

Figure 6 – figure supplement 1

A

Rank	Motif	Name	P-value	log P-value	Rank	Motif	Name	P-value	log P-value
1		ETV1(ETS)/GIST48-ETV1-ChIP-Seq(GSE22441)/Homer	1e-9	-2.270e+01	19		Foxo1(Forkhead)/RAW-Foxo1-ChIP-Seq(Fan_et_al)/Homer	1e-6	-1.490e+01
2		E1f4(ETS)/BMDM-E1f4-ChIP-Seq(GSE86999)/Homer	1e-9	-2.240e+01	20		SPDEF(ETS)/VCaP-SPDEF-ChIP-Seq(SRA014231)/Homer	1e-5	-1.375e+01
3		EHF(ETS)/LoVo-EHF-ChIP-Seq(GSE49402)/Homer	1e-9	-2.177e+01	21		ELFI(ETS)/Jurkat-ELFI-ChIP-Seq(SRA014231)/Homer	1e-5	-1.368e+01
4		ERG(ETS)/VCaP-ERG-ChIP-Seq(GSE14097)/Homer	1e-8	-2.009e+01	22		ETS1(ETS)/Jurkat-ETS1-ChIP-Seq(GSE17954)/Homer	1e-5	-1.328e+01
5		Ets1(distal)(ETS)/CD4+PolII-ChIP-Seq(Barski_et_al)/Homer	1e-8	-1.969e+01	23		Sox7(HMG)/ESC-Sox7-ChIP-Seq(GSE133899)/Homer	1e-5	-1.317e+01
6		Sox15(HMG)/CPA-Sox15-ChIP-Seq(GSE62909)/Homer	1e-8	-1.941e+01	24		Elk4(ETS)/Helo-Elk4-ChIP-Seq(GSE31477)/Homer	1e-5	-1.296e+01
7		Sox2(HMG)/mES-Sox2-ChIP-Seq(GSE11431)/Homer	1e-8	-1.921e+01	25		Sox10(HMG)/SciaticNerve-Sox3-ChIP-Seq(GSE35132)/Homer	1e-4	-1.089e+01
8		Sox3(HMG)/NPC-Sox3-ChIP-Seq(GSE33059)/Homer	1e-8	-1.866e+01	26		ELF5(ETS)/T47D-ELF5-ChIP-Seq(GSE30407)/Homer	1e-4	-1.087e+01
9		Sox6(HMG)/Myotubes-Sox6-ChIP-Seq(GSE32627)/Homer	1e-7	-1.839e+01	27		ETS(ETS)/Promoter/Homer	1e-4	-1.069e+01
10		ETV4(ETS)/HepG2-ETV4-ChIP-Seq(ENCODE)/Homer	1e-7	-1.823e+01	28		FOXK1(Forkhead)/HEK293-FOXK1-ChIP-Seq(GSE51673)/Homer	1e-3	-9.105e+00
11		EWS-ERG-fusion(ETS)/SK-N-MC-EWS-ChIP-Seq(SRA014231)/Homer	1e-7	-1.820e+01	29		Elk1(ETS)/Helo-Elk1-ChIP-Seq(GSE31477)/Homer	1e-3	-8.935e+00
12		EWS-FLI1-fusion(ETS)/SK-N-MC-EWS-FLI1-ChIP-Seq(SRA014231)/Homer	1e-7	-1.800e+01	30		Foxo3(Forkhead)/U2OS-Foxo3-ChIP-Seq(E-MTAB-2701)/Homer	1e-3	-8.187e+00
13		Sox17(HMG)/Endoderm-Sox17-ChIP-Seq(GSE61475)/Homer	1e-7	-1.780e+01	31		Rbpj1(7)/Panc1-Rbpj1-ChIP-Seq(GSE47459)/Homer	1e-3	-7.239e+00
14		Eiv2(ETS)/ES-ER71-ChIP-Seq(GSE9402)/Homer	1e-7	-1.650e+01	32		PU.1(ETS)/ThioMac-PU.1-ChIP-Seq(GSE21512)/Homer	1e-2	-6.769e+00
15		GABPA(ETS)/Jurkat-GABPA-ChIP-Seq(GSE17954)/Homer	1e-7	-1.643e+01	33		MeZa(MADS)/HL1-MeZa.biotin-ChIP-Seq(GSE21529)/Homer	1e-2	-6.084e+00
16		Fli1(ETS)/CD8-FLI1-ChIP-Seq(GSE0898)/Homer	1e-7	-1.625e+01	34		FoxL2(Forkhead)/Ovary-FoxL2-ChIP-Seq(GSE60858)/Homer	1e-2	-6.025e+00
17		Sox21(HMG)/ESC-SOX21-ChIP-Seq(GSE110505)/Homer	1e-6	-1.564e+01	35		Foxf1(Forkhead)/Lung-Foxf1-ChIP-Seq(GSE177951)/Homer	1e-2	-5.745e+00
18		ELF3(ETS)/PDAC-ELF3-ChIP-Seq(GSE4557)/Homer	1e-6	-1.511e+01	36		FOXP1(Forkhead)/H9-FOXP1-ChIP-Seq(GSE31006)/Homer	1e-2	-5.499e+00

B

TF	Sequence logo	Type	TF	Sequence logo	Type
ERG		ChIP-seq HUVEC ¹	RBPJ		ChIP-seq ²
ETS1		ChIP-seq HUVEC ³	MEF2A		ChIP-seq JASPAR/ReMap2018 ^{4,5}
SOX7		ChIP-seq ⁴	MEF2C		ChIP-seq JASPAR/ENCODE ⁵
SOX17		ChIP-seq JASPAR/ReMap2022 ^{2,7}	SMAD4		ChIP-seq, JASPAR2016/PAZAR ^{8,9}
FOXO1		HT-SELEX JASPAR ^{5,10}	SMAD1/5		ChIP-seq, HUVEC ¹¹ Morikawa et al 2011
FOXO2		HT-SELEX JASPAR ^{5,10}	LEF1		HT-SELEX, ¹⁰
FOXO1		ChIP-seq JASPAR/PAZAR ^{5,9}	TCF7L2		ChIP-seq JASPAR/ENCODE ⁵
FOX:ETS		Enhancer analysis ¹²	NR2F2		ChIP-seq, HUVEC ¹³
RBPJ		ChIP-seq, JASPAR/ReMap2018 ^{4,5}	KLF4		ChIP-seq, ^{4,5}
RBPJ		ChIP-seq, ¹⁴			

C

ETS motif search: CGGAAA, CGGAAG, AGGAAA, AGGAAG, TGGAAA, TGGAAG, TTTCGG, CTTCGG, TTTCCT, CTTCCCT, TTCCCA, CTTCCA. **SOX motif search:** ACAATG, CATTGT, AGAATG, CATCT, ACAAAG, CTTGT, AGAAAG, CTTCT, ACAATA, TATTGT, AGAATA, TATTCT, ACAAAG, TTTTGT, AGAAAA, TTTTCT, ACAATC, GATTGT, AGAATC, GATTCT, ACAAAC, GTTTGT, AGAAAC, GTTTCT. **FOXO motif search:** TAAATA, TCAATA, TAAACA, TCAACA, AAAATA, ACAATA, AAAACA, ACAACA, GAAATA, GAAACA, TATTTA, TATTGA, TGTTTA, TGTTGA, TATTTT, TATTGT, TGTTTT, TGTTGT, TATTTT, TGTTTC, CAAATA, TATTTG, CAAACA, TGTTTG. **FOX:ETS motif search:** AACAGGAA, AACAGGAT, TACAGGAA, TACAGGAT, ATCCTGTT, TTCCTGTT, ATCCTGTA, TTCCTGTA. **RBPJ motifs search:** TTCCCA, CTCCCA, TTCTCA, CTCTCA, TTCACA, CTCACA, TGGGAA, TGGGAG, TGAGAA, TGAGAG, TGTGAA, TGTGAG. **MEF2 motif search:** CTAWWWWA, CTAWWWWG, TTAWWWWA, TTAWWWWG, GTAWWWWA, GTAWWWWG, TWWWWWTAG, CWWWWWTAG, TWWWWWTAA, CWWWWWTAA, TWWWWWTAC, CWWWWWTAC. W represents a T or an A. **SMAD4 motif search:** CAGAC, GTCTG, CAGCC, GGCTG, GAGAC, GTCTC, GAGCC, GGCTC, TAGAC, GTCTA, TAGCC, GGCTA. **SMAD1/5 G/C rich motif search:** CTGGAG, CTCAG, CAGGAG, CTCTG, CTGCAG, CTGCAG, CAGCAG, CTGCTG, CTGGCG, CGCCAG, CAGGCG, CGCCTG, CTGCCG, CGGCAG, CAGCCG, CGGCTG. **WNT-linked TCF/LEF motif search:** ATCAAAG, TTCAAAG, ATGAAAG, TTGAAAG, ATCAAAA, TTCAAAA, ATGAAAA, CTTTGT, CTTTGA, CTTTCA, CTTTCA, TTTTGT, TTTTGA, TTTTCA, TTTTCA. **NR2F2 motif search:** AGGTCA, TGACCT, AGGTGA, TAACCT, GGGTCA, TGACCC, GGGTGA, TAACCC. **KLF motif search:** ACACCC, CCACCC, ACGCCC, CCGCCC, GGGTGT, GGGTGG, GGGCGT, GGGCGG.