Known and Novel Transcription Factor Biological Roles			Experimental Support in Literature	PRISM Predicted Target Genes and Binding Sites				ChIP-seq Target Genes and Binding Sites		
Transcription Factor	Ontology	Top-ranked PRISM Biological Role	Selected citation	PRISM Target Genes	PRISM Binding Sites	p-value	Fold	ChIP-seq Target Genes	ChIP-seq Binding Sites	ChIP-seq GREAT Significant
REST (NRSF)	GO Biol. Process	neurotransmitter transport	"The [putative REST target] genes encode proteins that contribute to many different aspects of the neuronal phenotype: neurotransmitter receptors, ion channels, neurotransmitter-synthesizing enzymes, neuropeptides, cell adhesion molecules, synaptic vesicle proteins, and cytoskeletal components."(Schoenherr et al. 1996)	27	49	2.01×10^{-15}	3.95	30	55	Y
	GO Cell. Comp.	neuronal cell body		56	85	6.31×10^{-11}	2.17	61	93	-
	GO Mol. Function	cation channel activity		71	98	1.24×10^{-11}	2.10	94	131	Y
	Mouse Pheno.	abnormal synaptic transmission		135	208	1.85×10^{-25}	2.16	172	269	Y
	PANTHER	synaptic vesicle trafficking		11	19	2.83×10^{-7}	4.22	13	20	Y
	Pathway Comm.	transmission across chemical synapses		23	34	2.99×10^{-8}	3.02	22	33	Y
								human Jurkat cells		
GABPA	GO Biol. Process	translation	"The GA-binding protein (GABP) [is] … a strong positive regulator of several ribosomal protein (rp)-encoding genes."(Genuario and Perry 1996)	141	212	1.66×10^{-20}	2.01	185	205	Y
	GO Cell. Comp.	membrane coat	Novel	34	50	3.15×10^{-7}	2.24	30	45	Y
	GO Mol. Function	translation initiation factor activity	Novel	36	58	4.20×10^{-12}	2.88	36	41	Y
	Mouse Pheno.	increased single-positive T cell number	"GABP is critically required for … normal T cell development."(Yu et al. 2010)	67	143	5.23×10^{-17}	2.18	25	30	-
	PANTHER	general transcription by RNA polymerase I	Novel	10	19	3.64×10^{-11}	7.47	10	11	Y
	Pathway Comm.	transcription	Novel	138	202	3.00×10^{-21}	2.08	196	223	Y
								human Jurkat cells		
SRF	GO Biol. Process	muscle structure development	"SRF controls mutually exclusive programs of gene expression (growth vs. muscle differentiation)." (Miano et al. 2007)	157	401	7.43×10^{-41}	2.07	18	25	-
	GO Cell. Comp.	actin cytoskeleton	"Genetic studies point to a crucial role for SRF in … normal actin cytoskeleton biology."(Miano et al. 2007)	142	356	4.84×10^{-58}	2.63	37	42	Y
	GO Mol. Function	structural constituent of muscle	"SRF [has a role] in controlling muscle contractile gene expression."(Miano et al. 2007)	26	66	3.97×10^{-16}	3.29	4	6	-
	Mouse Pheno.	dilated heart ventricles	"Heart-specific deletion of SRF in the embryo results in … dilated cardiac chambers."(Parlakian et al. 2004)	59	155	2.13×10^{-18}	2.19	4	4	-
	PANTHER	cytoskeletal regulation by Rho GTPase	"The Rho family GTPases … activate transcription via SRF."(Hill et al. 1995)	37	90	4.59×10^{-23}	3.48	10	17	-
	Pathway Comm.	regulation of insulin secretion by acetylcholine	Novel	28	98	2.90×10^{-26}	3.63	3	3	-
								human Jurkat cells		
STAT3	GO Biol. Process	negative regulation of signal transduction	"SSI-1,… a target of Stat3, … is responsible for negative feedback regulation of the JAK–STAT pathway."(Naka et al. 1997)	54	150	5.13×10^{-16}	2.08	26	51	-
	GO Mol. Function	transforming growth factor beta binding	Novel	8	26	5.96×10^{-7}	3.15	3	6	-
	Mouse Pheno.	abnormal spleen B cell follicle morphology	"STAT3-deficient mouse B cells… do not differentiate into IgG-secreting [plasma cells]."(Schmidlin et al. 2009)	52	145	1.52×10^{-19}	2.33	18	28	-
	Pathway Comm.	signaling events mediated by TCPTP	"TC-PTP regulates interleukin-6-mediated signaling pathway through STAT3 dephosphorylation."(Yamamoto et al. 2002)	48	119	1.79×10^{-18}	2.50	16	31	-
								mouse ES cells		