9.13E+01	91.307
DM_Era_dim.GDP	Demand function for Era_dim.GDP	1 Era_dim.GDP -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	0	3.80E+01	38.0375
DM_Era_dim.GTP	Demand function for Era_dim.GTP	1 Era_dim.GTP -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.33E+02	7.33E+02	0	1.27E+03	1265.676	0	3.80E+01	38.0375
DM_fmet_tRNA_met	Demand function for fmet_tRNA_met	1 fmet_tRNA_met -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	9.70E+01	96.98384	0	5.03E+01	50.26
DM_Fmt_mono	Demand function for Fmt_mono	1 Fmt_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.71E+03	1.71E+03	0	2.96E+03	2962.967	0	8.50E+01	85.032
DM_GidA_mono	Demand function for GidA_mono	1 GidA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.84E+03	1.84E+03	0	3.20E+03	3202.77	0	7.35E+01	73.519
DM_GlnS_mono	Demand function for GlnS_mono	1 GlnS_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.60E+03	2.60E+03	0	4.29E+03	4285.722	0	2.02E+02	201.728
DM_GltX_mono	Demand function for GltX_mono	1 GltX_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.61E+03	2.61E+03	0	4.01E+03	4005.054	0	1.87E+02	186.759
DM_Gly_RS_tetra	Demand function for Gly_RS_tetra	1 Gly_RS_tetra -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.76E+02	3.76E+02	0	6.38E+02	637.5599	0	3.58E+01	35.7595
DM_GreA_mono	Demand function for GreA_mono	1 GreA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.85E+03	2.85E+03	0	4.97E+03	4969.003	0	9.22E+01	92.205
DM_GreB_mono	Demand function for GreB_mono	1 GreB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.69E+03	2.69E+03	0	4.69E+03	4687.216	0	7.52E+01	75.1905
DM_GroEL.(7)ADP.cisGroES	Demand function for GroEL.(7)ADP.cisGroES	1 GroEL.(7)ADP.cisGroES -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.45E+02	244.8199	0	1.67E+01	16.66743
DM_GrpE_dim	Demand function for GrpE_dim	1 GrpE_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.55E+03	1.55E+03	0	2.66E+03	2664.459	0	1.03E+02	103.3285
DM_GroEL.(7)ADP.transGroES	Demand function for GroEL.(7)ADP.transGroES	1 GroEL.(7)ADP.transGroES -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.49E+02	1.49E+02	0	2.45E+02	244.8199	0	1.67E+01	16.66743
DM_His_RS_dim	Demand function for His_RS_dim	1 His_RS_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.28E+03	1.28E+03	0	2.22E+03	2216.958	0	6.26E+01	62.628
DM_hRNAP	Demand function for hRNAP	1 hRNAP -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.82E+02	4.82E+02	0	6.51E+02	650.6377	0	1.02E+02	102.418
DM_IF1	Demand function for IF1	1 IF1 -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.48E+03	4.48E+03	0	6.28E+03	6276.458	0	2.20E+03	2203.364
DM_IF2-GTP	Demand function for IF2-GTP	1 IF2-GTP -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.52E+03	1.52E+03	0	1.97E+03	1965.924	0	4.91E+01	49.12001
DM_IF3	Demand function for IF3	1 IF3 -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.94E+03	2.94E+03	0	5.05E+03	5046.609	0	2.34E+02	234.06
DM_IleS_mono	Demand function for IleS_mono	1 IleS_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.28E+03	1.28E+03	0	2.13E+03	2133.32	0	1.04E+02	103.6475
DM_IscA_tetra	Demand function for IscA_tetra	1 IscA_tetra -->	irreversible	Demands	0.00E+00	1.00E+09	0	9.93E+01	9.93E+01	0	1.57E+02	157.3623	0	2.38E+01	23.802
DM_IscS_dim_S-SH	Demand function for IscS_dim_S-SH	1 IscS_dim_S-SH -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.26E+02	6.26E+02	0	1.07E+03	1070.975	0	4.70E+01	47.012
DM_IscU_dim_[4Fe-4S]	Demand function for IscU_dim_[4Fe-4S]	1 IscU_dim_[4Fe-4S] -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.38E+02	2.38E+02	0	3.73E+02	373.4788	0	6.18E+01	61.838
DM_KsgA_mono	Demand function for KsgA_mono	1 KsgA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.10E+03	1.10E+03	0	1.89E+03	1891.517	0	7.92E+01	79.168
DM_LeuS_mono	Demand function for LeuS_mono	1 LeuS_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.25E+03	1.25E+03	0	2.13E+03	2127.826	0	1.16E+02	115.8
DM_LysI_RS_dim	Demand function for LysI_RS_dim	1 LysI_RS_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.36E+02	7.36E+02	0	1.26E+03	1257.488	0	5.77E+01	57.7245
DM_LysII_RS_dim	Demand function for LysII_RS_dim	1 LysII_RS_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.42E+03	1.42E+03	0	2.14E+03	2142.861	0	5.93E+01	59.2615
DM_Map_mono	Demand function for Map_mono	1 Map_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.14E+02	5.14E+02	0	8.30E+02	829.6965	0	1.04E+02	103.755
DM_Met_RS_dim	Demand function for Met_RS_dim	1 Met_RS_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.21E+03	1.21E+03	0	2.08E+03	2075.962	0	5.56E+01	55.6335
DM_Mfd_mono	Demand function for Mfd_mono	1 Mfd_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.95E+03	1.95E+03	0	2.12E+03	2119.82	0	7.92E+01	79.194
DM_MiaA_dim	Demand function for MiaA_dim	1 MiaA_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.90E+02	1.90E+02	0	2.74E+02	273.6907	0	8.06E+01	80.586
DM_MiaB_mono	Demand function for MiaB_mono	1 MiaB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.40E+03	2.40E+03	0	4.16E+03	4160.365	0	9.54E+01	95.364
DM_NusA_mono	Demand function for NusA_mono	1 NusA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	9.12E+02	9.12E+02	0	1.55E+03	1550.869	0	8.09E+01	80.91
DM_NusB_mono	Demand function for NusB_mono	1 NusB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.98E+02	4.98E+02	0	8.02E+02	801.9676	0	1.02E+02	102.3304
DM_NusG_mono	Demand function for NusG_mono	1 NusG_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.58E+03	1.58E+03	0	2.72E+03	2722.16	0	9.00E+01	89.99
DM_Orn_dim	Demand function for Orn_dim	1 Orn_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.24E+03	1.24E+03	0	2.16E+03	2155.584	0	3.68E+01	36.76
DM_Phe_RS_tetra	Demand function for Phe_RS_tetra	1 Phe_RS_tetra -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.64E+02	3.64E+02	0	5.97E+02	596.7828	0	5.36E+01	53.5624
DM_PrmA_mono	Demand function for PrmA_mono	1 PrmA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	9.21E+02	9.21E+02	0	1.56E+03	1555.257	0	9.53E+01	95.302
DM_PrmB_mono	Demand function for PrmB_mono	1 PrmB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.78E+02	5.78E+02	0	9.51E+02	950.5525	0	9.36E+01	93.5568
DM_PrmC_mono	Demand function for PrmC_mono	1 PrmC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.42E+03	2.42E+03	0	4.21E+03	4210.577	0	9.48E+01	94.832
DM_Pro_RS_dim	Demand function for Pro_RS_dim	1 Pro_RS_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.24E+03	1.24E+03	0	2.05E+03	2053.575	0	5.72E+01	57.2055
DM_QueA_mono	Demand function for QueA_mono	1 QueA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.30E+03	2.30E+03	0	4.02E+03	4019.263	0	6.35E+01	63.478
DM_QueF_dim	Demand function for QueF_dim	1 QueF_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.26E+03	1.26E+03	0	2.20E+03	2200.206	0	3.26E+01	32.592

DM_RbfA_mono	Demand function for RbfA_mono	1 RbfA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.69E+02	1.69E+02	0	2.45E+02	244.9262	0	6.98E+01	69.762
DM_RF1_mono	Demand function for RF1_mono	1 RF1_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.52E+03	2.52E+03	0	4.38E+03	4382.152	0	9.89E+01	98.868
DM_RF2_mono	Demand function for RF2_mono	1 RF2_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.07E+03	1.07E+03	0	1.82E+03	1824.129	0	8.65E+01	86.541
DM_RF3_mono.GDP	Demand function for RF3_mono.GDP	1 RF3_mono.GDP -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.49E+03	2.49E+03	0	4.33E+03	4334.315	0	9.14E+01	91.388
DM_Rho_hexa	Demand function for Rho_hexa	1 Rho_hexa -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.67E+02	3.67E+02	0	6.32E+02	632.4217	0	2.04E+01	20.428
DM_rib_30_ini	Demand function for rib_30_ini	1 rib_30_ini -->	irreversible	Demands	0.00E+00	1.00E+09	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
DM_rib_50	Demand function for rib_50	1 rib_50 -->	irreversible	Demands	6.22E+01	8.29E+01	8.44E+01	1.13E+02	2.81E+01	6.22E+01	8.29E+01	20.72	6.22E+01	8.29E+01	20.72
DM_RimI_mono	Demand function for RimI_mono	1 RimI_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.96E+02	6.96E+02	0	1.17E+03	1170.349	0	7.63E+01	76.3432
DM_RimJ_mono	Demand function for RimJ_mono	1 RimJ_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.66E+03	2.66E+03	0	4.58E+03	4578.325	0	1.52E+02	151.921
DM_RimK_mono	Demand function for RimK_mono	1 RimK_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.64E+03	1.64E+03	0	2.83E+03	2833.396	0	8.27E+01	82.739
DM_RimL_mono	Demand function for RimL_mono	1 RimL_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.02E+03	3.02E+03	0	5.05E+03	5054.124	0	8.98E+01	89.75
DM_RimM_mono	Demand function for RimM_mono	1 RimM_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	8.59E+02	8.59E+02	0	9.60E+02	960.3389	0	1.72E+02	171.79
DM_RlmB_dim	Demand function for RlmB_dim	1 RlmB_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.81E+02	2.81E+02	0	4.61E+02	460.6318	0	4.65E+01	46.466
DM_RluA_mono	Demand function for RluA_mono	1 RluA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.97E+02	4.97E+02	0	8.11E+02	811.2431	0	8.91E+01	89.112
DM_RluB_mono	Demand function for RluB_mono	1 RluB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.74E+03	2.74E+03	0	4.77E+03	4768.031	0	9.68E+01	96.815
DM_RluC_mono	Demand function for RluC_mono	1 RluC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.79E+03	2.79E+03	0	4.87E+03	4865.967	0	8.27E+01	82.746
DM_RluD_mono	Demand function for RluD_mono	1 RluD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.53E+03	1.53E+03	0	2.61E+03	2611.512	0	1.12E+02	112.404
DM_RNase_BN_dim	Demand function for RNase_BN_dim	1 RNase_BN_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.21E+03	1.21E+03	0	2.10E+03	2100.966	0	4.57E+01	45.6535
DM_RNase_E_tetra	Demand function for RNase_E_tetra	1 RNase_E_tetra -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.49E+02	3.49E+02	0	3.79E+02	379.1216	0	2.88E+01	28.8145
DM_RNase_G_dim	Demand function for RNase_G_dim	1 RNase_G_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.23E+02	4.23E+02	0	7.19E+02	718.9986	0	3.88E+01	38.836
DM_RNase_Gen	Demand function for RNase_Gen	1 RNase_Gen -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.70E+03	2.70E+03	0	4.48E+03	4476.727	0	2.89E+02	289.4685
DM_RNase_III_dim	Demand function for RNase_III_dim	1 RNase_III_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.64E+02	5.64E+02	0	9.72E+02	971.8349	0	3.31E+01	33.0525
DM_RNase_m16	Demand function for RNase_m16	1 RNase_m16 -->	irreversible	Demands	0.00E+00	1.00E+09	0	1000000000	1.00E+09	0	1000000000	1000000000	0	1000000000	1E+09
DM_RNase_m23	Demand function for RNase_m23	1 RNase_m23 -->	irreversible	Demands	0.00E+00	1.00E+09	0	1000000000	1.00E+09	0	1000000000	1000000000	0	1000000000	1E+09
DM_RNase_m5	Demand function for RNase_m5	1 RNase_m5 -->	irreversible	Demands	0.00E+00	1.00E+09	0	1000000000	1.00E+09	0	1000000000	1000000000	0	1000000000	1E+09
DM_RNase_P_cplx	Demand function for RNase_P_cplx	1 RNase_P_cplx -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.81E+02	2.81E+02	0	5.93E+01	59.25644	0	1.08E+01	10.8499
DM_RNase_T_dim	Demand function for RNase_T_dim	1 RNase_T_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.73E+02	1.73E+02	0	2.71E+02	271.4044	0	4.52E+01	45.246
DM_Rnb_mono	Demand function for Rnb_mono	1 Rnb_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.38E+03	2.38E+03	0	3.79E+03	3791.216	0	1.25E+02	125.43
DM_Rnc_mono	Demand function for Rnc_mono	1 Rnc_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.13E+03	1.13E+03	0	1.94E+03	1943.67	0	6.61E+01	66.105
DM_Rnd_mono	Demand function for Rnd_mono	1 Rnd_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.50E+03	2.50E+03	0	4.11E+03	4113.529	0	7.31E+01	73.139
DM_FliA_mono	Demand function for FliA_mono	1 FliA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	9.82E+02	9.82E+02	0	1.66E+03	1662.033	0	9.51E+01	95.074
DM_RpoD_mono	Demand function for RpoD_mono	1 RpoD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.50E+03	2.50E+03	0	2.78E+03	2776.665	0	1.02E+02	101.844
DM_RpoE_mono	Demand function for RpoE_mono	1 RpoE_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.30E+02	6.30E+02	0	1.03E+03	1033.275	0	1.05E+02	105.369
DM_RpoH_mono	Demand function for RpoH_mono	1 RpoH_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.45E+03	2.45E+03	0	4.25E+03	4251.581	0	9.93E+01	99.344
DM_RpoN_mono	Demand function for RpoN_mono	1 RpoN_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.44E+03	2.44E+03	0	4.24E+03	4236.416	0	1.10E+02	109.676
DM_RpoS_mono	Demand function for RpoS_mono	1 RpoS_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.83E+03	2.83E+03	0	4.81E+03	4808.371	0	1.39E+02	138.719
DM_RpoZ_mono	Demand function for RpoZ_mono	1 RpoZ_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.99E+02	1.99E+02	0	2.85E+02	285.2405	0	8.80E+01	87.96
DM_Rrf_mono	Demand function for Rrf_mono	1 Rrf_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.65E+03	2.65E+03	0	4.53E+03	4528.892	0	1.96E+02	195.99
DM_RrmA_dim	Demand function for RrmA_dim	1 RrmA_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.26E+03	1.26E+03	0	2.19E+03	2190.606	0	4.48E+01	44.7735
DM_RrmJ_mono	Demand function for RrmJ_mono	1 RrmJ_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.23E+02	7.23E+02	0	1.19E+03	1189.757	0	1.15E+02	115.38
DM_RsmB_mono	Demand function for RsmB_mono	1 RsmB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.52E+03	4517.09	0	7.87E+01	78.675
DM_RsmC_mono	Demand function for RsmC_mono	1 RsmC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.44E+03	2.44E+03	0	4.24E+03	4237.958	0	9.91E+01	99.14
DM_RsuA_mono	Demand function for RsuA_mono	1 RsuA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.41E+03	2.41E+03	0	4.18E+03	4183.787	0	9.16E+01	91.598
DM_RumA_mono	Demand function for RumA_mono	1 RumA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.56E+03	2.56E+03	0	4.47E+03	4466.434	0	7.79E+01	77.8625
DM_RumB_mono	Demand function for RumB_mono	1 RumB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.74E+03	1.74E+03	0	3.02E+03	3017.262	0	7.33E+01	73.348
DM_SelA_deca	Demand function for SelA_deca	1 SelA_deca -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.09E+02	1.09E+02	0	4.62E+01	46.224	0	9.74E+00	9.7362
DM_SelB.GTP.sec_tRNA	Demand function for SelB.GTP.sec_tRNA	1 SelB.GTP.sec_tRNA -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.39E+02	6.39E+02	0	1.37E+01	13.7	0	1.37E+01	13.7
DM_Ser_RS_dim	Demand function for Ser_RS_dim	1 Ser_RS_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.34E+03	1.34E+03	0	2.30E+03	2297.203	0	1.05E+02	105.2375
DM_TadA_dim	Demand function for TadA_dim	1 TadA_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.05E+02	6.05E+02	0	1.03E+03	1033.666	0	4.52E+01	45.205
DM_Tgt_hexa	Demand function for Tgt_hexa	1 Tgt_hexa -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.50E+02	3.50E+02	0	6.07E+02	606.9291	0	1.53E+01	15.312
DM_ThiI_mono	Demand function for ThiI_mono	1 ThiI_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.59E+03	2.59E+03	0	4.50E+03	4501.697	0	9.73E+01	97.328
DM_Thr_RS_dim	Demand function for Thr_RS_dim	1 Thr_RS_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	9.61E+02	9.61E+02	0	1.41E+03	1412.256	0	1.59E+02	159.0075
DM_TilS_mono	Demand function for TilS_mono	1 TilS_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.46E+03	2.46E+03	0	3.29E+03	3290.823	0	9.59E+01	95.9
DM_transGroES_hepta	Demand function for transGroES_hepta	1 transGroES_hepta -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.23E+02	4.23E+02	0	7.14E+02	714.4714	0	4.37E+01	43.73
DM_TrmA_mono	Demand function for TrmA_mono	1 TrmA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.56E+03	2.56E+03	0	4.47E+03	4470.891	0	7.16E+01	71.5659
DM_TrmC_mono	Demand function for TrmC_mono	1 TrmC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.66E+03	2.66E+03	0	3.29E+03	3290.823	0	7.01E+01	70.083
DM_TrmD_dim	Demand function for TrmD_dim	1 TrmD_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.06E+02	7.06E+02	0	7.83E+02	782.5042	0	1.91E+02	191.0925

DM_TrmE_dim	Demand function for TrmE_dim	1 TrmE_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.17E+03	1.17E+03	0	2.04E+03	2042.594	0	4.35E+01	43.459
DM_TrmH_dim	Demand function for TrmH_dim	1 TrmH_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.83E+02	1.83E+02	0	2.95E+02	294.7626	0	3.83E+01	38.298
DM_TrmU_mono	Demand function for TrmU_mono	1 TrmU_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.47E+03	2.47E+03	0	4.28E+03	4284.865	0	1.06E+02	105.567
DM_Trp_RS_dim	Demand function for Trp_RS_dim	1 Trp_RS_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.30E+03	1.30E+03	0	2.24E+03	2244.478	0	6.01E+01	60.1255
DM_TruA_dim	Demand function for TruA_dim	1 TruA_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.31E+02	4.31E+02	0	7.24E+02	723.5971	0	4.99E+01	49.90875
DM_TruB_mono	Demand function for TruB_mono	1 TruB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.26E+02	3.26E+02	0	5.23E+02	522.5303	0	7.21E+01	72.108
DM_TruD_mono	Demand function for TruD_mono	1 TruD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.77E+03	2.77E+03	0	4.82E+03	4823.381	0	9.02E+01	90.18
DM_Tyr_RS_dim	Demand function for Tyr_RS_dim	1 Tyr_RS_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.76E+02	7.76E+02	0	1.34E+03	1336.016	0	4.76E+01	47.568
DM_ValS_mono	Demand function for ValS_mono	1 ValS_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.02E+03	2.02E+03	0	2.06E+03	2056.765	0	1.19E+02	118.8
DM_YadB_mono	Demand function for YadB_mono	1 YadB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.31E+03	2.31E+03	0	4.01E+03	4010.973	0	9.64E+01	96.354
DM_YbbB_dim	Demand function for YbbB_dim	1 YbbB_dim -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.27E+03	1.27E+03	0	2.21E+03	2214.226	0	4.72E+01	47.208
DM_YccK_mono	Demand function for YccK_mono	1 YccK_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.07E+03	3.07E+03	0	5.36E+03	5362.387	0	7.77E+01	77.724
DM_YdaO_mono	Demand function for YdaO_mono	1 YdaO_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.84E+03	2.84E+03	0	4.95E+03	4947.459	0	9.52E+01	95.202
DM_YecO_mono	Demand function for YecO_mono	1 YecO_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	9.48E+02	9.48E+02	0	1.60E+03	1604.879	0	9.21E+01	92.092
DM_YecP_mono	Demand function for YecP_mono	1 YecP_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.26E+03	1.26E+03	0	2.15E+03	2149.36	0	9.63E+01	96.292
DM_YggH_mono	Demand function for YggH_mono	1 YggH_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.03E+03	2.03E+03	0	3.51E+03	3509.765	0	9.49E+01	94.948
DM_YggJ_mono	Demand function for YggJ_mono	1 YggJ_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.13E+03	1.13E+03	0	1.92E+03	1924.832	0	8.34E+01	83.384
DM_YheLMN_cplx	Demand function for YheLMN_cplx	1 YheLMN_cplx -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.22E+02	2.22E+02	0	3.65E+02	364.5383	0	3.35E+01	33.537
DM_YhhP_mono	Demand function for YhhP_mono	1 YhhP_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.99E+03	1.99E+03	0	3.45E+03	3448.746	0	8.36E+01	83.6
DM_YjbC_mono	Demand function for YjbC_mono	1 YjbC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.70E+03	2.70E+03	0	4.70E+03	4700.938	0	9.59E+01	95.897
DM_YmfC_mono	Demand function for YmfC_mono	1 YmfC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.44E+03	1.44E+03	0	2.48E+03	2481.692	0	8.41E+01	84.096
DM_YqcB_mono	Demand function for YqcB_mono	1 YqcB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.33E+03	1.33E+03	0	2.28E+03	2282.417	0	9.43E+01	94.335
DM_YrdC_mono	Demand function for YrdC_mono	1 YrdC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.82E+02	7.82E+02	0	1.31E+03	1310.16	0	9.31E+01	93.082
DM_rrfD	Demand function for rrfD	1 rrfD -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.06E+02	1.06E+02	0	1.15E+01	11.5	0	1.15E+01	11.5
DM_AcpS_mono	Demand function for AcpS_mono	1 AcpS_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.32E+02	3.32E+02	0	5.30E+02	530.1084	0	7.35E+01	73.542
DM_AmiB_mono	Demand function for AmiB_mono	1 AmiB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.10E+02	4.10E+02	0	6.53E+02	653.1219	0	9.53E+01	95.264
DM_ApaG_mono	Demand function for ApaG_mono	1 ApaG_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.02E+02	5.02E+02	0	8.18E+02	818.3957	0	9.01E+01	90.076
DM_ApaH_mono	Demand function for ApaH_mono	1 ApaH_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.03E+03	1.03E+03	0	1.75E+03	1752.699	0	8.80E+01	87.968
DM_AroB_mono	Demand function for AroB_mono	1 AroB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.99E+02	4.99E+02	0	8.23E+02	822.7952	0	7.80E+01	77.994
DM_AroC_mono	Demand function for AroC_mono	1 AroC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.71E+02	6.71E+02	0	1.10E+03	1104.778	0	1.05E+02	104.9496
DM_AroE_mono	Demand function for AroE_mono	1 AroE_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.08E+03	1.08E+03	0	1.84E+03	1843.607	0	7.33E+01	73.312
DM_AroK_mono	Demand function for AroK_mono	1 AroK_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.77E+02	2.77E+02	0	4.31E+02	431.2072	0	7.65E+01	76.54
DM_Bdm_mono	Demand function for BDemand function for mono	1 Bdm_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.03E+02	5.03E+02	0	4.21E+02	420.72	0	9.00E+01	89.956
DM_Cmk_mono	Demand function for Cmk_mono	1 Cmk_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	8.34E+02	8.34E+02	0	1.09E+03	1087.802	0	1.38E+02	138.372
DM_CobC_mono	Demand function for CobC_mono	1 CobC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.12E+02	3.12E+02	0	5.05E+02	504.8618	0	6.22E+01	62.216
DM_DamX_mono	Demand function for DamX_mono	1 DamX_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.48E+02	7.48E+02	0	1.27E+03	1266.246	0	7.51E+01	75.1
DM_Dam_mono	Demand function for Dam_mono	1 Dam_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.06E+02	7.06E+02	0	1.19E+03	1193.139	0	7.25E+01	72.544
DM_DapD_mono	Demand function for DapD_mono	1 DapD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.33E+02	5.33E+02	0	8.70E+02	870.2896	0	9.60E+01	95.952
DM_DedA_mono	Demand function for DedA_mono	1 DedA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.98E+02	6.98E+02	0	1.17E+03	1165.915	0	8.80E+01	88.014
DM_DnaG_mono	Demand function for DnaG_mono	1 DnaG_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.09E+03	1.09E+03	0	1.88E+03	1877.153	0	6.85E+01	68.51
DM_DsbC_mono	Demand function for DsbC_mono	1 DsbC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.47E+02	5.47E+02	0	8.99E+02	899.0264	0	8.92E+01	89.206
DM_FabD_mono	Demand function for FabD_mono	1 FabD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.79E+02	7.79E+02	0	1.23E+03	1229.523	0	1.95E+02	194.526
DM_FabG_mono	Demand function for FabG_mono	1 FabG_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.66E+02	6.66E+02	0	1.02E+03	1016.496	0	2.11E+02	211.498
DM_FabH_mono	Demand function for FabH_mono	1 FabH_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.05E+02	7.05E+02	0	1.16E+03	1155.183	0	1.20E+02	120.186
DM_FecR_mono	Demand function for FecR_mono	1 FecR_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	9.00E+01	9.00E+01	0	9.00E+01	90	0	9.00E+01	90
DM_Fis_mono	Demand function for Fis_mono	1 Fis_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.34E+02	6.34E+02	0	1.02E+03	1024.133	0	1.24E+02	124.14
DM_FkpB_mono	Demand function for FkpB_mono	1 FkpB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.42E+02	2.42E+02	0	3.73E+02	372.7892	0	7.08E+01	70.836
DM_FliY_mono	Demand function for FliY_mono	1 FliY_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.07E+03	1.07E+03	0	1.80E+03	1796.95	0	1.18E+02	118.065
DM_FliZ_mono	Demand function for FliZ_mono	1 FliZ_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.47E+02	7.47E+02	0	1.23E+03	1232.867	0	1.14E+02	113.61
DM_FtsH_mono	Demand function for FtsH_mono	1 FtsH_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.97E+03	1.97E+03	0	3.41E+03	3407.568	0	9.49E+01	94.905
DM_GarK_mono	Demand function for GarK_mono	1 GarK_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.65E+02	7.65E+02	0	1.28E+03	1279.259	0	9.46E+01	94.55759
DM_GarL_mono	Demand function for GarL_mono	1 GarL_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.13E+02	5.13E+02	0	8.34E+02	834.0366	0	9.36E+01	93.5985
DM_GarP_mono	Demand function for GarP_mono	1 GarP_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.88E+02	7.88E+02	0	1.34E+03	1344.783	0	6.14E+01	61.3574
DM_GarR_mono	Demand function for GarR_mono	1 GarR_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.40E+02	5.40E+02	0	9.04E+02	904.2715	0	6.51E+01	65.1083
DM_GidB_mono	Demand function for GidB_mono	1 GidB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.68E+02	6.68E+02	0	1.11E+03	1109.296	0	9.44E+01	94.404
DM_GlnD_mono	Demand function for GlnD_mono	1 GlnD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.54E+03	1.54E+03	0	1.99E+03	1991.064	0	1.14E+02	114.244
DM_Gph_mono	Demand function for Gph_mono	1 Gph_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	8.33E+02	8.33E+02	0	1.41E+03	1407.233	0	8.55E+01	85.526

DM_GshB_mono	Demand function for GshB_mono	1 GshB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.47E+03	1.47E+03	0	2.50E+03	2498.544	0	1.31E+02	130.968
DM_HepA_mono	Demand function for HepA_mono	1 HepA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.01E+03	2.01E+03	0	2.40E+03	2396.157	0	1.02E+02	102.256
DM_HflC_mono	Demand function for HflC_mono	1 HflC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.28E+02	3.28E+02	0	5.05E+02	505.2114	0	9.75E+01	97.546
DM_HflK_mono	Demand function for HflK_mono	1 HflK_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.95E+02	3.95E+02	0	6.19E+02	618.9618	0	1.04E+02	104.016
DM_HflX_mono	Demand function for HflX_mono	1 HflX_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.93E+02	3.93E+02	0	6.27E+02	626.5019	0	9.01E+01	90.1
DM_Hfq_mono	Demand function for Hfq_mono	1 Hfq_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.82E+02	6.82E+02	0	7.38E+02	738.3065	0	6.10E+02	609.57
DM_HolA_mono	Demand function for HolA_mono	1 HolA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.39E+02	5.39E+02	0	8.89E+02	889.3306	0	8.45E+01	84.52
DM_HolD_mono	Demand function for HolD_mono	1 HolD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.91E+02	6.91E+02	0	1.17E+03	1165.549	0	7.15E+01	71.5432
DM_IhfA_mono	Demand function for IhfA_mono	1 IhfA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.83E+02	2.83E+02	0	4.05E+02	405.2462	0	1.23E+02	122.994
DM_IhfB_mono	Demand function for IhfB_mono	1 IhfB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.44E+02	5.44E+02	0	6.14E+02	613.8883	0	2.30E+02	230.365
DM_IscR_mono	Demand function for IscR_mono	1 IscR_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.43E+02	5.43E+02	0	8.91E+02	890.984	0	8.96E+01	89.622
DM_IspH_mono	Demand function for IspH_mono	1 IspH_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.76E+02	4.76E+02	0	7.71E+02	771.4558	0	9.21E+01	92.061
DM_Lhr_mono	Demand function for Lhr_mono	1 Lhr_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.41E+03	1.41E+03	0	1.53E+03	1525.901	0	1.08E+02	108.09
DM_LspA_mono	Demand function for LspA_mono	1 LspA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.80E+02	2.80E+02	0	4.28E+02	427.5779	0	8.79E+01	87.8805
DM_MepA_mono	Demand function for MepA_mono	1 MepA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.03E+02	5.03E+02	0	8.34E+02	833.8956	0	7.21E+01	72.1216
DM_MreB_mono	Demand function for MreB_mono	1 MreB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.64E+02	6.64E+02	0	1.09E+03	1086.541	0	1.15E+02	114.88
DM_MreC_mono	Demand function for MreC_mono	1 MreC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.48E+02	6.48E+02	0	1.09E+03	1091.728	0	7.15E+01	71.484
DM_MreD_mono	Demand function for MreD_mono	1 MreD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.36E+02	3.36E+02	0	5.26E+02	526.2934	0	8.90E+01	89.046
DM_MutL_mono	Demand function for MutL_mono	1 MutL_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.05E+02	5.05E+02	0	8.42E+02	841.6827	0	6.93E+01	69.264
DM_MutM_mono	Demand function for MutM_mono	1 MutM_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.42E+03	1.42E+03	0	1.33E+03	1331.55	0	9.12E+01	91.23
DM_NadD_mono	Demand function for NadD_mono	1 NadD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.48E+02	3.48E+02	0	5.58E+02	558.1984	0	7.53E+01	75.312
DM_NfsA_mono	Demand function for NfsA_mono	1 NfsA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	8.65E+02	8.65E+02	0	1.43E+03	1426.703	0	1.34E+02	133.518
DM_NlpD_mono	Demand function for NlpD_mono	1 NlpD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.55E+03	1.55E+03	0	2.53E+03	2529.614	0	2.71E+02	271.282
DM_Npr_mono	Demand function for Npr_mono	1 Npr_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.85E+02	2.85E+02	0	4.20E+02	419.8026	0	1.10E+02	110.035
DM_PanF_mono	Demand function for PanF_mono	1 PanF_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.46E+03	1.46E+03	0	2.50E+03	2501.96	0	9.73E+01	97.328
DM_PdxA_mono	Demand function for PdxA_mono	1 PdxA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.31E+03	1.31E+03	0	2.24E+03	2241.617	0	8.95E+01	89.452
DM_PdxB_mono	Demand function for PdxB_mono	1 PdxB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	8.46E+02	8.46E+02	0	1.44E+03	1435.934	0	7.80E+01	77.979
DM_PdxH_mono	Demand function for PdxH_mono	1 PdxH_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.07E+02	6.07E+02	0	1.02E+03	1016.789	0	7.31E+01	73.128
DM_PdxJ_mono	Demand function for PdxJ_mono	1 PdxJ_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.09E+02	6.09E+02	0	1.01E+03	1005.897	0	9.28E+01	92.764
DM_PdxY_mono	Demand function for PdxY_mono	1 PdxY_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.06E+03	1.06E+03	0	1.81E+03	1809.834	0	9.19E+01	91.904
DM_PheM_mono	Demand function for PheM_mono	1 PheM_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.19E+02	2.19E+02	0	2.24E+02	224.2242	0	1.13E+02	113.3448
DM_PlsX_mono	Demand function for PlsX_mono	1 PlsX_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.53E+02	7.53E+02	0	1.25E+03	1253.737	0	1.04E+02	103.74
DM_PriB_mono	Demand function for PriB_mono	1 PriB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	8.89E+02	8.89E+02	0	8.74E+02	874.08	0	3.79E+02	378.534
DM_PtsN_mono	Demand function for PtsN_mono	1 PtsN_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.55E+02	4.55E+02	0	6.98E+02	698.0447	0	1.40E+02	140.463
DM_PyrG_mono	Demand function for PyrG_mono	1 PyrG_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.57E+03	1.57E+03	0	2.60E+03	2597.498	0	2.05E+02	204.928
DM_Rbn_mono	Demand function for Rbn_mono	1 Rbn_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	8.24E+02	8.24E+02	0	1.40E+03	1400.399	0	7.28E+01	72.828
DM_RecG_mono	Demand function for RecG_mono	1 RecG_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	9.63E+02	9.63E+02	0	1.65E+03	1650.324	0	7.21E+01	72.08
DM_RecJ_mono	Demand function for RecJ_mono	1 RecJ_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	2.12E+03	2119.124	0	6.34E+01	63.426
DM_RecO_mono	Demand function for RecO_mono	1 RecO_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.83E+02	5.83E+02	0	9.79E+02	979.2968	0	6.62E+01	66.164
DM_RhoL_mono	Demand function for RhoL_mono	1 RhoL_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.72E+02	1.72E+02	0	2.38E+02	238.0054	0	8.50E+01	85.007
DM_RibD_mono	Demand function for RibD_mono	1 RibD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.13E+03	1.13E+03	0	1.93E+03	1929.185	0	9.26E+01	92.6373
DM_RibE_mono	Demand function for RibE_mono	1 RibE_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.49E+02	5.49E+02	0	8.91E+02	890.5136	0	1.03E+02	103.4217
DM_RibF_mono	Demand function for RibF_mono	1 RibF_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.15E+02	5.15E+02	0	8.10E+02	809.7958	0	1.30E+02	130.401
DM_RlpB_mono	Demand function for RlpB_mono	1 RlpB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.42E+02	3.42E+02	0	5.35E+02	534.5618	0	9.19E+01	91.916
DM_Rnr_mono	Demand function for Rnr_mono	1 Rnr_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.65E+03	1.65E+03	0	2.79E+03	2794.799	0	7.56E+01	75.576
DM_Rpe_mono	Demand function for Rpe_mono	1 Rpe_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	8.20E+02	8.20E+02	0	1.35E+03	1353.646	0	1.26E+02	126.347
DM_RseA_mono	Demand function for RseA_mono	1 RseA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.16E+02	7.16E+02	0	1.16E+03	1156.249	0	1.44E+02	143.988
DM_RseB_mono	Demand function for RseB_mono	1 RseB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	9.74E+02	9.74E+02	0	1.63E+03	1634.653	0	1.16E+02	116.262
DM_RseC_mono	Demand function for RseC_mono	1 RseC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.21E+02	5.21E+02	0	8.52E+02	851.6164	0	9.24E+01	92.421
DM_SecE_mono	Demand function for SecE_mono	1 SecE_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.13E+03	1.13E+03	0	1.93E+03	1931.692	0	8.92E+01	89.173
DM_SecY_mono	Demand function for SecY_mono	1 SecY_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	8.26E+02	8.26E+02	0	1.32E+03	1315.489	0	1.90E+02	189.956
DM_SpoT_mono	Demand function for SpoT_mono	1 SpoT_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.02E+03	1.02E+03	0	1.73E+03	1728.892	0	1.11E+02	111.192
DM_SurA_mono	Demand function for SurA_mono	1 SurA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.96E+02	7.96E+02	0	1.32E+03	1321.986	0	1.13E+02	113.2
DM_Tpr_mono	Demand function for Tpr_mono	1 Tpr_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.59E+02	2.59E+02	0	4.21E+02	421.3748	0	4.82E+01	48.207
DM_Usg_mono	Demand function for Usg_mono	1 Usg_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.03E+03	1.03E+03	0	1.77E+03	1771.553	0	6.49E+01	64.8755
DM_YajC_mono	Demand function for YajC_mono	1 YajC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.56E+02	6.56E+02	0	1.08E+03	1076.077	0	1.08E+02	107.976
DM_YbaD_mono	Demand function for YbaD_mono	1 YbaD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.62E+02	4.62E+02	0	7.65E+02	765.4876	0	6.59E+01	65.8504

DM_YbjC_mono	Demand function for YbjC_mono	1 YbjC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.46E+02	3.46E+02	0	5.46E+02	546.3867	0	8.45E+01	84.535
DM_YbjN_mono	Demand function for YbjN_mono	1 YbjN_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	9.69E+02	9.69E+02	0	1.60E+03	1601.193	0	1.45E+02	144.963
DM_YbjO_mono	Demand function for YbjO_mono	1 YbjO_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.71E+02	7.71E+02	0	1.29E+03	1293.374	0	8.90E+01	89.046
DM_YceD_mono	Demand function for YceD_mono	1 YceD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.30E+03	1.30E+03	0	1.16E+03	1162.8	0	3.39E+02	338.55
DM_YecN_mono	Demand function for YecN_mono	1 YecN_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.14E+02	5.14E+02	0	8.42E+02	842.1994	0	8.58E+01	85.806
DM_YfcA_mono	Demand function for YfcA_mono	1 YfcA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.94E+02	4.94E+02	0	8.04E+02	803.8271	0	8.97E+01	89.664
DM_YfcL_mono	Demand function for YfcL_mono	1 YfcL_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.21E+02	2.21E+02	0	3.24E+02	324.4924	0	8.64E+01	86.438
DM_YfcM_mono	Demand function for YfcM_mono	1 YfcM_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.27E+02	3.27E+02	0	5.33E+02	533.3847	0	5.73E+01	57.276
DM_YfhB_mono	Demand function for YfhB_mono	1 YfhB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.43E+03	1.43E+03	0	2.46E+03	2463.998	0	9.17E+01	91.692
DM_YfiH_mono	Demand function for YfiH_mono	1 YfiH_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.14E+03	1.14E+03	0	1.94E+03	1935.472	0	9.40E+01	94.024
DM_YggL_mono	Demand function for YggL_mono	1 YggL_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	9.54E+02	9.54E+02	0	1.59E+03	1588.605	0	1.25E+02	125.112
DM_YhbC_mono	Demand function for YhbC_mono	1 YhbC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.10E+02	3.10E+02	0	4.86E+02	486.3058	0	8.08E+01	80.8
DM_YhbG_mono	Demand function for YhbG_mono	1 YhbG_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.07E+02	5.07E+02	0	8.34E+02	833.6445	0	8.41E+01	84.098
DM_YhbH_mono	Demand function for YhbH_mono	1 YhbH_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.43E+02	3.43E+02	0	4.78E+02	477.8026	0	1.68E+02	168.035
DM_YhbJ_mono	Demand function for YhbJ_mono	1 YhbJ_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	6.89E+02	6.89E+02	0	1.12E+03	1120.648	0	1.29E+02	129.392
DM_YhdE_mono	Demand function for YhdE_mono	1 YhdE_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.76E+02	3.76E+02	0	6.08E+02	608.4875	0	7.41E+01	74.074
DM_YhdT_mono	Demand function for YhdT_mono	1 YhdT_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	2.74E+02	2.74E+02	0	4.24E+02	423.5029	0	8.00E+01	79.984
DM_YheO_mono	Demand function for YheO_mono	1 YheO_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.12E+03	1.12E+03	0	1.92E+03	1917.235	0	8.32E+01	83.188
DM_YicR_mono	Demand function for YicR_mono	1 YicR_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.23E+03	1.23E+03	0	1.14E+03	1142.96	0	6.69E+01	66.872
DM_YihX_mono	Demand function for YihX_mono	1 YihX_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.90E+02	5.90E+02	0	9.63E+02	963.2302	0	1.04E+02	104.214
DM_YiiD_mono	Demand function for YiiD_mono	1 YiiD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	9.22E+02	9.22E+02	0	1.57E+03	1566.481	0	8.27E+01	82.726
DM_YjeB_mono	Demand function for YjeB_mono	1 YjeB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	3.53E+02	3.53E+02	0	5.59E+02	559.0763	0	8.57E+01	85.744
DM_YjeE_mono	Demand function for YjeE_mono	1 YjeE_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.70E+02	1.70E+02	0	2.54E+02	254.4307	0	6.13E+01	61.326
DM_YjeF_mono	Demand function for YjeF_mono	1 YjeF_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.59E+02	4.59E+02	0	7.39E+02	739.2022	0	9.55E+01	95.52
DM_YjjG_mono	Demand function for YjjG_mono	1 YjjG_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.08E+03	1.08E+03	0	1.85E+03	1854.368	0	7.66E+01	76.6077
DM_YmfB_mono	Demand function for YmfB_mono	1 YmfB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	1.11E+03	1.11E+03	0	1.89E+03	1892.949	0	9.48E+01	94.752
DM_YqcA_mono	Demand function for YqcA_mono	1 YqcA_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.47E+02	7.47E+02	0	1.25E+03	1253.289	0	8.63E+01	86.312
DM_YqcC_mono	Demand function for YqcC_mono	1 YqcC_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	5.73E+02	5.73E+02	0	9.53E+02	953.1668	0	7.79E+01	77.934
DM_YrdB_mono	Demand function for YrdB_mono	1 YrdB_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	4.07E+02	4.07E+02	0	6.47E+02	647.3271	0	9.41E+01	94.11
DM_YrdD_mono	Demand function for YrdD_mono	1 YrdD_mono -->	irreversible	Demands	0.00E+00	1.00E+09	0	7.10E+02	7.10E+02	0	1.19E+03	1190.554	0	8.41E+01	84.12
b0014_CONV2	Conversion of b0014	1 b0014_mRNA_2 --> 1 b0014_mRNA_1	irreversible	Translation	0.00E+00	6.43E+00	0	6.43E+00	6.43E+00	0	6.43E+00	6.43	0	6.43E+00	6.43
b0015_CONV2	Conversion of b0015	1 b0015_mRNA_2 --> 1 b0015_mRNA_1	irreversible	Translation	0.00E+00	3.97E+00	0	3.97E+00	3.97E+00	0	3.97E+00	3.97	0	3.97E+00	3.97
b0023_CONV2	Conversion of b0023	1 b0023_mRNA_2 --> 1 b0023_mRNA_1	irreversible	Translation	0.00E+00	1.44E+02	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	9.51E+00	8.29E+01	73.368
b0025_CONV2	Conversion of b0025	1 b0025_mRNA_2 --> 1 b0025_mRNA_1	irreversible	Translation	0.00E+00	7.15E+00	0	7.15E+00	7.15E+00	0	7.15E+00	7.15	0	7.15E+00	7.15
b0026_CONV2	Conversion of b0026	1 b0026_mRNA_2 --> 1 b0026_mRNA_1	irreversible	Translation	0.00E+00	1.79E+00	0	1.79E+00	1.79E+00	0	1.79E+00	1.79	0	1.79E+00	1.79
b0027_CONV2	Conversion of b0027	1 b0027_mRNA_2 --> 1 b0027_mRNA_1	irreversible	Translation	0.00E+00	9.67E+00	0	9.67E+00	9.67E+00	0	9.67E+00	9.67	0	9.67E+00	9.67
b0028_CONV2	Conversion of b0028	1 b0028_mRNA_2 --> 1 b0028_mRNA_1	irreversible	Translation	0.00E+00	8.76E+00	0	8.76E+00	8.76E+00	0	8.76E+00	8.76	0	8.76E+00	8.76
b0029_CONV2	Conversion of b0029	1 b0029_mRNA_2 --> 1 b0029_mRNA_1	irreversible	Translation	0.00E+00	5.02E+00	0	5.02E+00	5.02E+00	0	5.02E+00	5.02	0	5.02E+00	5.02
b0049_CONV2	Conversion of b0049	1 b0049_mRNA_2 --> 1 b0049_mRNA_1	irreversible	Translation	0.00E+00	5.33E+00	0	5.33E+00	5.33E+00	0	5.33E+00	5.33	0	5.33E+00	5.33
b0050_CONV2	Conversion of b0050	1 b0050_mRNA_2 --> 1 b0050_mRNA_1	irreversible	Translation	0.00E+00	1.27E+01	0	1.27E+01	1.27E+01	0	1.27E+01	12.7	0	1.27E+01	12.7
b0051_CONV2	Conversion of b0051	1 b0051_mRNA_2 --> 1 b0051_mRNA_1	irreversible	Translation	0.00E+00	4.78E+00	0	4.78E+00	4.78E+00	0	4.78E+00	4.78	0	4.78E+00	4.78
b0052_CONV2	Conversion of b0052	1 b0052_mRNA_2 --> 1 b0052_mRNA_1	irreversible	Translation	0.00E+00	4.54E+00	0	4.54E+00	4.54E+00	0	4.54E+00	4.54	0	4.54E+00	4.54
b0053_CONV2	Conversion of b0053	1 b0053_mRNA_2 --> 1 b0053_mRNA_1	irreversible	Translation	0.00E+00	4.36E+00	0	4.36E+00	4.36E+00	0	4.36E+00	4.36	0	4.36E+00	4.36
b0058_CONV2	Conversion of b0058	1 b0058_mRNA_2 --> 1 b0058_mRNA_1	irreversible	Translation	0.00E+00	7.24E+00	0	7.24E+00	7.24E+00	0	7.24E+00	7.24	0	7.24E+00	7.24
b0059_CONV2	Conversion of b0059	1 b0059_mRNA_2 --> 1 b0059_mRNA_1	irreversible	Translation	0.00E+00	1.64E+00	0	1.64E+00	1.64E+00	0	1.64E+00	1.64	0	1.64E+00	1.64
b0144_CONV2	Conversion of b0144	1 b0144_mRNA_2 --> 1 b0144_mRNA_1	irreversible	Translation	0.00E+00	5.15E+00	0	5.15E+00	5.15E+00	0	5.15E+00	5.15	0	5.15E+00	5.15
b0166_CONV2	Conversion of b0166	1 b0166_mRNA_2 --> 1 b0166_mRNA_1	irreversible	Translation	0.00E+00	5.79E+00	0	5.79E+00	5.79E+00	0	5.79E+00	5.79	0	5.79E+00	5.79
b0167_CONV2	Conversion of b0167	1 b0167_mRNA_2 --> 1 b0167_mRNA_1	irreversible	Translation	0.00E+00	1.99E+00	0	1.99E+00	1.99E+00	0	1.99E+00	1.99	0	1.99E+00	1.99
b0168_CONV2	Conversion of b0168	1 b0168_mRNA_2 --> 1 b0168_mRNA_1	irreversible	Translation	0.00E+00	6.71E+00	0	6.71E+00	6.71E+00	0	6.71E+00	6.71	0	6.71E+00	6.71
b0169_CONV2	Conversion of b0169	1 b0169_mRNA_2 --> 1 b0169_mRNA_1	irreversible	Translation	0.00E+00	2.09E+01	0	2.09E+01	2.09E+01	0	2.09E+01	20.9	3.92E+00	2.09E+01	16.978
b0170_CONV2	Conversion of b0170	1 b0170_mRNA_2 --> 1 b0170_mRNA_1	irreversible	Translation	0.00E+00	1.55E+01	0	1.55E+01	1.55E+01	0	1.55E+01	15.5	0	1.55E+01	15.5
b0172_CONV2	Conversion of b0172	1 b0172_mRNA_2 --> 1 b0172_mRNA_1	irreversible	Translation	0.00E+00	1.92E+01	0	1.92E+01	1.92E+01	0	1.92E+01	19.2	0	1.92E+01	19.2
b0188_CONV2	Conversion of b0188	1 b0188_mRNA_2 --> 1 b0188_mRNA_1	irreversible	Translation	0.00E+00	3.67E+00	0	3.67E+00	3.67E+00	0	3.67E+00	3.67	0	3.67E+00	3.67
b0194_CONV2	Conversion of b0194	1 b0194_mRNA_2 --> 1 b0194_mRNA_1	irreversible	Translation	0.00E+00	3.26E+00	0	3.26E+00	3.26E+00	0	3.26E+00	3.26	0	3.26E+00	3.26
b0405_CONV2	Conversion of b0405	1 b0405_mRNA_2 --> 1 b0405_mRNA_1	irreversible	Translation	0.00E+00	3.14E+00	0	3.14E+00	3.14E+00	0	3.14E+00	3.14	0	3.14E+00	3.14
b0406_CONV2	Conversion of b0406	1 b0406_mRNA_2 --> 1 b0406_mRNA_1	irreversible	Translation	0.00E+00	3.98E+00	0	3.98E+00	3.98E+00	0	3.98E+00	3.98	0	3.98E+00	3.98
b0407_CONV2	Conversion of b0407	1 b0407_mRNA_2 --> 1 b0407_mRNA_1	irreversible	Translation	0.00E+00	1.78E+01	0	1.78E+01	1.78E+01	0	1.78E+01	17.8	0	1.78E+01	17.8

b0413_CONV2	Conversion of b0413	1 b0413_mRNA_2 --> 1 b0413_mRNA_1	irreversible	Translation	0.00E+00	8.14E+00	0	8.14E+00	8.14E+00	0	8.14E+00	8.14	0	8.14E+00	8.14
b0414_CONV2	Conversion of b0414	1 b0414_mRNA_2 --> 1 b0414_mRNA_1	irreversible	Translation	0.00E+00	4.32E+00	0	4.32E+00	4.32E+00	0	4.32E+00	4.32	0	4.32E+00	4.32
b0415_CONV2	Conversion of b0415	1 b0415_mRNA_2 --> 1 b0415_mRNA_1	irreversible	Translation	0.00E+00	1.14E+01	0	1.14E+01	1.14E+01	0	1.14E+01	11.4	0	1.14E+01	11.4
b0416_CONV2	Conversion of b0416	1 b0416_mRNA_2 --> 1 b0416_mRNA_1	irreversible	Translation	0.00E+00	1.27E+01	0	1.27E+01	1.27E+01	0	1.27E+01	12.7	0	1.27E+01	12.7
b0423_CONV2	Conversion of b0423	1 b0423_mRNA_2 --> 1 b0423_mRNA_1	irreversible	Translation	0.00E+00	3.29E+00	0	3.29E+00	3.29E+00	0	3.29E+00	3.29	0	3.29E+00	3.29
b0436_CONV2	Conversion of b0436	1 b0436_mRNA_2 --> 1 b0436_mRNA_1	irreversible	Translation	0.00E+00	3.67E+00	0	3.67E+00	3.67E+00	0	3.67E+00	3.67	2.18E+00	3.67E+00	1.4916
b0503_CONV2	Conversion of b0503	1 b0503_mRNA_2 --> 1 b0503_mRNA_1	irreversible	Translation	0.00E+00	4.36E+00	0	4.36E+00	4.36E+00	0	4.36E+00	4.36	0	4.36E+00	4.36
b0526_CONV2	Conversion of b0526	1 b0526_mRNA_2 --> 1 b0526_mRNA_1	irreversible	Translation	0.00E+00	3.24E+00	0	3.24E+00	3.24E+00	0	3.24E+00	3.24	0	3.24E+00	3.24
b0638_CONV2	Conversion of b0638	1 b0638_mRNA_2 --> 1 b0638_mRNA_1	irreversible	Translation	0.00E+00	5.51E+00	0	5.51E+00	5.51E+00	0	5.51E+00	5.51	0	5.51E+00	5.51
b0639_CONV2	Conversion of b0639	1 b0639_mRNA_2 --> 1 b0639_mRNA_1	irreversible	Translation	0.00E+00	6.13E+00	0	6.13E+00	6.13E+00	0	6.13E+00	6.13	0	6.13E+00	6.13
b0640_CONV2	Conversion of b0640	1 b0640_mRNA_2 --> 1 b0640_mRNA_1	irreversible	Translation	0.00E+00	4.08E+00	0	4.08E+00	4.08E+00	0	4.08E+00	4.08	0	4.08E+00	4.08
b0641_CONV2	Conversion of b0641	1 b0641_mRNA_2 --> 1 b0641_mRNA_1	irreversible	Translation	0.00E+00	8.21E+00	0	8.21E+00	8.21E+00	0	8.21E+00	8.21	0	8.21E+00	8.21
b0642_CONV2	Conversion of b0642	1 b0642_mRNA_2 --> 1 b0642_mRNA_1	irreversible	Translation	0.00E+00	2.17E+00	0	2.17E+00	2.17E+00	0	2.17E+00	2.17	0	2.17E+00	2.17
b0661_CONV2	Conversion of b0661	1 b0661_mRNA_2 --> 1 b0661_mRNA_1	irreversible	Translation	0.00E+00	3.34E+00	0	3.34E+00	3.34E+00	0	3.34E+00	3.34	0	3.34E+00	3.34
b0680_CONV2	Conversion of b0680	1 b0680_mRNA_2 --> 1 b0680_mRNA_1	irreversible	Translation	0.00E+00	5.89E+00	0	5.89E+00	5.89E+00	0	5.89E+00	5.89	0	5.89E+00	5.89
b0850_CONV2	Conversion of b0850	1 b0850_mRNA_2 --> 1 b0850_mRNA_1	irreversible	Translation	0.00E+00	1.67E+01	0	1.67E+01	1.67E+01	0	1.67E+01	16.7	0	1.67E+01	16.7
b0851_CONV2	Conversion of b0851	1 b0851_mRNA_2 --> 1 b0851_mRNA_1	irreversible	Translation	0.00E+00	9.33E+00	0	9.33E+00	9.33E+00	0	9.33E+00	9.33	0	9.33E+00	9.33
b0852_CONV2	Conversion of b0852	1 b0852_mRNA_2 --> 1 b0852_mRNA_1	irreversible	Translation	0.00E+00	4.66E+00	0	4.66E+00	4.66E+00	0	4.66E+00	4.66	0	4.66E+00	4.66
b0853_CONV2	Conversion of b0853	1 b0853_mRNA_2 --> 1 b0853_mRNA_1	irreversible	Translation	0.00E+00	1.59E+01	0	1.59E+01	1.59E+01	0	1.59E+01	15.9	0	1.59E+01	15.9
b0858_CONV2	Conversion of b0858	1 b0858_mRNA_2 --> 1 b0858_mRNA_1	irreversible	Translation	0.00E+00	9.79E+00	0	9.79E+00	9.79E+00	0	9.79E+00	9.79	0	9.79E+00	9.79
b0859_CONV2	Conversion of b0859	1 b0859_mRNA_2 --> 1 b0859_mRNA_1	irreversible	Translation	0.00E+00	3.23E+00	0	3.23E+00	3.23E+00	0	3.23E+00	3.23	0	3.23E+00	3.23
b0884_CONV2	Conversion of b0884	1 b0884_mRNA_2 --> 1 b0884_mRNA_1	irreversible	Translation	0.00E+00	5.60E+02	0	5.60E+02	5.60E+02	0	5.60E+02	559.571	8.73E+00	5.60E+02	550.841
b0893_CONV2	Conversion of b0893	1 b0893_mRNA_2 --> 1 b0893_mRNA_1	irreversible	Translation	0.00E+00	7.59E+00	0	7.59E+00	7.59E+00	0	7.59E+00	7.59	0	7.59E+00	7.59
b0910_CONV2	Conversion of b0910	1 b0910_mRNA_2 --> 1 b0910_mRNA_1	irreversible	Translation	0.00E+00	1.03E+01	0	1.03E+01	1.03E+01	0	1.03E+01	10.3	0	1.03E+01	10.3
b0911_CONV2	Conversion of b0911	1 b0911_mRNA_2 --> 1 b0911_mRNA_1	irreversible	Translation	0.00E+00	1.21E+01	0	1.21E+01	1.21E+01	0	1.21E+01	12.1	1.20E+00	1.21E+01	10.8965
b0912_CONV2	Conversion of b0912	1 b0912_mRNA_2 --> 1 b0912_mRNA_1	irreversible	Translation	0.00E+00	4.56E+01	0	4.56E+01	4.56E+01	0	4.56E+01	45.6	0	4.56E+01	45.6
b0930_CONV2	Conversion of b0930	1 b0930_mRNA_2 --> 1 b0930_mRNA_1	irreversible	Translation	0.00E+00	4.80E+00	0	4.80E+00	4.80E+00	0	4.80E+00	4.8	0	4.80E+00	4.8
b0969_CONV2	Conversion of b0969	1 b0969_mRNA_2 --> 1 b0969_mRNA_1	irreversible	Translation	0.00E+00	1.28E+01	0	1.28E+01	1.28E+01	0	1.28E+01	12.8	0	1.28E+01	12.8
b1066_CONV2	Conversion of b1066	1 b1066_mRNA_2 --> 1 b1066_mRNA_1	irreversible	Translation	0.00E+00	1.35E+01	0	1.35E+01	1.35E+01	0	1.35E+01	13.5	0	1.35E+01	13.5
b1084_CONV2	Conversion of b1084	1 b1084_mRNA_2 --> 1 b1084_mRNA_1	irreversible	Translation	0.00E+00	1.67E+00	0	1.67E+00	1.67E+00	0	1.67E+00	1.67	0	1.67E+00	1.67
b1086_CONV2	Conversion of b1086	1 b1086_mRNA_2 --> 1 b1086_mRNA_1	irreversible	Translation	0.00E+00	4.39E+00	0	4.39E+00	4.39E+00	0	4.39E+00	4.39	0	4.39E+00	4.39
b1088_CONV2	Conversion of b1088	1 b1088_mRNA_2 --> 1 b1088_mRNA_1	irreversible	Translation	0.00E+00	3.34E+01	0	3.34E+01	3.34E+01	0	3.34E+01	33.4	0	3.34E+01	33.4
b1089_CONV2	Conversion of b1089	1 b1089_mRNA_2 --> 1 b1089_mRNA_1	irreversible	Translation	0.00E+00	1.47E+02	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	2.01E+01	8.29E+01	62.822
b1090_CONV2	Conversion of b1090	1 b1090_mRNA_2 --> 1 b1090_mRNA_1	irreversible	Translation	0.00E+00	4.98E+00	0	4.98E+00	4.98E+00	0	4.98E+00	4.98	0	4.98E+00	4.98
b1091_CONV2	Conversion of b1091	1 b1091_mRNA_2 --> 1 b1091_mRNA_1	irreversible	Translation	0.00E+00	6.47E+00	0	6.47E+00	6.47E+00	0	6.47E+00	6.47	0	6.47E+00	6.47
b1092_CONV2	Conversion of b1092	1 b1092_mRNA_2 --> 1 b1092_mRNA_1	irreversible	Translation	0.00E+00	1.06E+01	0	1.06E+01	1.06E+01	0	1.06E+01	10.6	0	1.06E+01	10.6
b1093_CONV2	Conversion of b1093	1 b1093_mRNA_2 --> 1 b1093_mRNA_1	irreversible	Translation	0.00E+00	1.49E+01	0	1.49E+01	1.49E+01	0	1.49E+01	14.9	0	1.49E+01	14.9
b1114_CONV2	Conversion of b1114	1 b1114_mRNA_2 --> 1 b1114_mRNA_1	irreversible	Translation	0.00E+00	9.75E-01	0	9.75E-01	9.75E-01	0	9.75E-01	0.975	0	9.75E-01	0.975
b1133_CONV2	Conversion of b1133	1 b1133_mRNA_2 --> 1 b1133_mRNA_1	irreversible	Translation	0.00E+00	4.82E+00	0	4.82E+00	4.82E+00	0	4.82E+00	4.82	0	4.82E+00	4.82
b1134_CONV2	Conversion of b1134	1 b1134_mRNA_2 --> 1 b1134_mRNA_1	irreversible	Translation	0.00E+00	1.04E+01	0	1.04E+01	1.04E+01	0	1.04E+01	10.4	0	1.04E+01	10.4
b1135_CONV2	Conversion of b1135	1 b1135_mRNA_2 --> 1 b1135_mRNA_1	irreversible	Translation	0.00E+00	6.88E+00	0	6.88E+00	6.88E+00	0	6.88E+00	6.88	0	6.88E+00	6.88
b1211_CONV2	Conversion of b1211	1 b1211_mRNA_2 --> 1 b1211_mRNA_1	irreversible	Translation	0.00E+00	4.40E+00	0	4.40E+00	4.40E+00	0	4.40E+00	4.4	0	4.40E+00	4.4
b1212_CONV2	Conversion of b1212	1 b1212_mRNA_2 --> 1 b1212_mRNA_1	irreversible	Translation	0.00E+00	5.72E+00	0	5.72E+00	5.72E+00	0	5.72E+00	5.72	0	5.72E+00	5.72
b1229_CONV2	Conversion of b1229	1 b1229_mRNA_2 --> 1 b1229_mRNA_1	irreversible	Translation	0.00E+00	4.80E+01	0	4.80E+01	4.80E+01	0	4.80E+01	48	0	4.80E+01	48
b1269_CONV2	Conversion of b1269	1 b1269_mRNA_2 --> 1 b1269_mRNA_1	irreversible	Translation	0.00E+00	5.45E+00	0	5.45E+00	5.45E+00	0	5.45E+00	5.45	0	5.45E+00	5.45
b1286_CONV2	Conversion of b1286	1 b1286_mRNA_2 --> 1 b1286_mRNA_1	irreversible	Translation	0.00E+00	2.90E+00	0	2.90E+00	2.90E+00	0	2.90E+00	2.9	0	2.90E+00	2.9
b1344_CONV2	Conversion of b1344	1 b1344_mRNA_2 --> 1 b1344_mRNA_1	irreversible	Translation	0.00E+00	5.10E+00	0	5.10E+00	5.10E+00	0	5.10E+00	5.1	0	5.10E+00	5.1
b1427_CONV2	Conversion of b1427	1 b1427_mRNA_2 --> 1 b1427_mRNA_1	irreversible	Translation	0.00E+00	8.86E+00	0	8.86E+00	8.86E+00	0	8.86E+00	8.86	0	8.86E+00	8.86
b1480_CONV2	Conversion of b1480	1 b1480_mRNA_2 --> 1 b1480_mRNA_1	irreversible	Translation	0.00E+00	7.88E+02	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	2.80E+01	8.29E+01	54.9
b1481_CONV2	Conversion of b1481	1 b1481_mRNA_2 --> 1 b1481_mRNA_1	irreversible	Translation	0.00E+00	2.23E+01	0	2.23E+01	2.23E+01	0	2.23E+01	22.3	0	2.23E+01	22.3
b1636_CONV2	Conversion of b1636	1 b1636_mRNA_2 --> 1 b1636_mRNA_1	irreversible	Translation	0.00E+00	5.52E+00	0	5.52E+00	5.52E+00	0	5.52E+00	5.52	0	5.52E+00	5.52
b1637_CONV2	Conversion of b1637	1 b1637_mRNA_2 --> 1 b1637_mRNA_1	irreversible	Translation	0.00E+00	3.74E+00	0	3.74E+00	3.74E+00	0	3.74E+00	3.74	0	3.74E+00	3.74
b1638_CONV2	Conversion of b1638	1 b1638_mRNA_2 --> 1 b1638_mRNA_1	irreversible	Translation	0.00E+00	5.99E+00	0	5.99E+00	5.99E+00	0	5.99E+00	5.99	0	5.99E+00	5.99
b1652_CONV2	Conversion of b1652	1 b1652_mRNA_2 --> 1 b1652_mRNA_1	irreversible	Translation	0.00E+00	7.37E+00	0	7.37E+00	7.37E+00	0	7.37E+00	7.37	0	7.37E+00	7.37
b1653_CONV2	Conversion of b1653	1 b1653_mRNA_2 --> 1 b1653_mRNA_1	irreversible	Translation	0.00E+00	1.03E+00	0	1.03E+00	1.03E+00	0	1.03E+00	1.03	0	1.03E+00	1.03
b1712_CONV2	Conversion of b1712	1 b1712_mRNA_2 --> 1 b1712_mRNA_1	irreversible	Translation	0.00E+00	2.45E+01	0	2.45E+01	2.45E+01	0	2.45E+01	24.5	0	2.45E+01	24.5
b1713_CONV2	Conversion of b1713	1 b1713_mRNA_2 --> 1 b1713_mRNA_1	irreversible	Translation	0.00E+00	2.23E+00	0	2.23E+00	2.23E+00	0	2.23E+00	2.23	0	2.23E+00	2.23

b1714_CONV2	Conversion of b1714	1 b1714_mRNA_2 --> 1 b1714_mRNA_1	irreversible	Translation	0.00E+00	6.27E+00	0	6.27E+00	6.27E+00	0	6.27E+00	6.27	0	6.27E+00	6.27
b1715_CONV2	Conversion of b1715	1 b1715_mRNA_2 --> 1 b1715_mRNA_1	irreversible	Translation	0.00E+00	1.13E+02	0	1.13E+02	1.13E+02	0	1.13E+02	113.246	0	1.13E+02	113.246
b1716_CONV2	Conversion of b1716	1 b1716_mRNA_2 --> 1 b1716_mRNA_1	irreversible	Translation	0.00E+00	2.61E+01	0	2.61E+01	2.61E+01	0	2.61E+01	26.1	1.02E+01	2.61E+01	15.905
b1717_CONV2	Conversion of b1717	1 b1717_mRNA_2 --> 1 b1717_mRNA_1	irreversible	Translation	0.00E+00	7.32E+01	0	7.32E+01	7.32E+01	0	7.32E+01	73.2	2.06E+01	7.32E+01	52.645
b1718_CONV2	Conversion of b1718	1 b1718_mRNA_2 --> 1 b1718_mRNA_1	irreversible	Translation	0.00E+00	2.90E+01	0	2.90E+01	2.90E+01	0	2.90E+01	29	5.59E+00	2.90E+01	23.406
b1719_CONV2	Conversion of b1719	1 b1719_mRNA_2 --> 1 b1719_mRNA_1	irreversible	Translation	0.00E+00	8.43E+00	0	8.43E+00	8.43E+00	0	8.43E+00	8.43	0	8.43E+00	8.43
b1804_CONV2	Conversion of b1804	1 b1804_mRNA_2 --> 1 b1804_mRNA_1	irreversible	Translation	0.00E+00	3.23E+00	0	3.23E+00	3.23E+00	0	3.23E+00	3.23	0	3.23E+00	3.23
b1822_CONV2	Conversion of b1822	1 b1822_mRNA_2 --> 1 b1822_mRNA_1	irreversible	Translation	0.00E+00	5.89E+00	0	5.89E+00	5.89E+00	0	5.89E+00	5.89	0	5.89E+00	5.89
b1866_CONV2	Conversion of b1866	1 b1866_mRNA_2 --> 1 b1866_mRNA_1	irreversible	Translation	0.00E+00	2.21E+00	0	2.21E+00	2.21E+00	0	2.21E+00	2.21	0	2.21E+00	2.21
b1869_CONV2	Conversion of b1869	1 b1869_mRNA_2 --> 1 b1869_mRNA_1	irreversible	Translation	0.00E+00	1.21E+01	0	1.21E+01	1.21E+01	0	1.21E+01	12.1	0	1.21E+01	12.1
b1870_CONV2	Conversion of b1870	1 b1870_mRNA_2 --> 1 b1870_mRNA_1	irreversible	Translation	0.00E+00	6.42E+00	0	6.42E+00	6.42E+00	0	6.42E+00	6.42	0	6.42E+00	6.42
b1871_CONV2	Conversion of b1871	1 b1871_mRNA_2 --> 1 b1871_mRNA_1	irreversible	Translation	0.00E+00	4.91E+00	0	4.91E+00	4.91E+00	0	4.91E+00	4.91	0	4.91E+00	4.91
b1876_CONV2	Conversion of b1876	1 b1876_mRNA_2 --> 1 b1876_mRNA_1	irreversible	Translation	0.00E+00	2.75E+00	0	2.75E+00	2.75E+00	0	2.75E+00	2.75	0	2.75E+00	2.75
b1920_CONV2	Conversion of b1920	1 b1920_mRNA_2 --> 1 b1920_mRNA_1	irreversible	Translation	0.00E+00	7.71E+00	0	7.71E+00	7.71E+00	0	7.71E+00	7.71	0	7.71E+00	7.71
b1921_CONV2	Conversion of b1921	1 b1921_mRNA_2 --> 1 b1921_mRNA_1	irreversible	Translation	0.00E+00	1.12E+01	0	1.12E+01	1.12E+01	0	1.12E+01	11.2	0	1.12E+01	11.2
b1922_CONV2	Conversion of b1922	1 b1922_mRNA_2 --> 1 b1922_mRNA_1	irreversible	Translation	0.00E+00	6.63E+00	0	6.63E+00	6.63E+00	0	6.63E+00	6.63	0	6.63E+00	6.63
b2114_CONV2	Conversion of b2114	1 b2114_mRNA_2 --> 1 b2114_mRNA_1	irreversible	Translation	0.00E+00	2.34E+00	0	2.34E+00	2.34E+00	0	2.34E+00	2.34	0	2.34E+00	2.34
b2140_CONV2	Conversion of b2140	1 b2140_mRNA_2 --> 1 b2140_mRNA_1	irreversible	Translation	0.00E+00	5.03E+00	0	5.03E+00	5.03E+00	0	5.03E+00	5.03	0	5.03E+00	5.03
b2183_CONV2	Conversion of b2183	1 b2183_mRNA_2 --> 1 b2183_mRNA_1	irreversible	Translation	0.00E+00	6.86E+00	0	6.86E+00	6.86E+00	0	6.86E+00	6.86	0	6.86E+00	6.86
b2185_CONV2	Conversion of b2185	1 b2185_mRNA_2 --> 1 b2185_mRNA_1	irreversible	Translation	0.00E+00	5.26E+01	0	5.26E+01	5.26E+01	0	5.26E+01	52.6	1.21E+01	5.26E+01	40.518
b2268_CONV2	Conversion of b2268	1 b2268_mRNA_2 --> 1 b2268_mRNA_1	irreversible	Translation	0.00E+00	5.20E+00	0	5.20E+00	5.20E+00	0	5.20E+00	5.2	0	5.20E+00	5.2
b2317_CONV2	Conversion of b2317	1 b2317_mRNA_2 --> 1 b2317_mRNA_1	irreversible	Translation	0.00E+00	7.24E+00	0	7.24E+00	7.24E+00	0	7.24E+00	7.24	0	7.24E+00	7.24
b2318_CONV2	Conversion of b2318	1 b2318_mRNA_2 --> 1 b2318_mRNA_1	irreversible	Translation	0.00E+00	6.56E+00	0	6.56E+00	6.56E+00	0	6.56E+00	6.56	0	6.56E+00	6.56
b2319_CONV2	Conversion of b2319	1 b2319_mRNA_2 --> 1 b2319_mRNA_1	irreversible	Translation	0.00E+00	3.32E+00	0	3.32E+00	3.32E+00	0	3.32E+00	3.32	0	3.32E+00	3.32
b2320_CONV2	Conversion of b2320	1 b2320_mRNA_2 --> 1 b2320_mRNA_1	irreversible	Translation	0.00E+00	3.45E+00	0	3.45E+00	3.45E+00	0	3.45E+00	3.45	0	3.45E+00	3.45
b2324_CONV2	Conversion of b2324	1 b2324_mRNA_2 --> 1 b2324_mRNA_1	irreversible	Translation	0.00E+00	1.68E+00	0	1.68E+00	1.68E+00	0	1.68E+00	1.68	0	1.68E+00	1.68
b2325_CONV2	Conversion of b2325	1 b2325_mRNA_2 --> 1 b2325_mRNA_1	irreversible	Translation	0.00E+00	1.72E+01	0	1.72E+01	1.72E+01	0	1.72E+01	17.2	0	1.72E+01	17.2
b2326_CONV2	Conversion of b2326	1 b2326_mRNA_2 --> 1 b2326_mRNA_1	irreversible	Translation	0.00E+00	5.64E+00	0	5.64E+00	5.64E+00	0	5.64E+00	5.64	0	5.64E+00	5.64
b2327_CONV2	Conversion of b2327	1 b2327_mRNA_2 --> 1 b2327_mRNA_1	irreversible	Translation	0.00E+00	5.89E+00	0	5.89E+00	5.89E+00	0	5.89E+00	5.89	0	5.89E+00	5.89
b2328_CONV2	Conversion of b2328	1 b2328_mRNA_2 --> 1 b2328_mRNA_1	irreversible	Translation	0.00E+00	4.42E+00	0	4.42E+00	4.42E+00	0	4.42E+00	4.42	0	4.42E+00	4.42
b2329_CONV2	Conversion of b2329	1 b2329_mRNA_2 --> 1 b2329_mRNA_1	irreversible	Translation	0.00E+00	4.91E+00	0	4.91E+00	4.91E+00	0	4.91E+00	4.91	0	4.91E+00	4.91
b2330_CONV2	Conversion of b2330	1 b2330_mRNA_2 --> 1 b2330_mRNA_1	irreversible	Translation	0.00E+00	5.11E+00	0	5.11E+00	5.11E+00	0	5.11E+00	5.11	0	5.11E+00	5.11
b2400_CONV2	Conversion of b2400	1 b2400_mRNA_2 --> 1 b2400_mRNA_1	irreversible	Translation	0.00E+00	6.34E+00	0	6.34E+00	6.34E+00	0	6.34E+00	6.34	0	6.34E+00	6.34
b2514_CONV2	Conversion of b2514	1 b2514_mRNA_2 --> 1 b2514_mRNA_1	irreversible	Translation	0.00E+00	4.62E+00	0	4.62E+00	4.62E+00	0	4.62E+00	4.62	0	4.62E+00	4.62
b2528_CONV2	Conversion of b2528	1 b2528_mRNA_2 --> 1 b2528_mRNA_1	irreversible	Translation	0.00E+00	1.57E+01	0	1.57E+01	1.57E+01	0	1.57E+01	15.7	0	1.57E+01	15.7
b2529_CONV2	Conversion of b2529	1 b2529_mRNA_2 --> 1 b2529_mRNA_1	irreversible	Translation	0.00E+00	1.75E+01	0	1.75E+01	1.75E+01	0	1.75E+01	17.5	0	1.75E+01	17.5
b2530_CONV2	Conversion of b2530	1 b2530_mRNA_2 --> 1 b2530_mRNA_1	irreversible	Translation	0.00E+00	3.92E+00	0	3.92E+00	3.92E+00	0	3.92E+00	3.92	0	3.92E+00	3.92
b2531_CONV2	Conversion of b2531	1 b2531_mRNA_2 --> 1 b2531_mRNA_1	irreversible	Translation	0.00E+00	9.79E+00	0	9.79E+00	9.79E+00	0	9.79E+00	9.79	0	9.79E+00	9.79
b2559_CONV2	Conversion of b2559	1 b2559_mRNA_2 --> 1 b2559_mRNA_1	irreversible	Translation	0.00E+00	8.91E+00	0	8.91E+00	8.91E+00	0	8.91E+00	8.91	0	8.91E+00	8.91
b2560_CONV2	Conversion of b2560	1 b2560_mRNA_2 --> 1 b2560_mRNA_1	irreversible	Translation	0.00E+00	7.51E+00	0	7.51E+00	7.51E+00	0	7.51E+00	7.51	0	7.51E+00	7.51
b2563_CONV2	Conversion of b2563	1 b2563_mRNA_2 --> 1 b2563_mRNA_1	irreversible	Translation	0.00E+00	1.04E+01	0	1.04E+01	1.04E+01	0	1.04E+01	10.4	0	1.04E+01	10.4
b2564_CONV2	Conversion of b2564	1 b2564_mRNA_2 --> 1 b2564_mRNA_1	irreversible	Translation	0.00E+00	6.52E+00	0	6.52E+00	6.52E+00	0	6.52E+00	6.52	0	6.52E+00	6.52
b2565_CONV2	Conversion of b2565	1 b2565_mRNA_2 --> 1 b2565_mRNA_1	irreversible	Translation	0.00E+00	4.62E+00	0	4.62E+00	4.62E+00	0	4.62E+00	4.62	0	4.62E+00	4.62
b2566_CONV2	Conversion of b2566	1 b2566_mRNA_2 --> 1 b2566_mRNA_1	irreversible	Translation	0.00E+00	4.34E+00	0	4.34E+00	4.34E+00	0	4.34E+00	4.34	0	4.34E+00	4.34
b2567_CONV2	Conversion of b2567	1 b2567_mRNA_2 --> 1 b2567_mRNA_1	irreversible	Translation	0.00E+00	4.95E+00	0	4.95E+00	4.95E+00	0	4.95E+00	4.95	0	4.95E+00	4.95
b2570_CONV2	Conversion of b2570	1 b2570_mRNA_2 --> 1 b2570_mRNA_1	irreversible	Translation	0.00E+00	9.97E+00	0	9.97E+00	9.97E+00	0	9.97E+00	9.97	0	9.97E+00	9.97
b2571_CONV2	Conversion of b2571	1 b2571_mRNA_2 --> 1 b2571_mRNA_1	irreversible	Translation	0.00E+00	6.16E+00	0	6.16E+00	6.16E+00	0	6.16E+00	6.16	0	6.16E+00	6.16
b2572_CONV2	Conversion of b2572	1 b2572_mRNA_2 --> 1 b2572_mRNA_1	irreversible	Translation	0.00E+00	1.17E+01	0	1.17E+01	1.17E+01	0	1.17E+01	11.7	0	1.17E+01	11.7
b2573_CONV2	Conversion of b2573	1 b2573_mRNA_2 --> 1 b2573_mRNA_1	irreversible	Translation	0.00E+00	9.28E+00	0	9.28E+00	9.28E+00	0	9.28E+00	9.28	0	9.28E+00	9.28
b2593_CONV2	Conversion of b2593	1 b2593_mRNA_2 --> 1 b2593_mRNA_1	irreversible	Translation	0.00E+00	6.52E+00	0	6.52E+00	6.52E+00	0	6.52E+00	6.52	0	6.52E+00	6.52
b2594_CONV2	Conversion of b2594	1 b2594_mRNA_2 --> 1 b2594_mRNA_1	irreversible	Translation	0.00E+00	5.72E+00	0	5.72E+00	5.72E+00	0	5.72E+00	5.72	0	5.72E+00	5.72
b2606_CONV2	Conversion of b2606	1 b2606_mRNA_2 --> 1 b2606_mRNA_1	irreversible	Translation	0.00E+00	2.92E+01	0	2.92E+01	2.92E+01	0	2.92E+01	29.2	1.01E+01	2.92E+01	19.119
b2607_CONV2	Conversion of b2607	1 b2607_mRNA_2 --> 1 b2607_mRNA_1	irreversible	Translation	0.00E+00	2.52E+01	0	2.52E+01	2.52E+01	0	2.52E+01	25.2	0	2.52E+01	25.2
b2608_CONV2	Conversion of b2608	1 b2608_mRNA_2 --> 1 b2608_mRNA_1	irreversible	Translation	0.00E+00	1.69E+01	0	1.69E+01	1.69E+01	0	1.69E+01	16.9	0	1.69E+01	16.9
b2609_CONV2	Conversion of b2609	1 b2609_mRNA_2 --> 1 b2609_mRNA_1	irreversible	Translation	0.00E+00	3.53E+01	0	3.53E+01	3.53E+01	0	3.53E+01	35.3	1.53E+01	3.53E+01	20.039
b2614_CONV2	Conversion of b2614	1 b2614_mRNA_2 --> 1 b2614_mRNA_1	irreversible	Translation	0.00E+00	1.85E+01	0	1.85E+01	1.85E+01	0	1.85E+01	18.5	0	1.85E+01	18.5
b2697_CONV2	Conversion of b2697	1 b2697_mRNA_2 --> 1 b2697_mRNA_1	irreversible	Translation	0.00E+00	1.92E+00	0	1.92E+00	1.92E+00	0	1.92E+00	1.92	0	1.92E+00	1.92

b2741_CONV2	Conversion of b2741	1 b2741_mRNA_2 --> 1 b2741_mRNA_1	irreversible	Translation	0.00E+00	7.07E+00	0	7.07E+00	7.07E+00	0	7.07E+00	7.07	0	7.07E+00	7.07
b2742_CONV2	Conversion of b2742	1 b2742_mRNA_2 --> 1 b2742_mRNA_1	irreversible	Translation	0.00E+00	1.21E+01	0	1.21E+01	1.21E+01	0	1.21E+01	12.1	0	1.21E+01	12.1
b2745_CONV2	Conversion of b2745	1 b2745_mRNA_2 --> 1 b2745_mRNA_1	irreversible	Translation	0.00E+00	4.28E+00	0	4.28E+00	4.28E+00	0	4.28E+00	4.28	0	4.28E+00	4.28
b2779_CONV2	Conversion of b2779	1 b2779_mRNA_2 --> 1 b2779_mRNA_1	irreversible	Translation	0.00E+00	8.64E+00	0	8.64E+00	8.64E+00	0	8.64E+00	8.64	0	8.64E+00	8.64
b2780_CONV2	Conversion of b2780	1 b2780_mRNA_2 --> 1 b2780_mRNA_1	irreversible	Translation	0.00E+00	5.99E+00	0	5.99E+00	5.99E+00	0	5.99E+00	5.99	0	5.99E+00	5.99
b2785_CONV2	Conversion of b2785	1 b2785_mRNA_2 --> 1 b2785_mRNA_1	irreversible	Translation	0.00E+00	3.02E+00	0	3.02E+00	3.02E+00	0	3.02E+00	3.02	0	3.02E+00	3.02
b2790_CONV2	Conversion of b2790	1 b2790_mRNA_2 --> 1 b2790_mRNA_1	irreversible	Translation	0.00E+00	1.06E+01	0	1.06E+01	1.06E+01	0	1.06E+01	10.6	0	1.06E+01	10.6
b2791_CONV2	Conversion of b2791	1 b2791_mRNA_2 --> 1 b2791_mRNA_1	irreversible	Translation	0.00E+00	6.10E+00	0	6.10E+00	6.10E+00	0	6.10E+00	6.1	0	6.10E+00	6.1
b2792_CONV2	Conversion of b2792	1 b2792_mRNA_2 --> 1 b2792_mRNA_1	irreversible	Translation	0.00E+00	1.28E+01	0	1.28E+01	1.28E+01	0	1.28E+01	12.8	0	1.28E+01	12.8
b2794_CONV2	Conversion of b2794	1 b2794_mRNA_2 --> 1 b2794_mRNA_1	irreversible	Translation	0.00E+00	3.97E+00	0	3.97E+00	3.97E+00	0	3.97E+00	3.97	0	3.97E+00	3.97
b2890_CONV2	Conversion of b2890	1 b2890_mRNA_2 --> 1 b2890_mRNA_1	irreversible	Translation	0.00E+00	3.69E+00	0	3.69E+00	3.69E+00	0	3.69E+00	3.69	0	3.69E+00	3.69
b2891_CONV2	Conversion of b2891	1 b2891_mRNA_2 --> 1 b2891_mRNA_1	irreversible	Translation	0.00E+00	3.83E+00	0	3.83E+00	3.83E+00	0	3.83E+00	3.83	0	3.83E+00	3.83
b2892_CONV2	Conversion of b2892	1 b2892_mRNA_2 --> 1 b2892_mRNA_1	irreversible	Translation	0.00E+00	1.78E+00	0	1.78E+00	1.78E+00	0	1.78E+00	1.78	0	1.78E+00	1.78
b2893_CONV2	Conversion of b2893	1 b2893_mRNA_2 --> 1 b2893_mRNA_1	irreversible	Translation	0.00E+00	6.72E+00	0	6.72E+00	6.72E+00	0	6.72E+00	6.72	0	6.72E+00	6.72
b2946_CONV2	Conversion of b2946	1 b2946_mRNA_2 --> 1 b2946_mRNA_1	irreversible	Translation	0.00E+00	5.76E+00	0	5.76E+00	5.76E+00	0	5.76E+00	5.76	0	5.76E+00	5.76
b2947_CONV2	Conversion of b2947	1 b2947_mRNA_2 --> 1 b2947_mRNA_1	irreversible	Translation	0.00E+00	7.08E+00	0	7.08E+00	7.08E+00	0	7.08E+00	7.08	0	7.08E+00	7.08
b2959_CONV2	Conversion of b2959	1 b2959_mRNA_2 --> 1 b2959_mRNA_1	irreversible	Translation	0.00E+00	2.07E+01	0	2.07E+01	2.07E+01	0	2.07E+01	20.7	0	2.07E+01	20.7
b2960_CONV2	Conversion of b2960	1 b2960_mRNA_2 --> 1 b2960_mRNA_1	irreversible	Translation	0.00E+00	6.63E+00	0	6.63E+00	6.63E+00	0	6.63E+00	6.63	0	6.63E+00	6.63
b3065_CONV2	Conversion of b3065	1 b3065_mRNA_2 --> 1 b3065_mRNA_1	irreversible	Translation	0.00E+00	1.39E+02	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	1.34E+01	8.29E+01	69.53
b3066_CONV2	Conversion of b3066	1 b3066_mRNA_2 --> 1 b3066_mRNA_1	irreversible	Translation	0.00E+00	1.77E+00	0	1.77E+00	1.77E+00	0	1.77E+00	1.77	0	1.77E+00	1.77
b3067_CONV2	Conversion of b3067	1 b3067_mRNA_2 --> 1 b3067_mRNA_1	irreversible	Translation	0.00E+00	2.43E+00	0	2.43E+00	2.43E+00	0	2.43E+00	2.43	0	2.43E+00	2.43
b3124_CONV2	Conversion of b3124	1 b3124_mRNA_2 --> 1 b3124_mRNA_1	irreversible	Translation	0.00E+00	3.89E+00	0	3.89E+00	3.89E+00	0	3.89E+00	3.89	0	3.89E+00	3.89
b3125_CONV2	Conversion of b3125	1 b3125_mRNA_2 --> 1 b3125_mRNA_1	irreversible	Translation	0.00E+00	3.78E+00	0	3.78E+00	3.78E+00	0	3.78E+00	3.78	0	3.78E+00	3.78
b3126_CONV2	Conversion of b3126	1 b3126_mRNA_2 --> 1 b3126_mRNA_1	irreversible	Translation	0.00E+00	6.19E+00	0	6.19E+00	6.19E+00	0	6.19E+00	6.19	0	6.19E+00	6.19
b3127_CONV2	Conversion of b3127	1 b3127_mRNA_2 --> 1 b3127_mRNA_1	irreversible	Translation	0.00E+00	2.31E+00	0	2.31E+00	2.31E+00	0	2.31E+00	2.31	0	2.31E+00	2.31
b3164_CONV2	Conversion of b3164	1 b3164_mRNA_2 --> 1 b3164_mRNA_1	irreversible	Translation	0.00E+00	3.81E+00	0	3.81E+00	3.81E+00	0	3.81E+00	3.81	0	3.81E+00	3.81
b3165_CONV2	Conversion of b3165	1 b3165_mRNA_2 --> 1 b3165_mRNA_1	irreversible	Translation	0.00E+00	5.55E+01	0	5.55E+01	5.55E+01	0	5.55E+01	55.5	1.20E+01	5.55E+01	43.549
b3166_CONV2	Conversion of b3166	1 b3166_mRNA_2 --> 1 b3166_mRNA_1	irreversible	Translation	0.00E+00	3.86E+00	0	3.86E+00	3.86E+00	0	3.86E+00	3.86	0	3.86E+00	3.86
b3167_CONV2	Conversion of b3167	1 b3167_mRNA_2 --> 1 b3167_mRNA_1	irreversible	Translation	0.00E+00	9.82E+00	0	9.82E+00	9.82E+00	0	9.82E+00	9.82	0	9.82E+00	9.82
b3168_CONV2	Conversion of b3168	1 b3168_mRNA_2 --> 1 b3168_mRNA_1	irreversible	Translation	0.00E+00	1.99E+00	0	1.99E+00	1.99E+00	0	1.99E+00	1.99	1.05E+00	1.99E+00	0.944615
b3169_CONV2	Conversion of b3169	1 b3169_mRNA_2 --> 1 b3169_mRNA_1	irreversible	Translation	0.00E+00	2.64E+00	0	2.64E+00	2.64E+00	0	2.64E+00	2.64	0	2.64E+00	2.64
b3170_CONV2	Conversion of b3170	1 b3170_mRNA_2 --> 1 b3170_mRNA_1	irreversible	Translation	0.00E+00	9.95E+00	0	9.95E+00	9.95E+00	0	9.95E+00	9.95	0	9.95E+00	9.95
b3178_CONV2	Conversion of b3178	1 b3178_mRNA_2 --> 1 b3178_mRNA_1	irreversible	Translation	0.00E+00	2.32E+00	0	2.32E+00	2.32E+00	0	2.32E+00	2.32	0	2.32E+00	2.32
b3179_CONV2	Conversion of b3179	1 b3179_mRNA_2 --> 1 b3179_mRNA_1	irreversible	Translation	0.00E+00	9.37E+00	0	9.37E+00	9.37E+00	0	9.37E+00	9.37	0	9.37E+00	9.37
b3181_CONV2	Conversion of b3181	1 b3181_mRNA_2 --> 1 b3181_mRNA_1	irreversible	Translation	0.00E+00	1.00E+01	0	1.00E+01	1.00E+01	0	1.00E+01	10	0	1.00E+01	10
b3185_CONV2	Conversion of b3185	1 b3185_mRNA_2 --> 1 b3185_mRNA_1	irreversible	Translation	0.00E+00	3.29E+01	0	3.29E+01	3.29E+01	0	3.29E+01	32.9	1.19E+01	3.29E+01	21.007
b3186_CONV2	Conversion of b3186	1 b3186_mRNA_2 --> 1 b3186_mRNA_1	irreversible	Translation	0.00E+00	4.07E+01	0	4.07E+01	4.07E+01	0	4.07E+01	40.7	9.82E+00	4.07E+01	30.879
b3201_CONV2	Conversion of b3201	1 b3201_mRNA_2 --> 1 b3201_mRNA_1	irreversible	Translation	0.00E+00	5.80E+00	0	5.80E+00	5.80E+00	0	5.80E+00	5.8	0	5.80E+00	5.8
b3202_CONV2	Conversion of b3202	1 b3202_mRNA_2 --> 1 b3202_mRNA_1	irreversible	Translation	0.00E+00	3.71E+00	0	3.71E+00	3.71E+00	0	3.71E+00	3.71	0	3.71E+00	3.71
b3203_CONV2	Conversion of b3203	1 b3203_mRNA_2 --> 1 b3203_mRNA_1	irreversible	Translation	0.00E+00	3.34E+01	0	3.34E+01	3.34E+01	0	3.34E+01	33.4	0	3.34E+01	33.4
b3204_CONV2	Conversion of b3204	1 b3204_mRNA_2 --> 1 b3204_mRNA_1	irreversible	Translation	0.00E+00	1.54E+01	0	1.54E+01	1.54E+01	0	1.54E+01	15.4	0	1.54E+01	15.4
b3205_CONV2	Conversion of b3205	1 b3205_mRNA_2 --> 1 b3205_mRNA_1	irreversible	Translation	0.00E+00	7.88E+00	0	7.88E+00	7.88E+00	0	7.88E+00	7.88	0	7.88E+00	7.88
b3206_CONV2	Conversion of b3206	1 b3206_mRNA_2 --> 1 b3206_mRNA_1	irreversible	Translation	0.00E+00	2.18E+01	0	2.18E+01	2.18E+01	0	2.18E+01	21.8	0	2.18E+01	21.8
b3230_CONV2	Conversion of b3230	1 b3230_mRNA_2 --> 1 b3230_mRNA_1	irreversible	Translation	0.00E+00	2.51E+01	0	2.51E+01	2.51E+01	0	2.51E+01	25.1	8.41E+00	2.51E+01	16.688
b3231_CONV2	Conversion of b3231	1 b3231_mRNA_2 --> 1 b3231_mRNA_1	irreversible	Translation	0.00E+00	6.04E+01	0	6.04E+01	6.04E+01	0	6.04E+01	60.4	7.30E+00	6.04E+01	53.098
b3247_CONV2	Conversion of b3247	1 b3247_mRNA_2 --> 1 b3247_mRNA_1	irreversible	Translation	0.00E+00	2.67E+00	0	2.67E+00	2.67E+00	0	2.67E+00	2.67	0	2.67E+00	2.67
b3248_CONV2	Conversion of b3248	1 b3248_mRNA_2 --> 1 b3248_mRNA_1	irreversible	Translation	0.00E+00	6.63E+00	0	6.63E+00	6.63E+00	0	6.63E+00	6.63	0	6.63E+00	6.63
b3249_CONV2	Conversion of b3249	1 b3249_mRNA_2 --> 1 b3249_mRNA_1	irreversible	Translation	0.00E+00	9.79E+00	0	9.79E+00	9.79E+00	0	9.79E+00	9.79	0	9.79E+00	9.79
b3250_CONV2	Conversion of b3250	1 b3250_mRNA_2 --> 1 b3250_mRNA_1	irreversible	Translation	0.00E+00	3.30E+00	0	3.30E+00	3.30E+00	0	3.30E+00	3.3	0	3.30E+00	3.3
b3251_CONV2	Conversion of b3251	1 b3251_mRNA_2 --> 1 b3251_mRNA_1	irreversible	Translation	0.00E+00	5.64E+00	0	5.64E+00	5.64E+00	0	5.64E+00	5.64	0	5.64E+00	5.64
b3257_CONV2	Conversion of b3257	1 b3257_mRNA_2 --> 1 b3257_mRNA_1	irreversible	Translation	0.00E+00	1.98E+01	0	1.98E+01	1.98E+01	0	1.98E+01	19.8	0	1.98E+01	19.8
b3258_CONV2	Conversion of b3258	1 b3258_mRNA_2 --> 1 b3258_mRNA_1	irreversible	Translation	0.00E+00	3.28E+00	0	3.28E+00	3.28E+00	0	3.28E+00	3.28	0	3.28E+00	3.28
b3259_CONV2	Conversion of b3259	1 b3259_mRNA_2 --> 1 b3259_mRNA_1	irreversible	Translation	0.00E+00	5.41E+00	0	5.41E+00	5.41E+00	0	5.41E+00	5.41	0	5.41E+00	5.41
b3260_CONV2	Conversion of b3260	1 b3260_mRNA_2 --> 1 b3260_mRNA_1	irreversible	Translation	0.00E+00	3.49E+00	0	3.49E+00	3.49E+00	0	3.49E+00	3.49	0	3.49E+00	3.49
b3261_CONV2	Conversion of b3261	1 b3261_mRNA_2 --> 1 b3261_mRNA_1	irreversible	Translation	0.00E+00	2.47E+01	0	2.47E+01	2.47E+01	0	2.47E+01	24.7	0	2.47E+01	24.7
b3280_CONV2	Conversion of b3280	1 b3280_mRNA_2 --> 1 b3280_mRNA_1	irreversible	Translation	0.00E+00	1.87E+01	0	1.87E+01	1.87E+01	0	1.87E+01	18.7	0	1.87E+01	18.7
b3281_CONV2	Conversion of b3281	1 b3281_mRNA_2 --> 1 b3281_mRNA_1	irreversible	Translation	0.00E+00	4.46E+00	0	4.46E+00	4.46E+00	0	4.46E+00	4.46	0	4.46E+00	4.46

b3282_CONV2	Conversion of b3282	1 b3282_mRNA_2 --> 1 b3282_mRNA_1	irreversible	Translation	0.00E+00	8.34E+00	0	8.34E+00	8.34E+00	0	8.34E+00	8.34	0	8.34E+00	8.34
b3283_CONV2	Conversion of b3283	1 b3283_mRNA_2 --> 1 b3283_mRNA_1	irreversible	Translation	0.00E+00	8.29E+00	0	8.29E+00	8.29E+00	0	8.29E+00	8.29	0	8.29E+00	8.29
b3287_CONV2	Conversion of b3287	1 b3287_mRNA_2 --> 1 b3287_mRNA_1	irreversible	Translation	0.00E+00	1.21E+01	0	1.21E+01	1.21E+01	0	1.21E+01	12.1	0	1.21E+01	12.1
b3288_CONV2	Conversion of b3288	1 b3288_mRNA_2 --> 1 b3288_mRNA_1	irreversible	Translation	0.00E+00	4.44E+00	0	4.44E+00	4.44E+00	0	4.44E+00	4.44	0	4.44E+00	4.44
b3289_CONV2	Conversion of b3289	1 b3289_mRNA_2 --> 1 b3289_mRNA_1	irreversible	Translation	0.00E+00	2.83E+00	0	2.83E+00	2.83E+00	0	2.83E+00	2.83	0	2.83E+00	2.83
b3294_CONV2	Conversion of b3294	1 b3294_mRNA_2 --> 1 b3294_mRNA_1	irreversible	Translation	0.00E+00	3.52E+01	0	3.52E+01	3.52E+01	0	3.52E+01	35.2	8.48E+00	3.52E+01	26.722
b3295_CONV2	Conversion of b3295	1 b3295_mRNA_2 --> 1 b3295_mRNA_1	irreversible	Translation	0.00E+00	1.96E+01	0	1.96E+01	1.96E+01	0	1.96E+01	19.6	0	1.96E+01	19.6
b3296_CONV2	Conversion of b3296	1 b3296_mRNA_2 --> 1 b3296_mRNA_1	irreversible	Translation	0.00E+00	3.35E+01	0	3.35E+01	3.35E+01	0	3.35E+01	33.5	4.78E+00	3.35E+01	28.722
b3297_CONV2	Conversion of b3297	1 b3297_mRNA_2 --> 1 b3297_mRNA_1	irreversible	Translation	0.00E+00	3.90E+01	0	3.90E+01	3.90E+01	0	3.90E+01	39	8.48E+00	3.90E+01	30.522
b3298_CONV2	Conversion of b3298	1 b3298_mRNA_2 --> 1 b3298_mRNA_1	irreversible	Translation	0.00E+00	1.03E+02	0	1.03E+02	1.03E+02	0	8.29E+01	82.88	9.96E+00	8.29E+01	72.922
b3299_CONV2	Conversion of b3299	1 b3299_mRNA_2 --> 1 b3299_mRNA_1	irreversible	Translation	0.00E+00	1.82E+02	1.76E+01	1.13E+02	9.50E+01	0	8.29E+01	82.88	3.09E+01	8.29E+01	51.946
b3300_CONV2	Conversion of b3300	1 b3300_mRNA_2 --> 1 b3300_mRNA_1	irreversible	Translation	0.00E+00	7.16E+00	0	7.16E+00	7.16E+00	0	7.16E+00	7.16	0	7.16E+00	7.16
b3301_CONV2	Conversion of b3301	1 b3301_mRNA_2 --> 1 b3301_mRNA_1	irreversible	Translation	0.00E+00	2.27E+01	0	2.27E+01	2.27E+01	0	2.27E+01	22.7	7.62E+00	2.27E+01	15.076
b3302_CONV2	Conversion of b3302	1 b3302_mRNA_2 --> 1 b3302_mRNA_1	irreversible	Translation	0.00E+00	8.54E+01	3.54E+00	8.54E+01	8.19E+01	0	8.29E+01	82.88	2.06E+01	8.29E+01	62.306
b3303_CONV2	Conversion of b3303	1 b3303_mRNA_2 --> 1 b3303_mRNA_1	irreversible	Translation	0.00E+00	2.46E+01	0	2.46E+01	2.46E+01	0	2.46E+01	24.6	6.76E+00	2.46E+01	17.839333
b3304_CONV2	Conversion of b3304	1 b3304_mRNA_2 --> 1 b3304_mRNA_1	irreversible	Translation	0.00E+00	7.65E+01	0	7.65E+01	7.65E+01	0	7.65E+01	76.5	1.02E+01	7.65E+01	66.286
b3305_CONV2	Conversion of b3305	1 b3305_mRNA_2 --> 1 b3305_mRNA_1	irreversible	Translation	0.00E+00	2.42E+01	0	2.42E+01	2.42E+01	0	2.42E+01	24.2	6.07E+00	2.42E+01	18.13
b3306_CONV2	Conversion of b3306	1 b3306_mRNA_2 --> 1 b3306_mRNA_1	irreversible	Translation	0.00E+00	1.55E+02	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	8.73E+00	8.29E+01	74.146
b3307_CONV2	Conversion of b3307	1 b3307_mRNA_2 --> 1 b3307_mRNA_1	irreversible	Translation	0.00E+00	1.10E+02	0	1.10E+02	1.10E+02	0	8.29E+01	82.88	1.23E+01	8.29E+01	70.594
b3308_CONV2	Conversion of b3308	1 b3308_mRNA_2 --> 1 b3308_mRNA_1	irreversible	Translation	0.00E+00	4.17E+01	0	4.17E+01	4.17E+01	0	4.17E+01	41.7	6.07E+00	4.17E+01	35.63
b3309_CONV2	Conversion of b3309	1 b3309_mRNA_2 --> 1 b3309_mRNA_1	irreversible	Translation	0.00E+00	1.00E+09	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	1.02E+01	8.29E+01	72.666
b3310_CONV2	Conversion of b3310	1 b3310_mRNA_2 --> 1 b3310_mRNA_1	irreversible	Translation	0.00E+00	6.07E+01	0	6.07E+01	6.07E+01	0	6.07E+01	60.7	8.73E+00	6.07E+01	51.966
b3311_CONV2	Conversion of b3311	1 b3311_mRNA_2 --> 1 b3311_mRNA_1	irreversible	Translation	0.00E+00	6.33E+01	0	6.33E+01	6.33E+01	0	6.33E+01	63.3	1.54E+01	6.33E+01	47.932
b3312_CONV2	Conversion of b3312	1 b3312_mRNA_2 --> 1 b3312_mRNA_1	irreversible	Translation	0.00E+00	2.52E+02	1.26E+00	1.13E+02	1.11E+02	0	8.29E+01	82.88	2.05E+01	8.29E+01	62.332
b3313_CONV2	Conversion of b3313	1 b3313_mRNA_2 --> 1 b3313_mRNA_1	irreversible	Translation	0.00E+00	2.26E+01	0	2.26E+01	2.26E+01	0	2.26E+01	22.6	7.60E+00	2.26E+01	15.002
b3314_CONV2	Conversion of b3314	1 b3314_mRNA_2 --> 1 b3314_mRNA_1	irreversible	Translation	0.00E+00	1.40E+01	0	1.40E+01	1.40E+01	0	1.40E+01	14	4.61E+00	1.40E+01	9.390462
b3315_CONV2	Conversion of b3315	1 b3315_mRNA_2 --> 1 b3315_mRNA_1	irreversible	Translation	0.00E+00	3.73E+01	0	3.73E+01	3.73E+01	0	3.73E+01	37.3	1.02E+01	3.73E+01	27.112
b3316_CONV2	Conversion of b3316	1 b3316_mRNA_2 --> 1 b3316_mRNA_1	irreversible	Translation	0.00E+00	1.84E+02	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	1.23E+01	8.29E+01	70.62
b3317_CONV2	Conversion of b3317	1 b3317_mRNA_2 --> 1 b3317_mRNA_1	irreversible	Translation	0.00E+00	2.56E+01	0	2.56E+01	2.56E+01	0	2.56E+01	25.6	3.71E+00	2.56E+01	21.887
b3318_CONV2	Conversion of b3318	1 b3318_mRNA_2 --> 1 b3318_mRNA_1	irreversible	Translation	0.00E+00	1.27E+02	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	1.23E+01	8.29E+01	70.62
b3319_CONV2	Conversion of b3319	1 b3319_mRNA_2 --> 1 b3319_mRNA_1	irreversible	Translation	0.00E+00	1.58E+01	0	1.58E+01	1.58E+01	0	1.58E+01	15.8	5.48E+00	1.58E+01	10.321091
b3320_CONV2	Conversion of b3320	1 b3320_mRNA_2 --> 1 b3320_mRNA_1	irreversible	Translation	0.00E+00	2.77E+01	0	2.77E+01	2.77E+01	0	2.77E+01	27.7	5.01E+00	2.77E+01	22.692
b3321_CONV2	Conversion of b3321	1 b3321_mRNA_2 --> 1 b3321_mRNA_1	irreversible	Translation	0.00E+00	1.40E+02	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	1.02E+01	8.29E+01	72.692
b3339_CONV2	Conversion of b3339	1 b3339_mRNA_2 --> 1 b3339_mRNA_1	irreversible	Translation	0.00E+00	5.44E+01	0	5.44E+01	5.44E+01	0	5.44E+01	54.4	0	5.44E+01	54.4
b3340_CONV2	Conversion of b3340	1 b3340_mRNA_2 --> 1 b3340_mRNA_1	irreversible	Translation	0.00E+00	1.17E+01	0	1.17E+01	1.17E+01	0	1.17E+01	11.7	0	1.17E+01	11.7
b3341_CONV2	Conversion of b3341	1 b3341_mRNA_2 --> 1 b3341_mRNA_1	irreversible	Translation	0.00E+00	3.02E+01	0	3.02E+01	3.02E+01	0	3.02E+01	30.2	5.65E+00	3.02E+01	24.551
b3342_CONV2	Conversion of b3342	1 b3342_mRNA_2 --> 1 b3342_mRNA_1	irreversible	Translation	0.00E+00	7.30E+01	0	7.30E+01	7.30E+01	0	7.30E+01	73	8.31E+00	7.30E+01	64.687
b3343_CONV2	Conversion of b3343	1 b3343_mRNA_2 --> 1 b3343_mRNA_1	irreversible	Translation	0.00E+00	1.47E+01	0	1.47E+01	1.47E+01	0	1.47E+01	14.7	0	1.47E+01	14.7
b3344_CONV2	Conversion of b3344	1 b3344_mRNA_2 --> 1 b3344_mRNA_1	irreversible	Translation	0.00E+00	1.33E+01	0	1.33E+01	1.33E+01	0	1.33E+01	13.3	0	1.33E+01	13.3
b3345_CONV2	Conversion of b3345	1 b3345_mRNA_2 --> 1 b3345_mRNA_1	irreversible	Translation	0.00E+00	9.47E+00	0	9.47E+00	9.47E+00	0	9.47E+00	9.47	0	9.47E+00	9.47
b3346_CONV2	Conversion of b3346	1 b3346_mRNA_2 --> 1 b3346_mRNA_1	irreversible	Translation	0.00E+00	5.83E+00	0	5.83E+00	5.83E+00	0	5.83E+00	5.83	0	5.83E+00	5.83
b3384_CONV2	Conversion of b3384	1 b3384_mRNA_2 --> 1 b3384_mRNA_1	irreversible	Translation	0.00E+00	6.14E+00	0	6.14E+00	6.14E+00	0	6.14E+00	6.14	0	6.14E+00	6.14
b3385_CONV2	Conversion of b3385	1 b3385_mRNA_2 --> 1 b3385_mRNA_1	irreversible	Translation	0.00E+00	5.92E+00	0	5.92E+00	5.92E+00	0	5.92E+00	5.92	0	5.92E+00	5.92
b3386_CONV2	Conversion of b3386	1 b3386_mRNA_2 --> 1 b3386_mRNA_1	irreversible	Translation	0.00E+00	9.53E+00	0	9.53E+00	9.53E+00	0	9.53E+00	9.53	0	9.53E+00	9.53
b3387_CONV2	Conversion of b3387	1 b3387_mRNA_2 --> 1 b3387_mRNA_1	irreversible	Translation	0.00E+00	4.36E+00	0	4.36E+00	4.36E+00	0	4.36E+00	4.36	0	4.36E+00	4.36
b3388_CONV2	Conversion of b3388	1 b3388_mRNA_2 --> 1 b3388_mRNA_1	irreversible	Translation	0.00E+00	2.83E+00	0	2.83E+00	2.83E+00	0	2.83E+00	2.83	0	2.83E+00	2.83
b3389_CONV2	Conversion of b3389	1 b3389_mRNA_2 --> 1 b3389_mRNA_1	irreversible	Translation	0.00E+00	3.61E+00	0	3.61E+00	3.61E+00	0	3.61E+00	3.61	0	3.61E+00	3.61
b3390_CONV2	Conversion of b3390	1 b3390_mRNA_2 --> 1 b3390_mRNA_1	irreversible	Translation	0.00E+00	7.55E+00	0	7.55E+00	7.55E+00	0	7.55E+00	7.55	0	7.55E+00	7.55
b3406_CONV2	Conversion of b3406	1 b3406_mRNA_2 --> 1 b3406_mRNA_1	irreversible	Translation	0.00E+00	8.26E+00	0	8.26E+00	8.26E+00	0	8.26E+00	8.26	0	8.26E+00	8.26
b3461_CONV2	Conversion of b3461	1 b3461_mRNA_2 --> 1 b3461_mRNA_1	irreversible	Translation	0.00E+00	5.91E+00	0	5.91E+00	5.91E+00	0	5.91E+00	5.91	0	5.91E+00	5.91
b3470_CONV2	Conversion of b3470	1 b3470_mRNA_2 --> 1 b3470_mRNA_1	irreversible	Translation	0.00E+00	2.07E+01	0	2.07E+01	2.07E+01	0	2.07E+01	20.7	0	2.07E+01	20.7
b3559_CONV2	Conversion of b3559	1 b3559_mRNA_2 --> 1 b3559_mRNA_1	irreversible	Translation	0.00E+00	1.62E+00	0	1.62E+00	1.62E+00	0	1.62E+00	1.62	0	1.62E+00	1.62
b3560_CONV2	Conversion of b3560	1 b3560_mRNA_2 --> 1 b3560_mRNA_1	irreversible	Translation	0.00E+00	4.00E+00	0	4.00E+00	4.00E+00	0	4.00E+00	4	0	4.00E+00	4
b3590_CONV2	Conversion of b3590	1 b3590_mRNA_2 --> 1 b3590_mRNA_1	irreversible	Translation	0.00E+00	1.67E+00	0	1.67E+00	1.67E+00	0	1.67E+00	1.67	0	1.67E+00	1.67
b3591_CONV2	Conversion of b3591	1 b3591_mRNA_2 --> 1 b3591_mRNA_1	irreversible	Translation	0.00E+00	3.42E+00	0	3.42E+00	3.42E+00	0	3.42E+00	3.42	0	3.42E+00	3.42
b3635_CONV2	Conversion of b3635	1 b3635_mRNA_2 --> 1 b3635_mRNA_1	irreversible	Translation	0.00E+00	5.89E+00	0	5.89E+00	5.89E+00	0	5.89E+00	5.89	0	5.89E+00	5.89
b3636_CONV2	Conversion of b3636	1 b3636_mRNA_2 --> 1 b3636_mRNA_1	irreversible	Translation	0.00E+00	8.14E+01	0	8.14E+01	8.14E+01	0	8.14E+01	81.4	2.01E+01	8.14E+01	61.321

b3637_CONV2	Conversion of b3637	1 b3637_mRNA_2 --> 1 b3637_mRNA_1	irreversible	Translation	0.00E+00	1.11E+02	0	1.11E+02	1.11E+02	0	8.29E+01	82.88	1.49E+01	8.29E+01	67.981
b3638_CONV2	Conversion of b3638	1 b3638_mRNA_2 --> 1 b3638_mRNA_1	irreversible	Translation	0.00E+00	5.04E+00	0	5.04E+00	5.04E+00	0	5.04E+00	5.04	0	5.04E+00	5.04
b3649_CONV2	Conversion of b3649	1 b3649_mRNA_2 --> 1 b3649_mRNA_1	irreversible	Translation	0.00E+00	1.74E+01	0	1.74E+01	1.74E+01	0	1.74E+01	17.4	0	1.74E+01	17.4
b3650_CONV2	Conversion of b3650	1 b3650_mRNA_2 --> 1 b3650_mRNA_1	irreversible	Translation	0.00E+00	2.52E+00	0	2.52E+00	2.52E+00	0	2.52E+00	2.52	0	2.52E+00	2.52
b3651_CONV2	Conversion of b3651	1 b3651_mRNA_2 --> 1 b3651_mRNA_1	irreversible	Translation	0.00E+00	5.70E+00	0	5.70E+00	5.70E+00	0	5.70E+00	5.7	0	5.70E+00	5.7
b3652_CONV2	Conversion of b3652	1 b3652_mRNA_2 --> 1 b3652_mRNA_1	irreversible	Translation	0.00E+00	1.61E+00	0	1.61E+00	1.61E+00	0	1.61E+00	1.61	0	1.61E+00	1.61
b3703_CONV2	Conversion of b3703	1 b3703_mRNA_2 --> 1 b3703_mRNA_1	irreversible	Translation	0.00E+00	9.33E+01	0	9.33E+01	9.33E+01	0	8.29E+01	82.88	3.08E+01	8.29E+01	52.126
b3704_CONV2	Conversion of b3704	1 b3704_mRNA_2 --> 1 b3704_mRNA_1	irreversible	Translation	0.00E+00	1.65E+01	0	1.65E+01	1.65E+01	0	1.65E+01	16.5	0	1.08E+01	10.8499
b3706_CONV2	Conversion of b3706	1 b3706_mRNA_2 --> 1 b3706_mRNA_1	irreversible	Translation	0.00E+00	3.08E+00	0	3.08E+00	3.08E+00	0	3.08E+00	3.08	0	3.08E+00	3.08
b3740_CONV2	Conversion of b3740	1 b3740_mRNA_2 --> 1 b3740_mRNA_1	irreversible	Translation	0.00E+00	7.66E+00	0	7.66E+00	7.66E+00	0	7.66E+00	7.66	0	7.66E+00	7.66
b3741_CONV2	Conversion of b3741	1 b3741_mRNA_2 --> 1 b3741_mRNA_1	irreversible	Translation	0.00E+00	1.78E+00	0	1.78E+00	1.78E+00	0	1.78E+00	1.78	0	1.78E+00	1.78
b3780_CONV2	Conversion of b3780	1 b3780_mRNA_2 --> 1 b3780_mRNA_1	irreversible	Translation	0.00E+00	3.77E+00	0	3.77E+00	3.77E+00	0	3.77E+00	3.77	0	3.77E+00	3.77
b3782_CONV2	Conversion of b3782	1 b3782_mRNA_2 --> 1 b3782_mRNA_1	irreversible	Translation	0.00E+00	8.48E+01	0	8.48E+01	8.48E+01	0	8.48E+01	84.8	0	8.48E+01	84.8
b3783_CONV2	Conversion of b3783	1 b3783_mRNA_2 --> 1 b3783_mRNA_1	irreversible	Translation	0.00E+00	4.90E+00	0	4.90E+00	4.90E+00	0	4.90E+00	4.9	0	4.90E+00	4.9
b3885_CONV2	Conversion of b3885	1 b3885_mRNA_2 --> 1 b3885_mRNA_1	irreversible	Translation	0.00E+00	9.37E+00	0	9.37E+00	9.37E+00	0	9.37E+00	9.37	0	9.37E+00	9.37
b3886_CONV2	Conversion of b3886	1 b3886_mRNA_2 --> 1 b3886_mRNA_1	irreversible	Translation	0.00E+00	4.18E+00	0	4.18E+00	4.18E+00	0	4.18E+00	4.18	0	4.18E+00	4.18
b3887_CONV2	Conversion of b3887	1 b3887_mRNA_2 --> 1 b3887_mRNA_1	irreversible	Translation	0.00E+00	9.65E+00	0	9.65E+00	9.65E+00	0	9.65E+00	9.65	0	9.65E+00	9.65
b3888_CONV2	Conversion of b3888	1 b3888_mRNA_2 --> 1 b3888_mRNA_1	irreversible	Translation	0.00E+00	4.25E+00	0	4.25E+00	4.25E+00	0	4.25E+00	4.25	0	4.25E+00	4.25
b3936_CONV2	Conversion of b3936	1 b3936_mRNA_2 --> 1 b3936_mRNA_1	irreversible	Translation	0.00E+00	5.73E+01	0	5.73E+01	5.73E+01	0	5.73E+01	57.3	1.52E+01	5.73E+01	42.132
b3965_CONV2	Conversion of b3965	1 b3965_mRNA_2 --> 1 b3965_mRNA_1	irreversible	Translation	0.00E+00	3.31E+00	0	3.31E+00	3.31E+00	0	3.31E+00	3.31	0	3.31E+00	3.31
b3980_CONV2	Conversion of b3980	1 b3980_mRNA_2 --> 1 b3980_mRNA_1	irreversible	Translation	0.00E+00	5.49E+01	0	5.49E+01	5.49E+01	0	5.49E+01	54.9	0	5.49E+01	54.9
b3981_CONV2	Conversion of b3981	1 b3981_mRNA_2 --> 1 b3981_mRNA_1	irreversible	Translation	0.00E+00	1.25E+01	0	1.25E+01	1.25E+01	0	1.25E+01	12.5	0	1.25E+01	12.5
b3982_CONV2	Conversion of b3982	1 b3982_mRNA_2 --> 1 b3982_mRNA_1	irreversible	Translation	0.00E+00	8.76E+00	0	8.76E+00	8.76E+00	0	8.76E+00	8.76	0	8.76E+00	8.76
b3983_CONV2	Conversion of b3983	1 b3983_mRNA_2 --> 1 b3983_mRNA_1	irreversible	Translation	0.00E+00	3.94E+01	0	3.94E+01	3.94E+01	0	3.94E+01	39.4	7.58E+00	3.94E+01	31.819
b3984_CONV2	Conversion of b3984	1 b3984_mRNA_2 --> 1 b3984_mRNA_1	irreversible	Translation	0.00E+00	1.32E+01	0	1.32E+01	1.32E+01	0	1.32E+01	13.2	4.59E+00	1.32E+01	8.607462
b3985_CONV2	Conversion of b3985	1 b3985_mRNA_2 --> 1 b3985_mRNA_1	irreversible	Translation	0.00E+00	1.70E+01	0	1.70E+01	1.70E+01	0	1.70E+01	17	6.72E+00	1.70E+01	10.282333
b3986_CONV2	Conversion of b3986	1 b3986_mRNA_2 --> 1 b3986_mRNA_1	irreversible	Translation	0.00E+00	1.38E+02	0	1.38E+02	1.38E+02	0	1.38E+02	137.966	3.38E+01	1.38E+02	104.146
b3987_CONV2	Conversion of b3987	1 b3987_mRNA_2 --> 1 b3987_mRNA_1	irreversible	Translation	0.00E+00	2.02E+00	0	2.02E+00	2.02E+00	0	2.02E+00	2.02	0	2.02E+00	2.02
b3988_CONV2	Conversion of b3988	1 b3988_mRNA_2 --> 1 b3988_mRNA_1	irreversible	Translation	0.00E+00	1.06E+00	0	1.06E+00	1.06E+00	0	1.06E+00	1.06	0	1.06E+00	1.06
b4022_CONV2	Conversion of b4022	1 b4022_mRNA_2 --> 1 b4022_mRNA_1	irreversible	Translation	0.00E+00	5.47E+00	0	5.47E+00	5.47E+00	0	5.47E+00	5.47	0	5.47E+00	5.47
b4049_CONV2	Conversion of b4049	1 b4049_mRNA_2 --> 1 b4049_mRNA_1	irreversible	Translation	0.00E+00	4.60E+00	0	4.60E+00	4.60E+00	0	4.60E+00	4.6	0	4.60E+00	4.6
b4129_CONV2	Conversion of b4129	1 b4129_mRNA_2 --> 1 b4129_mRNA_1	irreversible	Translation	0.00E+00	3.88E+00	0	3.88E+00	3.88E+00	0	3.88E+00	3.88	0	3.88E+00	3.88
b4142_CONV2	Conversion of b4142	1 b4142_mRNA_2 --> 1 b4142_mRNA_1	irreversible	Translation	0.00E+00	6.06E+01	0	6.06E+01	6.06E+01	0	6.06E+01	60.6	0	6.06E+01	60.6
b4143_CONV2	Conversion of b4143	1 b4143_mRNA_2 --> 1 b4143_mRNA_1	irreversible	Translation	0.00E+00	6.98E+00	0	6.98E+00	6.98E+00	0	6.98E+00	6.98	0	6.98E+00	6.98
b4162_CONV2	Conversion of b4162	1 b4162_mRNA_2 --> 1 b4162_mRNA_1	irreversible	Translation	0.00E+00	7.21E+00	0	7.21E+00	7.21E+00	0	7.21E+00	7.21	0	7.21E+00	7.21
b4167_CONV2	Conversion of b4167	1 b4167_mRNA_2 --> 1 b4167_mRNA_1	irreversible	Translation	0.00E+00	3.08E+00	0	3.08E+00	3.08E+00	0	3.08E+00	3.08	0	3.08E+00	3.08
b4168_CONV2	Conversion of b4168	1 b4168_mRNA_2 --> 1 b4168_mRNA_1	irreversible	Translation	0.00E+00	6.71E+00	0	6.71E+00	6.71E+00	0	6.71E+00	6.71	0	6.71E+00	6.71
b4169_CONV2	Conversion of b4169	1 b4169_mRNA_2 --> 1 b4169_mRNA_1	irreversible	Translation	0.00E+00	3.56E+00	0	3.56E+00	3.56E+00	0	3.56E+00	3.56	0	3.56E+00	3.56
b4170_CONV2	Conversion of b4170	1 b4170_mRNA_2 --> 1 b4170_mRNA_1	irreversible	Translation	0.00E+00	1.82E+00	0	1.82E+00	1.82E+00	0	1.82E+00	1.82	0	1.82E+00	1.82
b4171_CONV2	Conversion of b4171	1 b4171_mRNA_2 --> 1 b4171_mRNA_1	irreversible	Translation	0.00E+00	8.85E+00	0	8.85E+00	8.85E+00	0	8.85E+00	8.85	0	8.85E+00	8.85
b4172_CONV2	Conversion of b4172	1 b4172_mRNA_2 --> 1 b4172_mRNA_1	irreversible	Translation	0.00E+00	1.01E+02	0	1.01E+02	1.01E+02	0	1.01E+02	101.491	0	1.01E+02	101.491
b4173_CONV2	Conversion of b4173	1 b4173_mRNA_2 --> 1 b4173_mRNA_1	irreversible	Translation	0.00E+00	3.50E+00	0	3.50E+00	3.50E+00	0	3.50E+00	3.5	0	3.50E+00	3.5
b4174_CONV2	Conversion of b4174	1 b4174_mRNA_2 --> 1 b4174_mRNA_1	irreversible	Translation	0.00E+00	4.23E+00	0	4.23E+00	4.23E+00	0	4.23E+00	4.23	0	4.23E+00	4.23
b4175_CONV2	Conversion of b4175	1 b4175_mRNA_2 --> 1 b4175_mRNA_1	irreversible	Translation	0.00E+00	5.03E+00	0	5.03E+00	5.03E+00	0	5.03E+00	5.03	0	5.03E+00	5.03
b4178_CONV2	Conversion of b4178	1 b4178_mRNA_2 --> 1 b4178_mRNA_1	irreversible	Translation	0.00E+00	1.06E+01	0	1.06E+01	1.06E+01	0	1.06E+01	10.6	0	1.06E+01	10.6
b4179_CONV2	Conversion of b4179	1 b4179_mRNA_2 --> 1 b4179_mRNA_1	irreversible	Translation	0.00E+00	1.49E+00	0	1.49E+00	1.49E+00	0	1.49E+00	1.49	0	1.49E+00	1.49
b4180_CONV2	Conversion of b4180	1 b4180_mRNA_2 --> 1 b4180_mRNA_1	irreversible	Translation	0.00E+00	6.52E+00	0	6.52E+00	6.52E+00	0	6.52E+00	6.52	0	6.52E+00	6.52
b4200_CONV2	Conversion of b4200	1 b4200_mRNA_2 --> 1 b4200_mRNA_1	irreversible	Translation	0.00E+00	6.05E+01	0	6.05E+01	6.05E+01	0	6.05E+01	60.5	8.59E+00	6.05E+01	51.909
b4201_CONV2	Conversion of b4201	1 b4201_mRNA_2 --> 1 b4201_mRNA_1	irreversible	Translation	0.00E+00	6.28E+01	0	6.28E+01	6.28E+01	0	6.28E+01	62.8	0	6.28E+01	62.8
b4202_CONV2	Conversion of b4202	1 b4202_mRNA_2 --> 1 b4202_mRNA_1	irreversible	Translation	0.00E+00	1.47E+02	0	1.13E+02	1.13E+02	0	8.29E+01	82.88	1.53E+01	8.29E+01	67.629
b4203_CONV2	Conversion of b4203	1 b4203_mRNA_2 --> 1 b4203_mRNA_1	irreversible	Translation	0.00E+00	1.63E+01	0	1.63E+01	1.63E+01	0	1.63E+01	16.3	7.48E+00	1.63E+01	8.819
b4258_CONV2	Conversion of b4258	1 b4258_mRNA_2 --> 1 b4258_mRNA_1	irreversible	Translation	0.00E+00	1.67E+00	0	1.67E+00	1.67E+00	0	1.67E+00	1.67	0	1.67E+00	1.67
b4292_CONV2	Conversion of b4292	1 b4292_mRNA_2 --> 1 b4292_mRNA_1	irreversible	Translation	0.00E+00	5.00E+00	0	5.00E+00	5.00E+00	0	5.00E+00	5	0	5.00E+00	5
b4293_CONV2	Conversion of b4293	1 b4293_mRNA_2 --> 1 b4293_mRNA_1	irreversible	Translation	0.00E+00	6.47E+00	0	0	0.00E+00	0	0	0	0	0	0
b4371_CONV2	Conversion of b4371	1 b4371_mRNA_2 --> 1 b4371_mRNA_1	irreversible	Translation	0.00E+00	4.62E+00	0	4.62E+00	4.62E+00	0	4.62E+00	4.62	0	4.62E+00	4.62
b4372_CONV2	Conversion of b4372	1 b4372_mRNA_2 --> 1 b4372_mRNA_1	irreversible	Translation	0.00E+00	8.85E+00	0	8.85E+00	8.85E+00	0	8.85E+00	8.85	0	8.85E+00	8.85
b4373_CONV2	Conversion of b4373	1 b4373_mRNA_2 --> 1 b4373_mRNA_1	irreversible	Translation	0.00E+00	9.45E+00	0	9.45E+00	9.45E+00	0	9.45E+00	9.45	0	9.45E+00	9.45

b4374_CONV2	Conversion of b4374	1 b4374_mRNA_2 --> 1 b4374_mRNA_1	irreversible	Translation	0.00E+00	5.80E+00	0	5.80E+00	5.80E+00	0	5.80E+00	5.8	0	5.80E+00	5.8
b4375_CONV2	Conversion of b4375	1 b4375_mRNA_2 --> 1 b4375_mRNA_1	irreversible	Translation	0.00E+00	2.64E+00	0	2.64E+00	2.64E+00	0	2.64E+00	2.64	0	2.64E+00	2.64