

Table S3: Hexamer motifs and TFs that are predicted to regulate specific miRNAs

MicroRNA	Predicted hexamer sequence motifs upstream of miRNA	Candidate transcription factors
hsa-let-7i	CGCCGC GCGGCG CCGCGT CGCGGC CGCGTG CCGGCG CCGCCG CGCGAG CGGCGA GCGCGG GGGCCG GCGGCG GCGCCG GGGGCG GCGGGG AGCGCG CGCGGG GCCGCC CGGCGG CGCCGG GCCGGC GCGCGC	Sp1 GLI1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 GLI3 NF-Y AP-2alphaA GKLf Ikaros p53 ZNFN1A1 Copeb HNF-3beta COUP-TF1 CP2 GATA-2 GATA-1 MTF-1 CTCF AP-2 AP-2gamma HES-1 E2F-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha E12 M-Twist M-Twist:E12 TWIST TWIST:E12 MITF Smad3 AhR:Arnt Smad4 c-Jun:c-Fos AP-4 c-Jun Sp3 AP-1 Egr-1 GCF MAZ ENKTF-1 Egr-2 MZF-1 E2F-1:DP-1 EBF c-Jun:c-Fos Sp1 AP-4 GLI1 c-Myb c-Jun GLI3 MTF-1 GKLf Sp3 AP-1 p53 Egr-1 HNF-3beta HES-1 HDBP2 GCF HDBP1 E12 M-Twist M-Twist:E12 TWIST AhR:Arnt TWIST:E12 MITF E2F-1:DP-1 MAZ EBF AP-2 AP-2gamma GATA-2 GATA-1 AP-2delta CP2 AP-2beta AP-2alpha AP-2alphaA ENKTF-1 MZF-1 NF-Y Pmx2a HOXA5 COUP-TF1 CTCF Sp1 Egr-1 GATA-2 GATA-1 Ikaros CP2 HOXA5 Pmx2a ZNFN1A1 MTF-1 Sp3 AP-1 c-Jun:c-Fos Egr-2 c-Jun AP-2alphaA Copeb MZF-1 c-Myb GKLf p53 NF-Y HNF-3beta MITF Smad3 Smad4 AhR:Arnt
hsa-mir-106a	GCGCGG TGCGCG CGCGCG CCCGCG AGCGCG CGCGGG GCGCGT CGCGCT GCGCGC	
hsa-mir-124a-1	GGCCGC GGGGCG GCGGGG GCGGCG CGGCGG CCGGCG CGGCCG CGGCGA CGCCGC CGCGTG CCGCCG CGGCCG GCCGCG GCGCGG GGCCGC CGCGGA GGGCCG CGGCGC GGGGCG GCGGGG CCCGCG CGCGGG CGGCGG GCGGCG CGCGGC CCGGCG CGGCGA CGCGCT CCGCGG GCGCCG TGCGCG CGCGCG AGCGCG GCCGCC CGCCGG GCGCGT GCCGGC GCGCGC TTCGCG TCGCGG GCGGCG CGCGGC CGCGCT GCCGCG GCGCGG CGCGGA GGGCCG CGGCGC CCGCGG GGGGCG GCGGGG CGCGCG CGGCGG GCCGGC GCGCGC	Sp1 GLI1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 GLI3 NF-Y AP-2alphaA COUP-TF1 HES-1 E12 M-Twist M-Twist:E12 TWIST TWIST:E12 CTCF HDBP2 HDBP1 CP2 Pmx2a HOXA5 GATA-2 GATA-1 c-Jun:c-Fos AP-4 c-Myb c-Jun MTF-1 GKLf Sp3 AP-1 p53 Egr-1 HNF-3beta GCF Ikaros ZNFN1A1 Copeb Egr-2 MZF-1 MAZ EBF AP-2 AP-2gamma MITF AP-2delta AP-2beta AP-2alpha E2F-1:DP-1 Smad3 Smad4 E2F-1 AhR:Arnt ENKTF-1
hsa-mir-124a-3	GGCCGC GGGCCG CCGCGG GGGGCG GCGCCG GCGGGG CCGCGT CGCGGC CCCGCG GCCGCC CGCCGC CGCGTG CGGCCG GCGGGC CCGCCG CGCGCG GCGGCG CGCGGC CGGCGA CGCGCT CCGCGG GCGCCG TGCGCG CGCGCG AGCGCG GCCGCC CGCCGG GCGCGT GCCGGC GCGCGC TTCGCG TCGCGG GCGGCG CGCGGC CGCGCT GCCGCG GCGCGG CGCGGA GGGCCG CGGCGC CCGCGG GGGGCG GCGGGG CGCGCG CGGCGG GCCGGC GCGCGC	CTCF E2F-1 GLI1 GLI3 GKLf Ikaros p53 ZNFN1A1 Copeb NF-Y HNF-3beta MTF-1 AP-2 AP-2gamma HES-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha AP-2alphaA Pmx2a HOXA5 E2F-1:DP-1 COUP-TF1 Sp1 c-Jun:c-Fos AP-4 c-Jun Sp3 AP-1 Egr-1 GCF EBF MZF-1 Egr-2 MITF Smad3 Smad4 AhR:Arnt MAZ ENKTF-1
hsa-mir-129-2	GGCCGC GGGCCG CCGCGG GGGGCG GCGCCG GCGGGG CCGCGT CGCGGC CCCGCG GCCGCC CGCCGC CGCGTG CGGCCG GCGGGC CCGCCG CGCGCG GCGGCG CGCGGC CGGCGA CGCGCT CCGCGG GCGCCG TGCGCG CGCGCG AGCGCG GCCGCC CGCCGG GCGCGT GCCGGC GCGCGC TTCGCG TCGCGG GCGGCG CGCGGC CGCGCT GCCGCG GCGCGG CGCGGA GGGCCG CGGCGC CCGCGG GGGGCG GCGGGG CGCGCG CGGCGG GCCGGC GCGCGC	COUP-TF1 CTCF Sp1 Egr-1 GATA-2 GATA-1 Ikaros CP2 HOXA5 Pmx2a ZNFN1A1 Sp3 GCF Copeb MTF-1 EBF AP-2 p53 AP-2gamma MZF-1 AP-2delta AP-2beta AP-2alpha NF-Y AP-2alphaA AP-1 c-Jun:c-Fos Egr-2 c-Jun MAZ EFI CTF-2 ENKTF-1 CTF-3 CTF CTF-1 E2F-1:DP-1 c-Myb HNF-3beta HES-1 E2F-1 HDBP2 HDBP1 MITF YY1 c-Ets-2 Smad3 AhR:Arnt Smad4
hsa-mir-130b	CGCCGC GCGGCG CGCGGC CGCGCT GCCGCG GCGCGG CGCGGA GGGCCG CGGCGC CCGCGG GGGGCG GCGGGG CGCGCG CGGCGG GCCGGC GCGCGC	Sp1 GLI1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 GLI3 NF-Y AP-2alphaA GKLf Ikaros p53 ZNFN1A1 Copeb HNF-3beta MTF-1 CTCF AP-2 AP-2gamma HES-1 E2F-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha MITF Smad3 AhR:Arnt Smad4 CP2 Pmx2a HOXA5 GATA-2 GATA-1 COUP-TF1 c-Jun:c-Fos AP-4 c-Jun Sp3 AP-1 Egr-1 GCF EBF MZF-1 MAZ ENKTF-1 Egr-2 E2F-1:DP-1 E12 M-Twist M-Twist:E12 TWIST TWIST:E12 c-Jun:c-Fos Sp1 AP-4 GLI1 c-Myb c-Jun GLI3 MTF-1 GKLf Sp3 AP-1 p53 Egr-1 HNF-3beta HES-1 HDBP2 GCF HDBP1 COUP-TF1 CTCF GATA-2 GATA-1 Ikaros CP2 HOXA5 Pmx2a ZNFN1A1 Egr-2 AP-2alphaA Copeb MZF-1 MITF E2F-1:DP-1 ENKTF-1 EBF NF-Y EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 MAZ Smad3 AhR:Arnt Smad4
hsa-mir-132	GCGCGG GGCCGC GGGGCG GCGGGG CGCGCG AGCGCG CGCGGG GCCGCC CCGCCG CGCCGG CGGCCG GCCGGC	c-Jun:c-Fos Sp1 AP-4 GLI1 c-Myb c-Jun GLI3 MTF-1 GKLf Sp3 AP-1 p53 Egr-1 HNF-3beta HES-1 HDBP2 GCF HDBP1 COUP-TF1 CTCF GATA-2 GATA-1 Ikaros CP2 HOXA5 Pmx2a ZNFN1A1 Egr-2 AP-2alphaA Copeb MZF-1 MITF E2F-1:DP-1 ENKTF-1 EBF NF-Y EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 MAZ Smad3 AhR:Arnt Smad4
hsa-mir-148a	GCGCGG GGCCGC GGGCCG CGGCGC CCGCGG GGGGCG GCGCCG GCGGGG GCGGCG CGCGCG CGCGGG CGGCGG CCGGCG GCCGCG GCGCGC	c-Jun:c-Fos Sp1 AP-4 GLI1 c-Myb c-Jun GLI3 MTF-1 GKLf Sp3 AP-1 p53 Egr-1 HNF-3beta HES-1 HDBP2 GCF HDBP1 COUP-TF1 CTCF GATA-2 GATA-1 Ikaros CP2 HOXA5 Pmx2a ZNFN1A1 Copeb NF-Y EBF AP-2 AP-2gamma MZF-1 AP-2delta AP-2beta AP-2alpha AP-2alphaA Egr-2 MAZ EFI CTF-2 ENKTF-1 CTF-3 CTF CTF-1 E2F-1:DP-1 MITF Smad3 Smad4 AhR:Arnt COUP-TF1 CTCF Sp1 Egr-1 GATA-2 GATA-1 Ikaros CP2 HOXA5 Pmx2a ZNFN1A1 MTF-1 Sp3 AP-1 c-Jun:c-Fos Copeb MZF-1 c-Myb c-Jun AP-2 p53 AP-2gamma HNF-3beta HES-1 E2F-1 AP-2delta HDBP2 AP-2beta HDBP1 AP-2alpha AP-2alphaA MAZ EBF MITF E2F-1:DP-1 AP-4 GLI1 ENKTF-1 GLI3 GCF NF-Y CTF-3 CTF CTF-1 EFI CTF-2 Smad3 AhR:Arnt Smad4
hsa-mir-152	GGCCGC GCGGGG CGCGGC CCCGCG AGCGCG CGCGGG TCCGCG GCCGGC CGCCGC GCGGCG CCGCGT CGCGGC CGCGTG CCGCCG CGGCCG GCCGCG GCGCGG GGCCGC CGCGGA CCGCGG GGGCCG CGGCGC GCGCCG GGGGCG GCGGGG CCCGCG GCCGCC CGGCGG CGCCGG CGCGTC GCGCGC CGCCGC GCGGCG CCGCGT CGCGGC CCGCCG GCCGCG GGCCGC CGCGGA GGGCCG CGGCGC CCGCGG GCGCCG GGGGCG GCGGGG GCCGCC CGGCGG CGCCGG CGCGTC GCGCGC	Sp1 GLI1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 GLI3 NF-Y AP-2alphaA GKLf Ikaros p53 ZNFN1A1 Copeb HNF-3beta COUP-TF1 CP2 GATA-2 GATA-1 MTF-1 CTCF AP-2 AP-2gamma HES-1 E2F-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha E12 M-Twist M-Twist:E12 TWIST TWIST:E12 Pmx2a HOXA5 c-Jun:c-Fos AP-4 c-Jun Sp3 AP-1 Egr-1 GCF EBF MZF-1 MAZ ENKTF-1 Egr-2 E2F-1:DP-1 MITF Smad3 Smad4
hsa-mir-153-1	GCGCGG GGCCGC GGGCCG CGGCGC CCGCGG GGGGCG GCGCCG GCGGGG GCGGCG CGCGCG CGCGGG CGGCGG CCGGCG GCCGCG GCGCGC	Sp1 GLI1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 GLI3 NF-Y AP-2alphaA GKLf Ikaros p53 ZNFN1A1 Copeb HNF-3beta COUP-TF1 CP2 GATA-2 GATA-1 MTF-1 CTCF AP-2 AP-2gamma HES-1 E2F-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha Pmx2a HOXA5 Egr-1 Sp3 GCF EBF MZF-1 MAZ ENKTF-1 Egr-2 E2F-1:DP-1 AP-1 c-Jun:c-Fos c-Jun MITF Smad3 Smad4 c-Jun:c-Fos Sp1 AP-4 GLI1 c-Myb c-Jun GLI3 MTF-1 GKLf Sp3 AP-1 p53 Egr-1 HNF-3beta HES-1 HDBP2 GCF HDBP1 EBF MZF-1 NF-Y E12 M-Twist M-Twist:E12 TWIST TWIST:E12 MITF E2F-1:DP-1 ENKTF-1
hsa-mir-17	GCGCGG GGCCGC GGGCCG CGGCGC CCGCGG GGGGCG GCGCCG GCGGGG GCGGCG CGCGCG CGCGGG CGGCGG CCGGCG GCCGCG GCGCGC	
hsa-mir-18a	GCGCGG GGCCGC GGGCCG CGGCGC CCGCGG GGGGCG GCGCCG GCGGGG GCGGCG CGCGCG CGCGGG CGGCGG CCGGCG GCCGCG GCGCGC	
hsa-mir-18b	GCGCGG CGCGGG GCGCGT CGCGCG AGCGCG	

hsa-mir-191 CGCGGC CCGGCG CGCGAG CGCGCT CGGCGA
GCCGCG GCGCGG CGCGGA CCGCGG GGGCCG
CGGCGC GGGGCG GCGGGG CGCGCG CCCGCG
AGCGCG CGCGGG GTCGCG CGCCGG GCGCGT
CGCGTC GCCGGC GCGCGC
hsa-mir-193a CGCCGC GCGGCG CGCGGC CCGGCG CCGCCG
CGGCGA CGGCCG GCCGCG GCGCGG GGCCGC
CCGCGG GGGCCG GCGCCG GGGGCG GCGGGG
CGCCGA CCCGCG CGCGGG GCCGCC CGGCGG
CGCCGG GCCGGC GCGCGC
hsa-mir-193b CGCCGC GCGGCG CGCGGC CCGCCG CGCGCT
GCCGCG GCGCGG GGCCGC GGGCCG CGGCGC
GGGCGG GCGGGG CGCGCG AGCGCG GCCGCC
CGGCGG GCCGGC GCGCGC
hsa-mir-196a-1 CGCGGG GCGCGG GGCCGC GCCGCC GGGCCG
CGGCGG CGCCGC CCGCCG CGGCCG GCCGCG
hsa-mir-196b GCCGCC GGGGCG CGGCGG GCGGCG GCGCGC
CGCGGA GGGCCG CGGCGC CGCCGC CCGCGT
hsa-mir-19a GCCGCC CCGCCG CGCCGG CGCGTC GCCGCG
CGCCGC GCGGCG CGCGGC CCGGCG CCGCCG
GCGCGG GGGCCG CGGCGC GGGGCG GCGCCG
hsa-mir-203 GCGGGG CGCGCG AGCGCG CCCGCG CGCGGG
GCCGCC CGGCGG CGCCGG
CGCCGC GCGGCG CGCGGC CCGGCG CCGCCG
CGCGAG CGGCCG GCCGCG GCGCGG GGCCGC
CGCGGA CCGCGG GGGCCG GCGCCG GGGGCG
hsa-mir-210 GCGGGG CGCGCG CCCGCG CGCGGG GCCGCC
CGGCGG CGCCGG GCCGGC
CGCCGC GCGGCG CGCGGC CCGCCG GCCGCG
GCGCGG GGCCGC GGGCCG CGGCGC CCGCGG
GCGCCG GGGGCG GCGGGG CCCGCG GCCGCC
hsa-mir-212 TCCGCG CGCCGG GCGCGT GCCGGC
GGCCGC GGGCCG CGGCGC GGGGCG CGCCGC
GCGGGG GCGGCG CCGCGT CGCGTG CGCGGG
GCCGCC TCCGCG CCGCCG GCCTGG CGGCCG
hsa-mir-219-2 GCCGCG
GGGCCG GGGGCG GCGGGG GCGGCG CGGCGG
hsa-mir-22 CCGGCG CGGCGA GCCGGC
hsa-mir-23b CCGCGG CGCGGC GCCGGC AGCGCG
hsa-mir-27b CCGCGG CGCGGC GCCGGC AGCGCG
hsa-mir-320 GCGCGG GGCCGC GGGGCG GCGCCG CGCCGC
GCCGCC CCGGCG CGCCGG CGGCCG GCCGGC
TCGCGG CGCCGC GCGGCG CGCGGC CCGGCG
CCGCCG CGCGAG CGGCCG CGGCGA CGCGCT
GCCGCG CGCGGA GCGCGG GGCCGC CGGCGC
GGGCCG CCGCGG GGGGCG GCGCCG GCGGGG
TGCGCG CGCGCG CCCGCG AGCGCG CGCGGG
hsa-mir-345 GCCGCC CGGCGG CGCCGG GCGCGC

MTF-1 CTCF AP-2 p53 AP-2gamma HNF-3beta HES-1 E2F-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha AP-2alphaA MITF
Sp1 Copeb Smad3 AhR:Arnt NF-Y Smad4 Pmx2a HOXA5 E2F-1:DP-1 COUP-TF1 c-Jun:c-Fos AP-4 GLI1 c-Jun GLI3 GKLF Sp3 AP-1 Egr-
1 GCF EBF MZF-1 Ikaros ZNFN1A1 Egr-2 MAZ GATA-2 GATA-1 CP2 ENKTF-1 c-Ets-2 E12 M-Twist M-Twist:E12 TWIST TWIST:E12

Sp1 GLI1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 GLI3 NF-Y AP-2alphaA GKLF Ikaros p53 ZNFN1A1 Copeb HNF-3beta MTF-1 CTCF
AP-2 AP-2gamma HES-1 E2F-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha MITF Smad3 AhR:Arnt Smad4 CP2 Pmx2a HOXA5
GATA-2 GATA-1 COUP-TF1 c-Jun:c-Fos AP-4 c-Jun Sp3 AP-1 Egr-1 GCF EBF MZF-1 MAZ ENKTF-1 Egr-2 E2F-1:DP-1

Sp1 GLI1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 GLI3 NF-Y AP-2alphaA GKLF Ikaros p53 ZNFN1A1 Copeb HNF-3beta MTF-1 CTCF
AP-2 AP-2gamma HES-1 E2F-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha Pmx2a HOXA5 E2F-1:DP-1 COUP-TF1 c-Jun:c-Fos
AP-4 c-Jun Sp3 AP-1 Egr-1 GCF GATA-2 GATA-1 CP2 Egr-2 MZF-1 MITF ENKTF-1 Smad3 Smad4 AhR:Arnt MAZ
MTF-1 EBF Sp3 AP-1 c-Jun:c-Fos Sp1 p53 Egr-1 AP-4 GLI1 MZF-1 GCF c-Jun GLI3 NF-Y c-Myb GKLF HNF-3beta HES-1 HDBP2 HDBP1
COUP-TF1 CTCF GATA-2 GATA-1 Ikaros CP2 HOXA5 Pmx2a ZNFN1A1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 AP-2alphaA Copeb
MITF Smad3 Smad4
CTCF Sp1 Egr-1 EFI CTF-2 GATA-2 GATA-1 YY1 CTF-3 CTF CP2 c-Ets-2 CTF-1 AP-2alphaA MTF-1 Sp3 AP-1 c-Jun:c-Fos Egr-2 Ikaros
ZNFN1A1 c-Jun p53 Copeb MITF Smad3 Smad4 NF-Y GKLF HNF-3beta MAZ c-Myb E2F-1:DP-1 ENKTF-1
GLI1 GLI3 COUP-TF1 Sp3 Ikaros GCF Egr-1 ZNFN1A1 Copeb GKLF p53 HDBP2 c-Myb HDBP1 NF-Y Sp1 EFI CTF-2 YY1 CTF-3 CTF c-
Ets-2 CTF-1 AP-2alphaA CP2 GATA-2 GATA-1 CTCF MAZ Egr-2 E2F-1:DP-1 Pmx2a HOXA5

Sp1 GLI1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 GLI3 NF-Y AP-2alphaA GKLF Ikaros p53 ZNFN1A1 Copeb HNF-3beta MTF-1 CTCF
AP-2 AP-2gamma HES-1 E2F-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha MITF Smad3 AhR:Arnt Smad4 c-Jun:c-Fos AP-4 c-
Jun Sp3 AP-1 Egr-1 GCF COUP-TF1 Egr-2 MAZ ENKTF-1 MZF-1 E2F-1:DP-1 EBF GATA-2 GATA-1 CP2

Sp1 GLI1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 GLI3 NF-Y AP-2alphaA GKLF Ikaros p53 ZNFN1A1 Copeb HNF-3beta MTF-1 CTCF
AP-2 AP-2gamma HES-1 E2F-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha MITF Smad3 AhR:Arnt Smad4 CP2 Pmx2a HOXA5
GATA-2 GATA-1 COUP-TF1 c-Jun:c-Fos AP-4 c-Jun Sp3 AP-1 Egr-1 GCF EBF MZF-1 MAZ ENKTF-1 Egr-2 E2F-1:DP-1
Sp1 GLI1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 GLI3 NF-Y AP-2alphaA GKLF Ikaros p53 ZNFN1A1 Copeb HNF-3beta MTF-1 CTCF
AP-2 AP-2gamma HES-1 E2F-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha COUP-TF1 Pmx2a HOXA5 c-Jun:c-Fos AP-4 c-Jun
Sp3 AP-1 Egr-1 GCF GATA-2 GATA-1 CP2 EBF MZF-1 MAZ ENKTF-1 Egr-2 E2F-1:DP-1 MITF E12 M-Twist M-Twist:E12 TWIST
TWIST:E12 Smad3 AhR:Arnt Smad4

COUP-TF1 CTCF Sp1 Egr-1 GATA-2 GATA-1 Ikaros CP2 HOXA5 Pmx2a ZNFN1A1 Sp3 GCF Copeb GKLF p53 HDBP2 c-Myb HDBP1 NF-
Y MTF-1 AP-1 c-Jun:c-Fos Egr-2 c-Jun AP-2alphaA GLI1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 GLI3 MZF-1 HNF-3beta HES-1 E12 M-
Twist M-Twist:E12 TWIST TWIST:E12 EBF AP-4 MAZ E2F-1:DP-1
COUP-TF1 Sp3 Ikaros GCF Egr-1 ZNFN1A1 Copeb MTF-1 AP-1 c-Jun:c-Fos Egr-2 c-Jun AP-2alphaA MZF-1 c-Myb GKLF p53 NF-Y HNF-
3beta Sp1 MITF Smad3 Smad4 AhR:Arnt
MTF-1 EBF AP-2 p53 Sp1 AP-2gamma MZF-1 AP-2delta AP-2beta AP-2alpha NF-Y AP-2alphaA CTCF HNF-3beta HES-1 E2F-1 HDBP2 c-
Myb HDBP1 Sp3 Copeb Smad3 AhR:Arnt Smad4 AP-1 c-Jun:c-Fos AP-4 GLI1 ENKTF-1 c-Jun GLI3
MTF-1 EBF AP-2 p53 Sp1 AP-2gamma MZF-1 AP-2delta AP-2beta AP-2alpha NF-Y AP-2alphaA CTCF HNF-3beta HES-1 E2F-1 HDBP2 c-
Myb HDBP1 Sp3 Copeb Smad3 AhR:Arnt Smad4 AP-1 c-Jun:c-Fos AP-4 GLI1 ENKTF-1 c-Jun GLI3
c-Jun:c-Fos Sp1 AP-4 GLI1 c-Myb c-Jun GLI3 MTF-1 GKLF Sp3 AP-1 p53 Egr-1 HNF-3beta HES-1 HDBP2 GCF HDBP1 COUP-TF1 CTCF
GATA-2 GATA-1 Ikaros CP2 HOXA5 Pmx2a ZNFN1A1 Egr-2 AP-2alphaA MAZ EFI CTF-2 ENKTF-1 MZF-1 CTF-3 CTF CTF-1 NF-Y E2F-
1:DP-1 YY1 c-Ets-2 MITF Copeb Smad3 AhR:Arnt Smad4

CTCF E2F-1 GLI1 GLI3 Sp1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 NF-Y AP-2alphaA GKLF Ikaros p53 ZNFN1A1 Copeb HNF-3beta
MTF-1 AP-2 AP-2gamma HES-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha MITF Smad3 AhR:Arnt Smad4 CP2 Pmx2a HOXA5
GATA-2 GATA-1 E2F-1:DP-1 COUP-TF1 c-Jun:c-Fos AP-4 c-Jun Sp3 AP-1 Egr-1 GCF EBF MZF-1 Egr-2 MAZ ENKTF-1 E12 M-Twist M-
Twist:E12 TWIST TWIST:E12

hsa-mir-34b GCGCGG GGCCGC GGGCCG CCGCGG GGGGCG
GCGGGG CCCGCG CGCGGG CGGCGG
CGCCGC GCGGCG CGCGGC CGGCCG GCGCGG
GGCCGC GGGCCG CCGCGG GGGGCG GCGGGG
hsa-mir-34c CCCGCG CGCGGG GCCGCC CGGCGG GCCGGC
TCGCGG CGCCGC CGCGGC CCGCCG CGCGAG
CGGCCG GCCGCG GCGCGG GGCCGC CGCGGA
CCGCGG GGGGCG GCGCCG GCGGGG CGCGCG
hsa-mir-375 CGCGGG GCCGCC CGCCGG GCGCGC
TCGCGG CGCCGC CGCGGC CGCGTG CGCGCT
GCCGCG GCGCGG GGCCGC CCGCGG GGGGCG
GCGCCG GCGGGG CGCCGA TGCGCG CGCGCG
CGCGCG CGCGGG GCCGCC CGCCGG GCGCGT
hsa-mir-378 GCCGC CGCGCG
CGCGGC CCGCGG CGCGAG CGCGCT GCCGCG
GCGCGG CGCGGA CCGCGG GGGCCG CGGCGC
GGGGCG GCGGGG CGCGCG CCCGCG AGCGCG
hsa-mir-425 CGCGGG GTCGCG CGCGTC GCCGGC GCGCGC
GGGCCG GCCGCC GGGGCG CCGCCG GCGGGG
hsa-mir-429 GCCGGC
GCCGCC GGGGCG CGCCGC CCGCCG GCGGGG
hsa-mir-484 CGCGTC
GGCCGC GGGCCG GCGCCG CGCCGC GCGGCG
CGCCGA CGCGGC GCCGCC CCGCCG GCCGGC
hsa-mir-565 GCCCGG
GCGCGG GGCCGC CGGCGC GGGGCG GCGGGG
GCGGCG CGCGGC CCCGCG AGCGCG CGCGGG
hsa-mir-574 GCCGCC CGGCCG CGCGCT
hsa-mir-594 GCGCGG CGGCGC GCGCGT AGCGCG GCGCGC
hsa-mir-611 CGGCGG GCGGCG CGCGGC CGCGCT CCCGCG
GGCCGC CGGCGC CCGCGG GCGGGG CGCGGC
hsa-mir-615 CCGGCG CCGCCG CGCCGG GCCGGC
CCGCGG GGGGCG GCGGGG TGCGCG CGCGTG
hsa-mir-616 CGCGGG TCCGCG GCGCGT
GCGGCG CGCGGC CCGCGG CCGCCG CGGCGA
GCGCGG CCGCGG GCGCCG CGCCGA GCGGGG
hsa-mir-618 CGCGGG GCCGCC CGCCGG CGCGTC
TCGCGG GCGGCG CGCGGC CCGGCG CCGCCG
CGCGAG CGGCCG CGGCGA CGCGCT GCCGCG
GCGCGG GGCCGC CGGCGC CCGCGG GGGCCG
GGGGCG GCGGGG CGCGCG CCCGCG AGCGCG
CGCGGG GCCGCC TCCGCG CGCCGG GCGCGT
hsa-mir-636 CGCGTC GCCGGC GCGCGC TTCGCG
GGGCCG CGGCGC CCGCGG GCGGGG GCGGCG
hsa-mir-638 CGCGGG CGCCGG GCCGGC
TCGCGG CGCGGC CGCGTG CCGGCG CCGCCG
CGCGAG CGGCGA GCCGCG GGCCGC CCGCGG
CGGCGC GCGCCG GGGGCG GCGGGG TGCGCG
hsa-mir-663 CGCGGG GCCGCC CGCCGG GCCGGC GCGCGC

c-Jun:c-Fos Sp1 AP-4 GLI1 c-Myb c-Jun GLI3 MTF-1 GKLF Sp3 AP-1 p53 Egr-1 HNF-3beta HES-1 HDBP2 GCF HDBP1 COUP-TF1 CTCF
GATA-2 GATA-1 Ikaros CP2 HOXA5 Pmx2a ZNFN1A1 Copeb EBF AP-2 AP-2gamma MZF-1 AP-2delta AP-2beta AP-2alpha NF-Y AP-
2alphaA Egr-2 MAZ MITF E2F-1:DP-1 Smad3 Smad4
Sp1 GLI1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 GLI3 NF-Y AP-2alphaA GKLF Ikaros p53 ZNFN1A1 Copeb HNF-3beta MTF-1 CTCF
AP-2 AP-2gamma HES-1 E2F-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha CP2 Pmx2a HOXA5 GATA-2 GATA-1 c-Jun:c-Fos
AP-4 c-Jun Sp3 AP-1 Egr-1 GCF COUP-TF1 EBF MZF-1 Egr-2 MAZ MITF E2F-1:DP-1 Smad3 Smad4 AhR:Arnt
CTCF E2F-1 GLI1 GLI3 Sp1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 NF-Y AP-2alphaA MTF-1 AP-2 p53 AP-2gamma HNF-3beta HES-1
AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha CP2 Pmx2a HOXA5 GATA-2 GATA-1 COUP-TF1 c-Jun:c-Fos AP-4 c-Jun GKLF Sp3
AP-1 Egr-1 GCF Ikaros ZNFN1A1 EBF MZF-1 Egr-2 MAZ ENKTF-1 E2F-1:DP-1 Copeb MITF
CTCF E2F-1 GLI1 GLI3 Sp1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1 NF-Y AP-2alphaA MTF-1 AP-2 p53 AP-2gamma HNF-3beta HES-1
AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha COUP-TF1 E12 M-Twist M-Twist:E12 TWIST TWIST:E12 Pmx2a HOXA5 E2F-1:DP-
1 c-Jun:c-Fos AP-4 c-Jun GKLF Sp3 AP-1 Egr-1 GCF GATA-2 GATA-1 Ikaros CP2 ZNFN1A1 EBF MZF-1 Egr-2 MAZ ENKTF-1 Copeb
AhR:Arnt MITF Smad3 Smad4
MTF-1 CTCF AP-2 p53 AP-2gamma HNF-3beta HES-1 E2F-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha AP-2alphaA MITF
Sp1 Copeb Smad3 AhR:Arnt NF-Y Smad4 Pmx2a HOXA5 E2F-1:DP-1 COUP-TF1 c-Jun:c-Fos AP-4 GLI1 c-Jun GLI3 GKLF Sp3 AP-1 Egr-
1 GCF EBF MZF-1 Ikaros ZNFN1A1 Egr-2 MAZ GATA-2 GATA-1 CP2 ENKTF-1
COUP-TF1 Sp3 Ikaros GCF Egr-1 ZNFN1A1 Copeb CTCF Sp1 EFI CTF-2 GATA-2 GATA-1 YY1 CTF-3 CTF CP2 c-Ets-2 CTF-1 AP-
2alphaA MTF-1 AP-1 c-Jun:c-Fos Egr-2 c-Jun HDBP2 HDBP1 MZF-1 c-Myb Smad3 AhR:Arnt NF-Y Smad4
CTCF Sp1 Egr-1 EFI CTF-2 GATA-2 GATA-1 YY1 CTF-3 CTF CP2 c-Ets-2 CTF-1 AP-2alphaA MTF-1 Sp3 AP-1 c-Jun:c-Fos Egr-2 Ikaros
ZNFN1A1 c-Jun GLI1 GLI3 NF-Y HDBP2 HDBP1 Copeb MZF-1 c-Myb
COUP-TF1 CTCF Sp1 Egr-1 GATA-2 GATA-1 Ikaros CP2 HOXA5 Pmx2a ZNFN1A1 Sp3 GCF Copeb MAZ EFI CTF-2 ENKTF-1 Egr-2
MZF-1 CTF-3 CTF CTF-1 NF-Y E2F-1:DP-1 GLI1 YY1 c-Ets-2 GLI3 AP-2alphaA GKLF p53 HNF-3beta MTF-1 AP-2 AP-2gamma HES-1
E2F-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha Smad3 AhR:Arnt Smad4
c-Jun:c-Fos Sp1 AP-4 GLI1 c-Myb c-Jun GLI3 MTF-1 GKLF Sp3 AP-1 p53 Egr-1 HNF-3beta HES-1 HDBP2 GCF HDBP1 COUP-TF1 CTCF
GATA-2 GATA-1 Ikaros CP2 HOXA5 Pmx2a ZNFN1A1 NF-Y Egr-2 AP-2alphaA Copeb MZF-1 AP-2 AP-2gamma E2F-1 AP-2delta AP-
2beta AP-2alpha MAZ EBF MITF E2F-1:DP-1 ENKTF-1 EFI CTF-2 YY1 CTF-3 CTF c-Ets-2 CTF-1
c-Jun:c-Fos Sp1 AP-4 GLI1 c-Myb c-Jun GLI3 MTF-1 GKLF Sp3 AP-1 p53 Egr-1 HNF-3beta HES-1 HDBP2 GCF HDBP1 NF-Y E12 M-
Twist M-Twist:E12 TWIST TWIST:E12 ENKTF-1 MITF MAZ E2F-1:DP-1 AP-2alphaA
Sp1 p53 Copeb MITF Ikaros Smad3 ZNFN1A1 Smad4 NF-Y GKLF HNF-3beta MTF-1 CTCF AP-2 AP-2gamma HES-1 E2F-1 AP-2delta
HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha AP-2alphaA Pmx2a HOXA5 E2F-1:DP-1 MAZ EBF GATA-2 GATA-1 CP2
COUP-TF1 CTCF Sp1 Egr-1 GATA-2 GATA-1 Ikaros CP2 HOXA5 Pmx2a ZNFN1A1 GKLF p53 HDBP2 c-Myb HDBP1 NF-Y MTF-1 EBF
AP-2 AP-2gamma MZF-1 AP-2delta AP-2beta AP-2alpha AP-2alphaA Sp3 AP-1 c-Jun:c-Fos Copeb c-Jun HNF-3beta HES-1 E2F-1 MITF
Smad3 AhR:Arnt Smad4 c-Ets-2 YY1 MAZ Egr-2 E2F-1:DP-1
MTF-1 EBF AP-2 p53 Sp1 AP-2gamma MZF-1 AP-2delta AP-2beta AP-2alpha NF-Y AP-2alphaA Sp3 AP-1 c-Jun:c-Fos Egr-1 Egr-2 Ikaros
ZNFN1A1 c-Jun Copeb c-Myb E12 M-Twist M-Twist:E12 TWIST AhR:Arnt TWIST:E12 COUP-TF1 HES-1 AP-4 GLI1 GCF GLI3 CTF-3 CTF
CTF-1 EFI CTF-2
GKLF Ikaros p53 ZNFN1A1 Copeb NF-Y HNF-3beta MTF-1 CTCF AP-2 AP-2gamma HES-1 E2F-1 AP-2delta HDBP2 AP-2beta c-Myb
HDBP1 AP-2alpha AP-2alphaA MITF Sp1 Smad3 AhR:Arnt Smad4 c-Ets-2 YY1 c-Jun:c-Fos AP-4 GLI1 c-Jun GLI3 Sp3 AP-1 Egr-1 GCF
EBF MZF-1 MAZ EFI CTF-2 ENKTF-1 Egr-2 CTF-3 CTF CTF-1 E2F-1:DP-1 GATA-2 GATA-1 CP2
CTCF E2F-1 GLI1 GLI3 GKLF Ikaros p53 ZNFN1A1 Copeb NF-Y HNF-3beta MTF-1 AP-2 AP-2gamma HES-1 AP-2delta HDBP2 AP-2beta
c-Myb HDBP1 AP-2alpha AP-2alphaA MITF Sp1 Smad3 AhR:Arnt Smad4 c-Ets-2 YY1 CP2 Pmx2a HOXA5 GATA-2 GATA-1 E2F-1:DP-1
COUP-TF1 c-Jun:c-Fos AP-4 c-Jun Sp3 AP-1 Egr-1 GCF EBF MZF-1 Egr-2 MAZ ENKTF-1 EFI CTF-2 CTF-3 CTF CTF-1 E12 M-Twist M-
Twist:E12 TWIST TWIST:E12
COUP-TF1 Sp3 Ikaros GCF Egr-1 ZNFN1A1 Copeb GKLF p53 HDBP2 c-Myb HDBP1 NF-Y MTF-1 EBF AP-2 Sp1 AP-2gamma MZF-1 AP-
2delta AP-2beta AP-2alpha AP-2alphaA AP-1 c-Jun:c-Fos c-Jun HNF-3beta AP-4 GLI1 GLI3 CTCF MAZ Egr-2 c-Ets-2 E2F-1:DP-1 Smad3
AhR:Arnt Smad4
CTCF E2F-1 GLI1 GLI3 MTF-1 AP-2 p53 AP-2gamma HNF-3beta HES-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha AP-
2alphaA COUP-TF1 E12 M-Twist M-Twist:E12 TWIST TWIST:E12 MITF Sp1 Copeb Smad3 AhR:Arnt NF-Y Smad4 c-Ets-2 YY1 Pmx2a
HOXA5 Egr-1 GATA-2 GATA-1 Ikaros CP2 ZNFN1A1 EBF MZF-1 GKLF Sp3 MAZ EFI CTF-2 ENKTF-1 Egr-2 CTF-3 CTF CTF-1 E2F-1:DP-
1 AP-1 c-Jun:c-Fos c-Jun AP-4 GCF

hsa-mir-9-1	GCGGCG CGCGGC CCGGCG CGGCGA CGGCCG	GKLF Ikaros p53 ZNFN1A1 Copeb NF-Y HNF-3beta MTF-1 CTCF AP-2 AP-2gamma HES-1 E2F-1 AP-2delta HDBP2 AP-2beta c-Myb HDBP1 AP-2alpha AP-2alphaA MITF Sp1 Smad3 AhR:Arnt Smad4 CP2 Pmx2a HOXA5 GATA-2 GATA-1 COUP-TF1 Sp3 GCF Egr-1 EBF MZF-1 AP-1 c-Jun:c-Fos Egr-2 c-Jun E2F-1:DP-1 MAZ c-Ets-2 E12 M-Twist M-Twist:E12 TWIST TWIST:E12
	GGGCCG CCGCGG GGGGCG GCGGGG CGCGCG	
	CCCGCG CGGCGG CGCCGG GCGCGT CGCGTC	
hsa-mir-92b	GCCGGC	c-Jun:c-Fos Sp1 AP-4 GLI1 c-Myb c-Jun GLI3 MTF-1 GKLF Sp3 AP-1 p53 Egr-1 HNF-3beta HES-1 HDBP2 GCF HDBP1 COUP-TF1 CTCF GATA-2 GATA-1 Ikaros CP2 HOXA5 Pmx2a ZNFN1A1 Copeb MAZ EFI CTF-2 ENKTF-1 Egr-2 MZF-1 CTF-3 CTF CTF-1 NF-Y E2F-1:DP-1 YY1 c-Ets-2 AP-2alphaA AP-2 AP-2gamma E2F-1 AP-2delta AP-2beta AP-2alpha MITF EBF
	GCGCGG GGCCGC GGGCCG GCGCCG CGCCGC	
	GCGGGG GCGGCG CGCGGC CGCGCG CCCGCG	
hsa-mir-9-3	AGCGCG CGGCGA GCCGCG GCGCGC	c-Jun:c-Fos Sp1 AP-4 GLI1 c-Myb c-Jun GLI3 MTF-1 GKLF Sp3 AP-1 p53 Egr-1 HNF-3beta HES-1 HDBP2 GCF HDBP1 Egr-2 Ikaros ZNFN1A1 AP-2alphaA MAZ EFI CTF-2 ENKTF-1 MZF-1 CTF-3 CTF CTF-1 NF-Y E2F-1:DP-1 Copeb COUP-TF1 CP2 GATA-2 GATA-1 EBF AP-2 AP-2gamma MITF AP-2delta AP-2beta AP-2alpha E12 M-Twist M-Twist:E12 TWIST TWIST:E12 CTCF c-Ets-2 Smad3 AhR:Arnt Smad4
	GCGCGG GGGGCG GCGCCG GCGGGG CCGCGT	
	CCCGCG CGCGGG CGCGTG TCCGCG CGCCGG	
	GCCGGC	