Supplementary Table - Matrices with conserved regulatory sequences in promoter regions of human, or murine, NRF2 and AP-1

Family/Matrix	Sequence Name	Optimized Threshold	Start Position	End Position	Strand	Matrix Similarity	Core Similarity	Sequence (Core Sequence in Upper Case)
Activator protein 1, AP-1								
V$AP1F/V$AP1.02	Nrf2-mouse	0.87	237	247	-	0.88	1	gcgGAGTcagg
Nuclear factor (erythroid-derived 2)-like 2, NRF2								
V$AP1R/V$NFE2L2.01	Ap1-human	0.7	265	289	+	0.718	0.826	accagacaATGAatcagctcccttg
Activator protein 4								
V$AP4R/V$AP4.01	Ap1-human	0.85	236	252	-	0.887	1	gggccCAGCtggcggcc
V$AP4R/V$AP4.01	Ap1-human	0.85	554	570	-	0.926	1	agaacCAGCtcctggcc
V$AP4R/V$AP4.01	Nrf2-human	0.85	279	295	-	0.942	1	actgcCAGCtggggtcc
Activator protein 4								
V$AP4R/V$AP4.02	Nrf2-mouse	0.92	133	149	-	0.925	1	attagcAGCTgtttgcc
V$AP4R/V$AP4.02	Ap1-mouse	0.92	183	199	-	0.944	1	ctttacAGCTgtttccc
V$AP4R/V$AP4.02	Nrf2-mouse	0.92	134	150	+	0.943	1	gcaaacAGCTgctaatc
V$AP4R/V$AP4.02	Ap1-mouse	0.92	469	485	+	0.975	1	gctgacAGCTgctggcg
BTB/POZ-bZIP transcription factor BACH1, forms heterodimers with the small Maf protein family								
V$AP1R/V$BACH1.01	Ap1-human	0.82	40	64	-	0.856	1	cagcactgaTGAGtgatcagctctc
Bach2 bound TRE								
V$AP1R/V$BACH2.01	Nrf2-human	0.89	316	340	+	0.918	0.868	cgagcttctTGCGtcagccccggcg
Paraxis (TCF15), member of the Twist subfamily of Class B bHLH factors, forms heterodimers with E12								
V$AP4R/V$PARAXIS.01	Ap1-mouse	0.86	55	71	+	0.904	0.882	ccgACCAcatgagtagg
V$AP4R/V$PARAXIS.01	Nrf2-mouse	0.86	770	786	-	0.891	0.882	ggcAGCAcctgctggga
V$AP4R/V$PARAXIS.01	Ap1-mouse	0.86	18	34	-	0.888	0.882	gtgAGCAcatgctgaac
Cell cycle-dependent element, CDF-1 binding site (CDE/CHR tandem elements regulate cell cycle dependent repression)								
V$CDEF/V$CDE.01	Ap1-human	0.87	185	197	-	0.898	1	tgatCGCGgttag
V$CDEF/V$CDE.01	Nrf2-human	0.87	364	376	-	0.92	1	gccgCGCGggctg
V$CDEF/V$CDE.01	Nrf2-human	0.87	540	552	-	0.875	1	gcggCGCGgacag
Cell cycle gene homology region (CDE/CHR tandem elements regulate cell cycle dependent repression)								
V$CHRF/V$CHR.01	Ap1-human	0.92	199	211	-	0.943	1	ccgtTTGAaaacc
V$CHRF/V$CHR.01	Nrf2-human	0.92	131	143	-	0.929	1	cgctTTGAaacag
CP2								
V$CP2F/V$CP2.01	Nrf2-mouse	0.9	800	818	+	0.9	1	ccCTGGgctgtgccaagaa
V$CP2F/V$CP2.01	Ap1-mouse	0.9	518	536	-	0.912	1	cgCTGGctccggctcccgg
V$CP2F/V$CP2.01	Ap1-mouse	0.9	427	445	+	0.949	0.909	gaCTTGgtggggcggtgtc
E2F, involved in cell cycle regulation, interacts with Rb p107 protein								
V$E2FF/V$E2F.03	Ap1-human	0.85	368	384	-	0.874	1	gcgtgGCGCgcccacgg
V$E2FF/V$E2F.03	Ap1-human	0.85	369	385	+	0.928	1	cgtggGCGCgccacgcc
V$E2FF/V$E2F.03	Nrf2-human	0.85	538	554	-	0.898	1	gcgcgGCGCggacaggg
GLI-Krueppel-related transcription factor, regulator of adenovirus E4 promoter								
V$E4FF/V$E4F.01	Ap1-mouse	0.82	384	396	+	0.887	0.789	atgAAGTcacgtg
V$E4FF/V$E4F.01	Nrf2-mouse	0.82	220	232	-	0.831	0.789	ctgAAGTcgcacg
MYC-MAX binding sites								
V$EBOX/V$MYCMAX.03	Ap1-human	0.91	411	423	-	0.925	1	gggcctCGCGccc
V$EBOX/V$MYCMAX.03	Nrf2-human	0.91	366	378	-	0.925	1	cggccgCGCGggc

Family/Matrix	Sequence Name	Optimized Threshold	Start Position	End Position	Strand	Matrix Similarity	Core Similarity	Sequence (Core Sequence in Upper Case)
EGR1, early growth response 1 - in human								
V$EGRF/V$EGR1.02	Ap1-human	0.86	302	318	-	0.894	1	ggctggtgGGGCggtcg
V$EGRF/V$EGR1.02	Ap1-human	0.86	420	436	-	0.879	1	gggcgatgGGGCggggc
V$EGRF/V$EGR1.02	Ap1-human	0.86	506	522	+	0.866	0.789	ggtggcggCGGCgaagg
V$EGRF/V$EGR1.02	Ap1-human	0.86	568	584	+	0.862	0.789	tctggtggCGGCggggc
V$EGRF/V$EGR1.02	Nrf2-human	0.86	299	315	-	0.904	1	cggtccggGGGCgggaa
V$EGRF/V$EGR1.02	Nrf2-human	0.86	412	428	+	0.875	1	cccttgtgGGGCgggag
V$EGRF/V$EGR1.02	Nrf2-human	0.86	502	518	-	0.906	0.789	ggcggcggTGGCggctg
V$EGRF/V$EGR1.02	Nrf2-human	0.86	508	524	-	0.914	0.789	ggcggcggCGGCggtgg
V$EGRF/V$EGR1.02	Nrf2-human	0.86	511	527	-	0.911	0.789	ggcggcggCGGCggcgg
V$EGRF/V$EGR1.02	Nrf2-human	0.86	514	530	-	0.872	0.789	ggtggcggCGGCggcgg
V$EGRF/V$EGR1.02	Nrf2-human	0.86	694	710	+	0.915	1	cgggacggGGGCggggg
EGR1, early growth response 1 - in mouse								
V$EGRF/V$EGR1.02	Ap1-mouse	0.86	428	444	+	0.863	1	acttggtgGGGCggtgt
V$EGRF/V$EGR1.02	Nrf2-mouse	0.86	663	679	-	0.865	0.789	aggtgaggCGGCggcaa
V$EGRF/V$EGR1.02	Nrf2-mouse	0.86	572	588	+	0.905	1	cccccaggGGGCggggg
V$EGRF/V$EGR1.02	Nrf2-mouse	0.86	566	582	-	0.903	1	ccccctggGGGCggaac
V$EGRF/V$EGR1.02	Ap1-mouse	0.86	405	421	-	0.874	1	cgacgacgGGGCggggc
V$EGRF/V$EGR1.02	Nrf2-mouse	0.86	209	225	-	0.902	1	cgcacgggGGGCggagc
V$EGRF/V$EGR1.02	Ap1-mouse	0.86	538	554	+	0.978	1	cgcggcggGGGCgggcg
V$EGRF/V$EGR1.02	Nrf2-mouse	0.86	583	599	+	0.896	1	cgggggcgGGGCggact
V$EGRF/V$EGR1.02	Nrf2-mouse	0.86	179	195	+	0.893	1	gactggggGGGCcgaag
V$EGRF/V$EGR1.02	Ap1-mouse	0.86	584	600	+	0.891	1	ggcggggcGGGCggagt
V$EGRF/V$EGR1.02	Nrf2-mouse	0.86	460	476	-	0.875	1	ggggtaagGGGCggggc
Wilms Tumor Suppressor								
V$EGRF/V$WT1.01	Nrf2-mouse	0.92	372	388	-	0.945	0.837	aggggAGGGggggacaa
V$EGRF/V$WT1.01	Ap1-mouse	0.92	544	560	+	0.928	0.953	gggggCGGGcgcggggc
V$EGRF/V$WT1.01	Nrf2-mouse	0.92	578	594	+	0.98	0.953	gggggCGGGggcggggc
Kidney-enriched kruppel-like factor, KLF15								
V$EKLF/V$KKLF.01	Nrf2-mouse	0.91	372	388	-	0.949	1	aggggaGGGGgggacaa
V$EKLF/V$KKLF.01	Ap1-mouse	0.91	429	445	+	0.931	1	cttggtGGGGcggtgtc
V$EKLF/V$KKLF.01	Nrf2-mouse	0.91	579	595	+	0.94	1	ggggcgGGGGcggggcg
V$EKLF/V$KKLF.01	Nrf2-mouse	0.91	584	600	+	0.948	1	gggggcGGGGcggacta
V$EKLF/V$KKLF.01	Ap1-mouse	0.91	581	597	+	0.921	1	gtcggcGGGGcgggcgg
Elk-1 - in human								
V$ETSF/V$ELK1.02	Nrf2-human	0.91	84	104	-	0.958	1	ggagccccGGAAaggcgttgg
V$ETSF/V$ELK1.02	Nrf2-human	0.91	557	577	+	0.951	1	cggcagccGGAAcagggccgc
Elk-1 - in mouse								
V$ETSF/V$ELK1.02	Nrf2-mouse	0.91	305	325	+	0.987	1	ctccggccGGAAgcactcagg
V$ETSF/V$ELK1.02	Ap1-mouse	0.91	444	464	+	0.977	1	tctgccccGGAAgtgcctgtc

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MEL1 (MDS1/EVI1-like gene 1) DNA-binding domain 2								
V$EVI1/V$MEL1.02	Ap1-human	0.99	48	64	-	1	1	cagcactGATGagtgat
V$EVI1/V$MEL1.02	Nrf2-human	0.99	604	620	-	0.995	1	ccatcatGATGagctgt
Fork head related activator-4 (FOXD1)								
V$FKHD/V$FREAC4.01	Ap1-mouse	0.78	179	195	+	0.811	1	ccaagggaAACAgctgt
V$FKHD/V$FREAC4.01	Nrf2-mouse	0.78	129	145	+	0.784	1	cttcggcaAACAgctgc
GATA-binding factor 1								
V$GATA/V$GATA1.03	Ap1-human	0.95	88	100	-	0.972	1	aacaGATAggtcc
V$GATA/V$GATA1.03	Nrf2-human	0.95	172	184	-	0.963	1	gcgaGATAaagag
Zinc finger transcription factor, Zic family member 2 (odd-paired homolog, Drosophila)								
V$GLIF/V$ZIC2.01	Ap1-mouse	0.89	431	445	-	0.938	1	gacaccgCCCCacca
V$GLIF/V$ZIC2.01	Nrf2-mouse	0.89	156	170	-	0.914	1	gacagcaCCCCcttg
Glucocorticoid receptor, C2C2 zinc finger protein binds glucocorticoid dependent to GREs, IR3 sites								
V$GREF/V$GRE.01	Nrf2-mouse	0.85	66	84	+	0.886	0.833	ggggctcccggtGTGCttg
V$GREF/V$GRE.01	Ap1-mouse	0.85	15	33	+	0.898	0.833	taggttcagcatGTGCtca
Heterodimers of the bHLH transcription factors HAND2 (Thing2) and E12								
V$HAND/V$HAND2_E12.01	Ap1-human	0.75	234	248	+	0.779	1	tgggccGCCAgctgg
V$HAND/V$HAND2_E12.01	Ap1-human	0.75	241	255	-	0.806	0.759	gcagggCCCAgctgg
V$HAND/V$HAND2_E12.01	Ap1-human	0.75	540	554	-	0.773	1	cgcagcGCCAtcttg
V$HAND/V$HAND2_E12.01	Nrf2-human	0.75	284	298	-	0.755	1	gggactGCCAgctgg
Hey-like bHLH-transcriptional repressor								
V$HESF/V$HELT.01	Nrf2-mouse	0.91	54	68	+	0.949	1	agcgCACGggccggg
V$HESF/V$HELT.01	Ap1-mouse	0.91	363	377	-	0.949	1	cgggCACGagcggcg
V$HESF/V$HELT.01	Nrf2-mouse	0.91	213	227	-	0.917	1	gtcgCACGgggggcg
Hypoxia inducible factor, bHLH / PAS protein family								
V$HIFF/V$HIF1.02	Nrf2-mouse	0.93	213	225	+	0.934	1	cgcccccCGTGcg
V$HIFF/V$HIF1.02	Ap1-mouse	0.93	389	401	-	0.964	1	gcgcccaCGTGac
Liver enriched Cut - Homeodomain transcription factor HNF6 (ONECUT)								
V$HNF6/V$HNF6.01	Nrf2-mouse	0.82	733	749	-	0.873	0.833	actccaagTCCAtcatg
V$HNF6/V$HNF6.01	Ap1-mouse	0.82	119	135	-	0.935	1	tacttaagTCAAtctag
Zinc finger protein insulinoma-associated 1 (IA-1) functions as a transcriptional repressor								
V$INSM/V$INSM1.01	Ap1-mouse	0.9	372	384	+	0.952	1	tgcccGGGGgcca
V$INSM/V$INSM1.01	Ap1-mouse	0.9	491	503	-	0.915	1	tgctcGGGGccgc
V$INSM/V$INSM1.01	Nrf2-mouse	0.9	248	260	-	0.934	1	tgtccGGGGcatg
MYC-associated zinc finger protein related transcription factor - in human								
V$MAZF/V$MAZR.01	Ap1-human	0.88	418	430	-	0.929	1	tggggcGGGGcct
V$MAZF/V$MAZR.01	Ap1-human	0.88	446	458	+	0.895	1	cgaggtGGGGcct
V$MAZF/V$MAZR.01	Ap1-human	0.88	574	586	+	0.889	1	ggcggcGGGGccg
V$MAZF/V$MAZR.01	Nrf2-human	0.88	340	352	+	0.889	1	gcgggtGGGGgat
V$MAZF/V$MAZR.01	Nrf2-human	0.88	404	416	-	0.905	1	aagggcGGGGcaa
V$MAZF/V$MAZR.01	Nrf2-human	0.88	700	712	+	0.893	1	gggggcGGGGgag

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MYC-associated zinc finger protein related transcription factor - in mouse								
V$MAZF/V$MAZR.01	Nrf2-mouse	0.88	180	192	+	0.93	1	actgggGGGGccg
V$MAZF/V$MAZR.01	Nrf2-mouse	0.88	458	470	-	0.929	1	aggggcGGGGcaa
V$MAZF/V$MAZR.01	Ap1-mouse	0.88	403	415	-	0.913	1	cggggcGGGGctg
V$MAZF/V$MAZR.01	Nrf2-mouse	0.88	329	341	-	0.896	1	gagggcGGGGcat
V$MAZF/V$MAZR.01	Nrf2-mouse	0.88	373	385	-	0.95	1	ggagggGGGGaca
V$MAZF/V$MAZR.01	Nrf2-mouse	0.88	584	596	+	0.917	1	gggggcGGGGcgg
V$MAZF/V$MAZR.01	Nrf2-mouse	0.88	578	590	+	0.904	1	gggggcGGGGgcg
V$MAZF/V$MAZR.01	Nrf2-mouse	0.88	388	400	-	0.904	1	tagggcGGGGcaa
Ribonucleoprotein associated zinc finger protein MOK-2 (human)								
V$MOKF/V$MOK2.02	Ap1-mouse	0.98	62	82	+	0.983	1	catgagtagggcaCCTTggag
V$MOKF/V$MOK2.02	Nrf2-mouse	0.98	549	569	+	0.981	1	cccgtccctaggtCCTTgttc
V$MOKF/V$MOK2.02	Ap1-mouse	0.98	133	153	-	0.984	1	gacactgacagtaCCTTttac
V$MOKF/V$MOK2.02	Ap1-mouse	0.98	193	213	-	1	1	ggatcctagagggCCTTtaca
V$MOKF/V$MOK2.02	Nrf2-mouse	0.98	412	432	+	0.981	1	ggggccctcgggtCCTTgccc
V$MOKF/V$MOK2.02	Nrf2-mouse	0.98	7	27	-	0.983	1	tggacctgcagaaCCTTgccc
c-Myb, important in hematopoesis, cellular equivalent to avian myoblastosis virus oncogene v-myb								
V$MYBL/V$CMYB.02	Ap1-human	0.96	184	196	+	0.971	1	acTAACcgcgatc
V$MYBL/V$CMYB.02	Nrf2-human	0.96	117	129	+	0.961	0.99	tcCAACtgtttaa
v-Myb								
V$MYBL/V$VMYB.02	Ap1-human	0.9	215	227	+	0.978	1	accAACGgcgctt
V$MYBL/V$VMYB.02	Nrf2-human	0.9	243	255	+	0.991	1	gctAACGgagacc
Myf5 myogenic bHLH protein - in human								
V$MYOD/V$MYF5.01	Ap1-human	0.9	488	504	+	0.932	1	gctgaCAGCtgctgata
V$MYOD/V$MYF5.01	Ap1-human	0.9	490	506	-	0.905	1	cttatCAGCagctgtca
V$MYOD/V$MYF5.01	Ap1-human	0.9	518	534	+	0.91	1	gaaggCAGCggcaggtc
V$MYOD/V$MYF5.01	Nrf2-human	0.9	650	666	-	0.953	0.836	ggcagCACCtgctggga
Myf5 myogenic bHLH protein - in mouse								
V$MYOD/V$MYF5.01	Ap1-mouse	0.9	471	487	-	0.936	1	cgcgcCAGCagctgtca
V$MYOD/V$MYF5.01	Ap1-mouse	0.9	469	485	+	0.932	1	gctgaCAGCtgctggcg
V$MYOD/V$MYF5.01	Nrf2-mouse	0.9	770	786	-	0.953	0.836	ggcagCACCtgctggga
Complex of Lmo2 bound to Tal-1, E2A proteins, and GATA-1, half-site 1								
V$MYOD/V$TAL1_E2A.01	Nrf2-mouse	0.98	771	787	+	0.99	1	cccagCAGGtgctgccc
V$MYOD/V$TAL1_E2A.01	Ap1-mouse	0.98	237	253	-	0.98	1	gaacaCAGGtgcttttc
Neurogenin 1 and 3 (ngn1/3) binding sites								
V$NEUR/V$NEUROG.01	Ap1-human	0.92	239	251	-	0.94	0.875	ggcCCAGctggcg
V$NEUR/V$NEUROG.01	Nrf2-human	0.92	281	293	+	0.935	0.875	accCCAGctggca
NF-kappaB (p50)								
V$NFKB/V$NFKAPPAB50.01	Ap1-human	0.83	397	409	+	0.832	1	cggGGGAgtcacg
V$NFKB/V$NFKAPPAB50.01	Nrf2-human	0.83	580	592	+	0.944	1	tcgGGGAgcccca
V$NFKB/V$NFKAPPAB50.01	Nrf2-human	0.83	581	593	-	0.877	0.75	ttgGGGCtccccg
V$NFKB/V$NFKAPPAB50.01	Nrf2-human	0.83	637	649	+	0.846	1	gccGGGActcccg
V$NFKB/V$NFKAPPAB50.01	Nrf2-human	0.83	639	651	-	0.855	1	gacGGGAgtcccg

Family/Matrix	Sequence Name	Optimized Threshold	Start Position	End Position	Strand	Matrix Similarity	Core Similarity	Sequence (Core Sequence in Upper Case)
Nuclear respiratory factor 1 (NRF1), bZIP transcription factor that acts on nuclear genes encoding mitochondrial proteins- in human								
V$NRF1/V$NRF1.01	Ap1-human	0.78	291	307	-	0.788	0.75	cggTCGCgggcgcctct
V$NRF1/V$NRF1.01	Ap1-human	0.78	292	308	+	0.783	1	gagGCGCccgcgaccgc
V$NRF1/V$NRF1.01	Nrf2-human	0.78	183	199	-	0.781	1	gcaGCGCtctcgcccgc
V$NRF1/V$NRF1.01	Nrf2-human	0.78	328	344	-	0.826	1	cccGCGCcggggctgac
Nuclear respiratory factor 1 (NRF1), bZIP transcription factor that acts on nuclear genes encoding mitochondrial proteins-in mouse								
V$NRF1/V$NRF1.01	Ap1-mouse	0.78	542	558	-	0.835	1	cccGCGCccgccccccgc
V$NRF1/V$NRF1.01	Nrf2-mouse	0.78	51	67	-	0.794	0.75	ccgGCCCgtgcgctgct
V$NRF1/V$NRF1.01	Ap1-mouse	0.78	543	559	+	0.788	0.75	cggGGGCgggcgcgggg
V$NRF1/V$NRF1.01	Nrf2-mouse	0.78	52	68	+	0.823	1	gcaGCGCacgggccggg
V$NRF1/V$NRF1.01	Ap1-mouse	0.78	397	413	+	0.784	1	ggcGCGCagccccgccc
Tumor suppressor p53 (3' half site)								
V$P53F/V$P53.03	Ap1-human	0.92	514	536	+	0.921	0.828	cggcgaaggcagcggCAGGtcgg
V$P53F/V$P53.05	Nrf2-human	0.78	399	421	-	0.799	1	cccaCAAGggcggggcaagagtc
B-cell-specific activator protein - in human								
V$PAX5/V$PAX5.01	Ap1-human	0.79	41	69	-	0.796	0.905	tctcgcAGCActgatgagtgatcagctct
V$PAX5/V$PAX5.01	Nrf2-human	0.79	55	83	+	0.798	0.81	ctccaaATCAgggaggcgcagctcctaca
B-cell-specific activator protein - in mouse								
V$PAX5/V$PAX5.02	Ap1-human	0.73	413	441	-	0.731	0.842	ggaccgggcgatggGGCGgggcctcgcgc
V$PAX5/V$PAX5.02	Nrf2-human	0.73	419	447	+	0.734	1	ggggcgggaggcggAGCGgggcaggggcc
Zebrafish PAX9 binding sites								
V$PAX9/V$PAX9.01	Ap1-human	0.78	43	63	-	0.833	0.824	agCACTgatgagtgatcagct
V$PAX9/V$PAX9.01	Nrf2-human	0.78	232	252	+	0.825	1	ggCACCggggagctaacggag
Binding site for a Pbx1/Meis1 heterodimer								
V$PBXC/V$PBX1_MEIS1.02	Ap1-human	0.77	457	473	+	0.772	0.75	ctggTGTTtgacccgga
V$PBXC/V$PBX1_MEIS1.02	Nrf2-human	0.77	611	627	+	0.779	1	atcaTGATggacttgga
Pleomorphic adenoma gene (PLAG) 1, a developmentally regulated C2H2 zinc finger protein								
V$PLAG/V$PLAG1.01	Nrf2-mouse	0.88	268	288	+	0.893	1	GAGGatcaacagtgggggtc
V$PLAG/V$PLAG1.01	Nrf2-mouse	0.88	655	675	-	0.886	1	GAGGcggcggcaatggctagt
V$PLAG/V$PLAG1.01	Nrf2-mouse	0.88	461	481	-	0.932	1	GAGGcggggtaaggggcgggg
V$PLAG/V$PLAG1.01	Nrf2-mouse	0.88	374	394	-	0.939	0.958	GGGGcaaggggaggggggggac
V$PLAG/V$PLAG1.01	Ap1-mouse	0.88	566	586	+	0.889	0.958	GGGGcaggcaggtgggtcggc
V$PLAG/V$PLAG1.01	Nrf2-mouse	0.88	782	802	-	0.881	0.958	GGGGcccgaaggttggggcag
V$PLAG/V$PLAG1.01	Ap1-mouse	0.88	406	426	-	0.912	0.958	GGGGccgacgacggggcgggg
V$PLAG/V$PLAG1.01	Nrf2-mouse	0.88	360	380	-	0.926	0.958	GGGGgacaagacgggggccag
V$PLAG/V$PLAG1.01	Nrf2-mouse	0.88	578	598	+	0.892	0.958	GGGGgcgggggcggggcggac
Alpha (1)-fetoprotein transcription factor (FTF), liver receptor homologue-1 (LRH-1)								
V$SF1F/V$FTF.01	Ap1-mouse	0.94	71	83	-	0.974	1	cctcCAAGgtgcc
V$SF1F/V$FTF.01	Nrf2-mouse	0.94	6	18	+	0.945	1	cgggCAAGgttct

Family/Matrix	Sequence Name	Optimized Threshold	Start Position	End Position	Strand	Matrix Similarity	Core Similarity	Sequence (Core Sequence in Upper Case)
GC box elements								
V$SP1F/V$GC.01	Ap1-human	0.88	418	432	-	0.981	1	gatggGGCGgggcct
V$SP1F/V$GC.01	Ap1-human	0.88	572	586	+	0.9	1	gtggcGGCGgggccg
V$SP1F/V$GC.01	Nrf2-human	0.88	423	437	+	0.89	1	cgggaGGCGgagcgg
Stimulating protein 1, ubiquitous zinc finger transcription factor								
V$SP1F/V$SP1.01	Nrf2-mouse	0.88	427	441	-	0.904	1	acagGGGCagggcaa
V$SP1F/V$SP1.01	Nrf2-mouse	0.88	470	484	-	0.884	0.772	atggAGGCggggtaa
V$SP1F/V$SP1.01	Nrf2-mouse	0.88	576	590	+	0.997	1	caggGGGCgggggcg
V$SP1F/V$SP1.01	Nrf2-mouse	0.88	564	578	-	0.912	1	ctggGGGCggaacaa
V$SP1F/V$SP1.01	Ap1-mouse	0.88	403	417	-	1	1	gacgGGGCggggctg
V$SP1F/V$SP1.01	Ap1-mouse	0.88	542	556	+	0.977	1	gcggGGGCgggcgcg
V$SP1F/V$SP1.01	Nrf2-mouse	0.88	582	596	+	1	1	gcggGGGCggggcgg
V$SP1F/V$SP1.01	Ap1-mouse	0.88	563	577	+	0.891	1	ggcgGGGCaggcagg
V$SP1F/V$SP1.01	Nrf2-mouse	0.88	587	601	+	0.913	1	ggcgGGGCggactaa
V$SP1F/V$SP1.01	Ap1-mouse	0.88	584	598	+	0.977	1	ggcgGGGCgggcgga
V$SP1F/V$SP1.01	Nrf2-mouse	0.88	458	472	-	0.989	1	taagGGGCggggcaa
V$SP1F/V$SP1.02	Nrf2-mouse	0.85	58	72	+	0.852	0.75	cacgGGCCggggctc
V$SP1F/V$SP1.02	Nrf2-mouse	0.85	207	221	-	0.959	1	cgggGGGCggagcgc
V$SP1F/V$SP1.02	Ap1-mouse	0.85	432	446	+	0.916	1	ggtgGGGCggtgtct
Serum response factor								
V$SRFF/V$SRF.02	Nrf2-mouse	0.84	21	39	+	0.857	0.889	aggtcCAAAtcagggagtg
V$SRFF/V$SRF.02	Ap1-mouse	0.84	103	121	-	0.851	1	tagagCATAcatggaccca
ZNF143 (the human ortholog of Xenopus Staf, and a DNA binding protein related to ZNF143 and Staf)								
V$STAF/V$ZNF76_143.01	Ap1-human	0.76	305	327	+	0.793	1	ccgcCCCAccagcccgagagcta
V$STAF/V$ZNF76_143.01	Nrf2-human	0.76	366	388	-	0.825	0.81	cttcCCCCgccggccgcgcgggc
V$STAF/V$ZNF76_143.01	Nrf2-human	0.76	667	689	+	0.796	0.81	tcggCCCTctgggccctgcggtg
Signal transducers and activators of transcription								
V$STAT/V$STAT.01	Ap1-human	0.87	174	192	-	0.908	1	gcggttagtGGAAagagta
V$STAT/V$STAT.01	Nrf2-human	0.87	348	366	+	0.887	1	gggattttcGGAAgctcag
Core promoter-binding protein (CPBP) with 3 Krueppel-type zinc fingers - in human								
V$ZBPF/V$ZF9.01	Ap1-human	0.87	298	320	+	0.882	1	cccgcgaCCGCcccaccagcccg
V$ZBPF/V$ZF9.01	Ap1-human	0.87	414	436	+	0.879	0.821	cgcgaggCCCCgccccatcgccc
V$ZBPF/V$ZF9.01	Ap1-human	0.87	416	438	+	0.942	1	cgaggccCCGCcccatcgcccgg
V$ZBPF/V$ZF9.01	Nrf2-human	0.87	542	564	+	0.884	1	gtccgcgCCGCgcctcggcagcc
Core promoter-binding protein (CPBP) with 3 Krueppel-type zinc fingers - in mouse								
V$ZBPF/V$ZF9.01	Ap1-mouse	0.87	578	600	-	0.885	1	actccgcCCGCcccgccgaccca
V$ZBPF/V$ZF9.01	Ap1-mouse	0.87	536	558	-	0.957	1	cccgcgcCCGCccccgccgcgcc
V$ZBPF/V$ZF9.01	Ap1-mouse	0.87	542	564	-	0.937	1	ccgggccCCGCgcccgcccccgc
V$ZBPF/V$ZF9.01	Ap1-mouse	0.87	401	423	+	0.915	1	cgcagccCCGCcccgtcgtcggc
V$ZBPF/V$ZF9.01	Ap1-mouse	0.87	479	501	-	0.87	1	ctcggggCCGCcgccgcgccagc
V$ZBPF/V$ZF9.01	Ap1-mouse	0.87	426	448	-	0.903	1	gcagacaCCGCcccaccaagtcg
V$ZBPF/V$ZF9.01	Ap1-mouse	0.87	473	495	-	0.879	1	gccgccgCCGCgccagcagctgt
V$ZBPF/V$ZF9.01	Nrf2-mouse	0.87	456	478	+	0.917	1	tcttgccCCGCcccttaccccgc

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Kruppel-like zinc finger protein 219 - in human								
V$ZBPF/V$ZNF219.01	Ap1-human	0.91	387	409	-	0.988	1	cgtgactCCCCcggccctcgggg
V$ZBPF/V$ZNF219.01	Nrf2-human	0.91	298	320	+	0.95	1	cttcccgCCCCcggaccgcgagc
V$ZBPF/V$ZNF219.01	Nrf2-human	0.91	689	711	-	0.987	1	tcccccgCCCCcgtcccggcacc
Kruppel-like zinc finger protein 219 - in mouse								
V$ZBPF/V$ZNF219.01	Nrf2-mouse	0.91	573	595	-	0.996	1	cgccccgCCCCcgccccctgggg
V$ZBPF/V$ZNF219.01	Nrf2-mouse	0.91	208	230	+	0.918	1	cgctccgCCCCccgtgcgacttc
V$ZBPF/V$ZNF219.01	Nrf2-mouse	0.91	371	393	+	0.993	1	cttgtccCCCCctccccttgccc
V$ZBPF/V$ZNF219.01	Ap1-mouse	0.91	533	555	-	0.973	1	gcgcccgCCCCcgccgcgccgct
V$ZBPF/V$ZNF219.01	Nrf2-mouse	0.91	172	194	-	0.943	1	ttcggccCCCCcagtcctctgta
Human zinc finger protein ZNF35								
V$ZF35/V$ZNF35.01	Ap1-mouse	0.96	497	509	+	0.967	1	ccgagcAAGAtgg
V$ZF35/V$ZNF35.01	Nrf2-mouse	0.96	453	465	-	0.964	1	cggggcAAGAgct