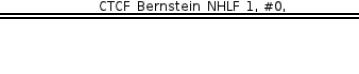
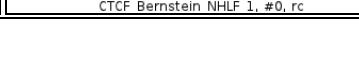


**Table S1 Known motifs recovered by GEM in ENCODE data**

The 184 GEM discovered primary motifs that match the public database PWM. The PFM of these primary and secondary motifs are in Dataset S2.

AP-2alpha_Snyder_HeLa-S3	 AP-2alpha Snyder HeLa-S3 1, #0,	 AP-2alpha Snyder HeLa-S3 1, #0, rc
AP-2gamma_Snyder_HeLa-S3	 AP-2gamma Snyder HeLa-S3 1, #0,	 AP-2gamma Snyder HeLa-S3 1, #0, rc
BHLHE40-v041610.1_Myers_HepG2	 BHLHE40-v041610.1 Myers HepG2 1,	 BHLHE40-v041610.1 Myers HepG2 1,
CEPB_Snyder_HepG2-forskolin	 CEPB Snyder HepG2-forskolin 1, #0	 CEPB Snyder HepG2-forskolin 1, #0,
c-Fos_Snyder_HeLa-S3	 c-Fos Snyder HeLa-S3 1, #0,	 c-Fos Snyder HeLa-S3 1, #0, rc
c-Jun_Snyder_GM12878	 c-Jun Snyder GM12878 1, #0,	 c-Jun Snyder GM12878 1, #0, rc
c-Jun_Snyder_HeLa-S3	 c-Jun Snyder HeLa-S3 1, #0,	 c-Jun Snyder HeLa-S3 1, #0, rc
c-Jun_Snyder_HUVEC	 c-Jun Snyder HUVEC 1, #0,	 c-Jun Snyder HUVEC 1, #0, rc
c-Jun_Snyder_K562	 c-Jun Snyder K562 1, #0,	 c-Jun Snyder K562 1, #0, rc
c-Jun_Snyder_K562-IFNa6h	 c-Jun Snyder K562-IFNa6h 1, #0,	 c-Jun Snyder K562-IFNa6h 1, #0, rc
c-Jun_Snyder_K562-IFNg30	 c-Jun Snyder K562-IFNg30 1, #0,	 c-Jun Snyder K562-IFNg30 1, #0, rc
c-Jun_Snyder_K562-IFNg6h	 c-Jun Snyder K562-IFNg6h 1, #0,	 c-Jun Snyder K562-IFNg6h 1, #0, rc
c-Myc_Crawford_GM12878	 c-Myc Crawford GM12878 1, #	 c-Myc Crawford GM12878 1, #
c-Myc_Crawford_HeLa-S3	 c-Myc Crawford HeLa-S3 1, #	 c-Myc Crawford HeLa-S3 1, #0
c-Myc_Crawford_HepG2	 c-Myc Crawford HepG2 1, #0,	 c-Myc Crawford HepG2 1, #0, rc
c-Myc_Crawford_HUVEC	 c-Myc Crawford HUVEC 1, #0,	 c-Myc Crawford HUVEC 1, #0, rc
c-Myc_Crawford_K562	 c-Myc Crawford K562 1, #0,	 c-Myc Crawford K562 1, #0, i

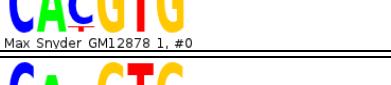
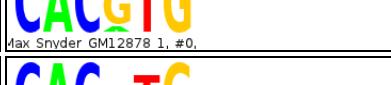
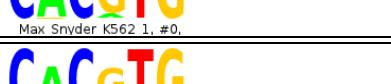
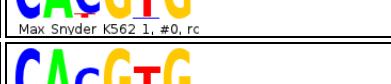
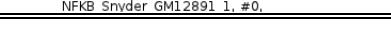
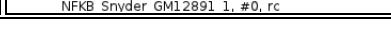
c-Myc_Crawford_MCF-7	 c-Myc Crawford MCF-7 1, #0	 c-Myc Crawford MCF-7 1, #0,
c-Myc_Crawford_MCF-7-estrogen	 c-Myc Crawford MCF-7-estrogen 1, .	 c-Myc Crawford MCF-7-estrogen 1, .
c-Myc_Crawford_MCF-7-vehicle	 c-Myc Crawford MCF-7-vehicle 1,	 c-Myc Crawford MCF-7-vehicle 1,
c-Myc_Snyder_GM12878	 c-Myc Snyder GM12878 1, #0	 c-Myc Snyder GM12878 1, #0,
c-Myc_Snyder_HeLa-S3	 c-Myc Snyder HeLa-S3 1, #0	 c-Myc Snyder HeLa-S3 1, #0,
c-Myc_Snyder_K562	 c-Myc Snyder K562 1, #0,	 c-Myc Snyder K562 1, #0, rc
c-Myc_Snyder_K562-IFNa30	 c-Myc Snyder K562-IFNa30 1, .	 c-Myc Snyder K562-IFNa30 1, #
c-Myc_Snyder_K562-IFNa6h	 c-Myc Snyder K562-IFNa6h 1, .	 c-Myc Snyder K562-IFNa6h 1, #
c-Myc_Snyder_K562-IFNg6h	 c-Myc Snyder K562-IFNg6h 1, .	 c-Myc Snyder K562-IFNg6h 1, #
CTCF_Bernstein_GM12878	 CTCF Bernstein GM12878 1, #0,	 CTCF Bernstein GM12878 1, #0, rc
CTCF_Bernstein_H1-hESC	 CTCF Bernstein H1-hESC 1, #0,	 CTCF Bernstein H1-hESC 1, #0, rc
CTCF_Bernstein_HeLa-S3	 CTCF Bernstein HeLa-S3 1, #0,	 CTCF Bernstein HeLa-S3 1, #0, rc
CTCF_Bernstein_HepG2	 CTCF Bernstein HepG2 1, #0,	 CTCF Bernstein HepG2 1, #0, rc
CTCF_Bernstein_HMEC	 CTCF Bernstein HMEC 1, #0,	 CTCF Bernstein HMEC 1, #0, rc
CTCF_Bernstein_HSMM	 CTCF Bernstein HSMM 1, #0,	 CTCF Bernstein HSMM 1, #0, rc
CTCF_Bernstein_HUVEC	 CTCF Bernstein HUVEC 1, #0,	 CTCF Bernstein HUVEC 1, #0, rc
CTCF_Bernstein_K562	 CTCF Bernstein K562 1, #0,	 CTCF Bernstein K562 1, #0, rc
CTCF_Bernstein_NHEK	 CTCF Bernstein NHEK 1, #0,	 CTCF Bernstein NHEK 1, #0, rc
CTCF_Bernstein_NHLF	 CTCF Bernstein NHLF 1, #0,	 CTCF Bernstein NHLF 1, #0, rc

CTCF_Crawford_Gliobla		
CTCF_Crawford_GM12878		
CTCF_Crawford_HeLa-S3		
CTCF_Crawford_HepG2		
CTCF_Crawford_HUVEC		
CTCF_Crawford_K562		
CTCF_Crawford_MCF-7		
CTCF_Crawford_MCF-7-estrogen		
CTCF_Crawford_MCF-7-vehicle		
CTCF--SC-5916-PCR1x_Myers_A549-EtOH-0.02pct		
CTCF--SC-5916-v041610.1_Myers_HepG2		
CTCF--SC-5916-v041610.2_Myers_H1-hESC		
CTCF--SC-5916-v041610.2_Myers_T-47D-DMSO-0.02pct		
CTCF_Stam_AG04449		
CTCF_Stam_AG04450		
CTCF_Stam_AG09309		
CTCF_Stam_AG09319		
CTCF_Stam_AG10803		

CTCF_Stam_AoAF	 CTCF Stam AoAF 1, #0,	 CTCF Stam AoAF 1, #0, rc
CTCF_Stam_BJ	 CTCF Stam BJ 1, #0,	 CTCF Stam BJ 1, #0, rc
CTCF_Stam_GM12878	 CTCF Stam GM12878 1, #0,	 CTCF Stam GM12878 1, #0, rc
CTCF_Stam_HA-sp	 CTCF Stam HA-sp 1, #0,	 CTCF Stam HA-sp 1, #0, rc
CTCF_Stam_HBMEC	 CTCF Stam HBMEC 1, #0,	 CTCF Stam HBMEC 1, #0, rc
CTCF_Stam_HCFaa	 CTCF Stam HCFaa 1, #0,	 CTCF Stam HCFaa 1, #0, rc
CTCF_Stam_HCPEpiC	 CTCF Stam HCPEpiC 1, #0,	 CTCF Stam HCPEpiC 1, #0, rc
CTCF_Stam_HEEpiC	 CTCF Stam HEEpiC 1, #0,	 CTCF Stam HEEpiC 1, #0, rc
CTCF_Stam_HeLa-S3	 CTCF Stam HeLa-S3 1, #0,	 CTCF Stam HeLa-S3 1, #0, rc
CTCF_Stam_HepG2	 CTCF Stam HepG2 1, #0,	 CTCF Stam HepG2 1, #0, rc
CTCF_Stam_HMEC	 CTCF Stam HMEC 1, #0,	 CTCF Stam HMEC 1, #0, rc
CTCF_Stam_HMF	 CTCF Stam HMF 1, #0,	 CTCF Stam HMF 1, #0, rc
CTCF_Stam_HPAF	 CTCF Stam HPAF 1, #0,	 CTCF Stam HPAF 1, #0, rc
CTCF_Stam_HPF	 CTCF Stam HPF 1, #0,	 CTCF Stam HPF 1, #0, rc
CTCF_Stam_HRPEpiC	 CTCF Stam HRPEpiC 1, #0,	 CTCF Stam HRPEpiC 1, #0, rc
CTCF_Stam_HUVEC	 CTCF Stam HUVEC 1, #0,	 CTCF Stam HUVEC 1, #0, rc
CTCF_Stam_K562	 CTCF Stam K562 1, #0,	 CTCF Stam K562 1, #0, rc
CTCF_Stam_NHEK	 CTCF Stam NHEK 1, #0,	 CTCF Stam NHEK 1, #0, rc
CTCF-v041610.2_Myers_SK-N-SH-	 CTCF-v041610.2 Myers SK-N-SH-RA 1, #0,	 CTCF-v041610.2 Myers SK-N-SH-RA 1, #0, rc

RA		
EBF1--SC-137065-PCR1x_Myers_GM12878	 EBF1--SC-137065-PCR1x Myers GM12878 1, #0,	 EBF1--SC-137065-PCR1x Myers GM12878 1, #0,
EBF-PCR1x_Myers_GM12878	 EBF-PCR1x Myers GM12878 1, #0,	 EBF-PCR1x Myers GM12878 1, #0, rc
Egr-1-PCR2x_Myers_GM12878	 Egr-1-PCR2x Myers GM12878 1, #	 Egr-1-PCR2x Myers GM12878 1, #0
Egr-1-v041610.1_Myers_GM12878	 Egr-1-v041610.1 Myers GM12878 1, #0,	 Egr-1-v041610.1 Myers GM12878 1, #0, rc
Egr-1-v041610.1_Myers_K562	 Egr-1-v041610.1 Myers K562 1, #	 Egr-1-v041610.1 Myers K562 1, #0
Egr-1-v041610.2_Myers_H1-hESC	 Egr-1-v041610.2 Myers H1-hESC 1, #0,	 Egr-1-v041610.2 Myers H1-hESC 1, #0, rc
ELF1--SC-631-v041610.1_Myers_GM12878	 C-631-v041610.1 Myers GM12878	 C-631-v041610.1 Myers GM12878
ELF1--SC-631-v041610.1_Myers_HepG2	 C-631-v041610.1 Myers HepG2	 C-631-v041610.1 Myers HepG2
ELF1--SC-631-v041610.2_Myers_K562	 C-631-v041610.2 Myers K562	 C-631-v041610.2 Myers K562
ERalpha-a-v041610.2_Myers_ECC-1-Genistein-100nM	 1610.2 Myers ECC-1-Genistein	 1610.2 Myers ECC-1-Genistein
ERalpha-a-v041610.2_Myers_T-47D-Estradiol-10nM	 1610.2 Myers T-47D-Estradiol	 1610.2 Myers T-47D-Estradiol
ERalpha-a-v041610.2_Myers_T-47D-Genistein-100nM	 1610.2 Myers T-47D-Genistein	 1610.2 Myers T-47D-Genistein
ERRA_Snyder_HepG2-forskolin	 ERRA Snyder HepG2-forskolin 1, #	 ERRA Snyder HepG2-forskolin 1, #0
ETS1-PCR1x_Myers_GM12878	 ETS1-PCR1x Myers GM12878 1, #0, r	 ETS1-PCR1x Myers GM12878 1, #0, r
FOS-eGFP_White_K562	 FOS-eGFP White K562 1, #0,	 FOS-eGFP White K562 1, #0, rc
Fosl1--SC-183-v041610.1_Myers_K562	 SL1-SC-183-v041610.1 Myers K562 1,	 SL1-SC-183-v041610.1 Myers K562 1,
Fosl2-v041610.1_Myers_HepG2	 SL2-v041610.1 Myers HepG2 1, ;	 SL2-v041610.1 Myers HepG2 1, #

FOXA1--SC-101058-v041610.1_Myers_HepG2	<b>GTAAC</b> C-101058-v041610.1 Myers HepG2	<b>TGTTTAC</b> C-101058-v041610.1 Myers HepG2
FOXA1--SC-6553-v041610.1_Myers_HepG2	<b>TGTTTAC</b> C-6553-v041610.1 Myers HepG2	<b>GTAAC</b> C-6553-v041610.1 Myers HepG2
FOXA2--SC-6554-v041610.1_Myers_HepG2	<b>TGTTTAC</b> C-6554-v041610.1 Myers HepG2	<b>GTAAC</b> C-6554-v041610.1 Myers HepG2
GABP-PCR1x_Myers_HeLa-S3	<b>CTTCCGG</b> GABP-PCR1x Myers HeLa-S3 1, #0	<b>CCGGAAG</b> GABP-PCR1x Myers HeLa-S3 1, #0, r
GABP-PCR2x_Myers_GM12878	<b>CTTCCGG</b> GABP-PCR2x Myers GM12878 1, #0, r	<b>CCGGAAG</b> GABP-PCR2x Myers GM12878 1, #0, r
GABP-PCR2x_Myers_HepG2	<b>CTTCCG</b> GABP-PCR2x Myers HepG2 1, #	<b>CGGAAG</b> GABP-PCR2x Myers HepG2 1, #
GABP-v041610.1_Myers_K562	<b>cTCCGG</b> GABP-v041610.1 Myers K562 1, #	<b>CCGGAA</b> GABP-v041610.1 Myers K562 1, #0
GATA-1_Snyder_K562b	<b>AGATAA</b> GATA-1 Snyder K562b 1, #0	<b>TTATC</b> GATA-1 Snyder K562b 1, #0, r
GATA2-eGFP_White_K562	<b>AGATAA</b> GATA2-eGFP White K562 1, #0	<b>TTATC</b> GATA2-eGFP White K562 1, #0, r
GATA2--SC-267-PCR1x_Myers_K562	<b>AGATAA</b> C-267-PCR1x Myers K562	<b>TTATC</b> C-267-PCR1x Myers K562 :
GATA-2_Snyder_K562b	<b>AGATAA</b> GATA-2 Snyder K562b 1, #0	<b>TTATC</b> GATA-2 Snyder K562b 1, #0, r
GATA3--SC-268-v041610.2_Myers_T-47D-DMSO-0.02pct	<b>TTATC</b> v041610.2 Myers T-47D-DMSO	<b>AGATAA</b> v041610.2 Myers T-47D-DMSO
GR-PCR1x_Myers_A549-DEX-50nM	<b>GAACA</b> CR1x Myers A549-DEX-50nM	<b>TGTTCc</b> CR1x Myers A549-DEX-50nM 1
GR-PCR1x_Myers_A549-DEX-5nM	<b>TGTTC</b> CR1x Myers A549-DEX-5nM 1	<b>AGAAC</b> CR1x Myers A549-DEX-5nM 1
GR-PCR2x_Myers_A549-DEX-100nM	<b>GGACA</b> CR2x Myers A549-DEX-100nM	<b>TGTcc</b> CR2x Myers A549-DEX-100nM 1
HNF4A--SC-8987-v041610.1_Myers_HepG2	<b>TGGACTTTG</b> HNF4A--SC-8987-v041610.1 Myers HepG2 1, #0,	<b>GCAAAGTccCA</b> HNF4A--SC-8987-v041610.1 Myers HepG2 1, #0, rc
HNF4A_Snyder_HepG2-forskolin	<b>TGGACTTTG</b> HNF4A Snyder HepG2-forskolin 1, #0,	<b>GCAAAGTccCA</b> HNF4A Snyder HepG2-forskolin 1, #0, rc
HNF4G--SC-6558-v041610.1_Myers_HepG2	<b>TGGACTTTG</b> HNF4G--SC-6558-v041610.1 Myers HepG2 1, #0,	<b>GCAAAGTccCA</b> HNF4G--SC-6558-v041610.1 Myers HepG2 1, #0, rc

HSF1_Snyder_HepG2-forskolin		
JunB-eGFP_White_K562		
JunD-eGFP_White_K562		
JunD-PCR1x_Myers_HepG2		
JunD_Snyder_GM12878		
JunD_Snyder_HeLa-S3		
JunD-v041610.2_Myers_H1-hESC		
Max_Snyder_GM12878		
Max_Snyder_HeLa-S3		
Max_Snyder_HUVEC		
Max_Snyder_K562		
Max-v041610.2_Myers_K562		
MEF2A-PCR1x_Myers_GM12878		
MEF2C--SC-13268-v041610.1_Myers_GM12878		
NF-E2_Snyder_K562		
NFKB_Snyder_GM10847		
NFKB_Snyder_GM12878		
NFKB_Snyder_GM12878-TNFa		
NFKB_Snyder_GM12891		

NFKB_Snyder_GM12892		
NFKB_Snyder_GM15510		
NFKB_Snyder_GM18505		
NFKB_Snyder_GM18526		
NFKB_Snyder_GM18951		
NFKB_Snyder_GM19099		
NFKB_Snyder_GM19193		
Nrf1_Snyder_HeLa-S3		
NRSF-PCR1x_Myers_H1-hESC		
NRSF-PCR1x_Myers_HeLa-S3		
NRSF-PCR2x_Myers_GM12878		
NRSF-PCR2x_Myers_HepG2		
NRSF-PCR2x_Myers_PANC-1		
NRSF-PCR2x_Myers_SK-N-SH		
NRSF-PCR2x_Myers_U87		
NRSF-v041610.2_Myers_H1-hESC		
NRSF-v041610.2_Myers_K562		
PAX5-C20-PCR1x_Myers_GM12878		
PAX5-C20-v041610.1_Myers_GM12891		

PAX5-C20-v041610.1_Myers_GM12892	 C20-v041610.1 Myers GM12892	 C20-v041610.1 Myers GM12892 1
POU2F2-PCR1x_Myers_GM12878	 POU2F2-PCR1x Myers GM12878 1, #0	 POU2F2-PCR1x Myers GM12878 1, #0,
POU2F2-PCR1x_Myers_GM12891	 POU2F2-PCR1x Myers GM12891 1, #0,	 POU2F2-PCR1x Myers GM12891 1, #0, rc
POU5F1--SC-9081-v041610.2_Myers_H1-hESC	 POU5F1--SC-9081-v041610.2 Myers H1-hESC 1, #0	 POU5F1--SC-9081-v041610.2 Myers H1-hESC 1, #0,
PU.1-PCR1x_Myers_GM12878	 PU.1-PCR1x Myers GM12878 1, #0,	 PU.1-PCR1x Myers GM12878 1, #0, r
PU.1-PCR1x_Myers_GM12891	 PU.1-PCR1x Myers GM12891 1, #0,	 PU.1-PCR1x Myers GM12891 1, #0, rc
PU.1-PCR1x_Myers_K562	 PU.1-PCR1x Myers K562 1, #0,	 PU.1-PCR1x Myers K562 1, #0, rc
RXRA-PCR1x_Myers_HepG2	 RXRA-PCR1x Myers HepG2 1, #0,	 RXRA-PCR1x Myers HepG2 1, #0,
RXRA-v041610.2_Myers_H1-hESC	 v041610.2 Myers H1-hESC :	 v041610.2 Myers H1-hESC 1
SREBP1_Snyder_HepG2-pravastatin	 SREBP1 Snyder HepG2-pravastatin 1, #0,	 SREBP1 Snyder HepG2-pravastatin 1, #0, rc
SRF-PCR1x_Myers_H1-hESC	 SRF-PCR1x Myers H1-hESC 1, #0,	 SRF-PCR1x Myers H1-hESC 1, #0, rc
SRF-PCR2x_Myers_GM12878	 SRF-PCR2x Myers GM12878 1, #0,	 SRF-PCR2x Myers GM12878 1, #0, rc
SRF-v041610.1_Myers_GM12878	 SRF-v041610.1 Myers GM12878 1, #0,	 SRF-v041610.1 Myers GM12878 1, #0, rc
SRF-v041610.1_Myers_HepG2	 SRF-v041610.1 Myers HepG2 1, #0,	 SRF-v041610.1 Myers HepG2 1, #0, rc
SRF-v041610.1_Myers_K562	 SRF-v041610.1 Myers K562 1, #0,	 SRF-v041610.1 Myers K562 1, #0, rc
STAT1_Snyder_HeLa-S3-IFNg30	 STAT1 Snyder HeLa-S3-IFNg30 1, #0,	 STAT1 Snyder HeLa-S3-IFNg30 1, #0, rc
STAT1_Snyder_K562-IFNa30	 STAT1 Snyder K562-IFNa30 1, #0,	 STAT1 Snyder K562-IFNa30 1, #0, rc
STAT1_Snyder_K562-IFNa6h	 STAT1 Snyder K562-IFNa6h 1, #0,	 STAT1 Snyder K562-IFNa6h 1, #0, rc
STAT1_Snyder_K562-IFNg30	 STAT1 Snyder K562-IFNg30 1, #0,	 STAT1 Snyder K562-IFNg30 1, #0, rc

STAT1_Snyder_K562- IFNg6h	<b>TTCCAGGAA</b> STAT1 Snyder K562-IFNg6h 1, #0,	<b>TTCC<sub>T</sub>GGAA</b> STAT1 Snyder K562-IFNg6h 1, #0, rc
TCF12- PCR1x_Myers_GM12878	<b>CAGCTGc</b> CF12-PCR1x Myers GM12878 1, #	<b>GCAGcTG</b> F12-PCR1x Myers GM12878 1, #
TCF4_Snyder_HCT-116	<b>CTTTGAT<sub>CT</sub></b> TCF4 Snyder HCT-116 1, #0,	<b>A<sub>A</sub>TCAAAG</b> TCF4 Snyder HCT-116 1, #0, rc
USF-1-PCR1x_Myers_A549- EtOH-0.02pct	<b>CACGTGAc</b> -1-PCR1x Myers A549-EtOH-0.02pct 1	<b>GT<sub>T</sub>CACGTG</b> -1-PCR1x Myers A549-EtOH-0.02pct 1
USF-1-PCR1x_Myers_H1- hESC	<b>CA<sub>c</sub>GTGAc</b> USF-1-PCR1x Myers H1-hESC 1, #0,	<b>GT<sub>T</sub>CACGTG</b> USF-1-PCR1x Myers H1-hESC 1, #0, r
USF-1- PCR1x_Myers_HepG2	<b>GT<sub>T</sub>CACGTG</b> USF-1-PCR1x Myers HepG2 1, #0,	<b>CA<sub>c</sub>GTGAc</b> USF-1-PCR1x Myers HepG2 1, #0, rc
USF-1- PCR2x_Myers_GM12878	<b>CACGTGAc</b> USF-1-PCR2x Myers GM12878 1, #0,	<b>GT<sub>T</sub>CACGTG</b> USF-1-PCR2x Myers GM12878 1, #0, r
USF1--SC-8983- v041610.2_Myers_SK-N-SH- RA	<b>CA<sub>c</sub>GTGAc</b> SC-8983-v041610.2 Myers SK-N-SH-RA	<b>GT<sub>T</sub>CACGTG</b> SC-8983-v041610.2 Myers SK-N-SH-RA
USF-1- v041610.1_Myers_K562	<b>GT<sub>T</sub>CA<sub>c</sub>GTG</b> USF-1-v041610.1 Myers K562 1, #0,	<b>CA<sub>c</sub>GTGAc</b> USF-1-v041610.1 Myers K562 1, #0, r
YY1--SC-281- v041610.1_Myers_GM12891	<b>C<sub>c</sub>GCCAT<sub>T</sub></b> -SC-281-v041610.1 Myers GM12891 1, ;	<b>A<sub>A</sub>ATGGC<sub>G</sub></b> -SC-281-v041610.1 Myers GM12891 1, #
YY1--SC-281- v041610.2_Myers_H1-hESC	<b>ATGGC<sub>G</sub></b> -281-v041610.2 Myers H1-hESC	<b>C<sub>c</sub>GCCAT</b> -281-v041610.2 Myers H1-hESC
YY1--SC-281- v041610.2_Myers_SK-N-SH- RA	<b>GCCATT<sub>T</sub></b> -281-v041610.2 Myers SK-N-SH-R	<b>AAAATGGC</b> -281-v041610.2 Myers SK-N-SH-RA
YY1_Snyder_GM12878	<b>AA<sub>A</sub>ATGGC<sub>G</sub></b> YY1 Snyder GM12878 1, #0,	<b>GC<sub>c</sub>GCCAT<sub>T</sub></b> YY1 Snyder GM12878 1, #0, rc
YY1_Snyder_K562b	<b>ATGGC<sub>G</sub></b> YY1 Snyder K562b 1, #0,	<b>GC<sub>c</sub>GCCAT</b> YY1 Snyder K562b 1, #0, rc
YY1_Snyder_NT2-D1	<b>A<sub>A</sub>ATGGC<sub>G</sub></b> YY1 Snyder NT2-D1 1, #0,	<b>C<sub>c</sub>GCCAT<sub>T</sub></b> YY1 Snyder NT2-D1 1, #0, rc
YY1- v041610.1_Myers_GM12892	<b>A<sub>A</sub>ATGGC<sub>G</sub></b> YY1-v041610.1 Myers GM12892 1, #0,	<b>C<sub>c</sub>GCCAT<sub>T</sub></b> YY1-v041610.1 Myers GM12892 1, #0, rc
YY1-v041610.1_Myers_K562	<b>ATGGC<sub>G</sub>Gc</b> YY1-v041610.1 Myers K562 1, #0,	<b>GC<sub>c</sub>GCCAT</b> YY1-v041610.1 Myers K562 1, #0, rc
YY1-v041610.2_Myers_K562	<b>ATGGC<sub>G</sub>Gc</b> YY1-v041610.2 Myers K562 1, #0,	<b>GC<sub>c</sub>GCCAT</b> YY1-v041610.2 Myers K562 1, #0, rc

ZEB1--SC-25388-  
v041610.2\_Myers\_GM12878

**CAGGTG**  
5388-v041610.2 Myers GM12878

**cACCTG**  
5388-v041610.2 Myers GM12878