

Table S1 Myod and Myog target genes belong to a variety of functional classes

Symbol	Name	Myod	Myog
Adhesion			
1200003C23Rik	RIKEN cDNA 1200003C23	x	
Itgb1	integrin beta 1 (fibronectin receptor beta)	x	
Itgb1l	integrin, beta-like 1	x	x
Lgals1	lectin, galactose binding, soluble 1		x
Cd34 3' end	CD34 antigen	x	
Apoptosis			
Acin1	apoptotic chromatin condensation inducer 1	x	
Birc5	baculoviral IAP repeat-containing 5	x	
Cd5l	CD5 antigen-like	x	x
Gadd45g	growth arrest and DNA-damage-inducible 45 gamma		x
Lsp1	lymphocyte specific 1	x	
Pycard	PYD and CARD domain containing	x	
Cell cycle			
Akt2	thymoma viral proto-oncogene 2	x	x
Calm1	calmodulin 1		x
Cdc34	cell division cycle 34 homolog	x	
Crkl	v-crk sarcoma virus CT10 oncogene homolog (avian)-like	x	
Fgf7	fibroblast growth factor 7	x	x
Frk	fyn-related kinase	x	x
Fyn	protein-tyrosine kinase fyn		x
Gadd45g	growth arrest and DNA-damage-inducible 45 gamma		x
Gspt1	G1 to phase transition 1		x
Itgb1	integrin beta 1 (fibronectin receptor beta)	x	
Mcm2	minichromosome maintenance deficient 2 mitotin		x
Mdm2	transformed mouse 3T3 cell double minute 2	x	
Jund1 3' end	jun D proto-oncogene	x	
Pycard	PYD and CARD domain containing	x	
DNA repair			
Mus81	MUS81 endonuclease		x
Parp1 3' end	ADP-ribosyltransferase (NAD+, poly (ADP-ribose) polymerase) 1	x	x
Poli	polymerase (DNA directed), iota		x
Rad50	RAD50 homolog	x	
Xrcc1	X-ray repair complementing defective repair in Chinese hamster cells 1	x	x
Metabolism			
2610020H15Rik	RIKEN cDNA 2610020H15	x	
Atp1a2	ATPase, Na ⁺ /K ⁺ transporting, alpha 2 polypeptide	x	
Atpi	ATPase inhibitor	x	x
Cav3	caveolin 3	x	x
Ckm	creatine kinase, muscle	x	x

Crat	carnitine acetyltransferase		X
Cth	cystathionase	X	
Fbl	fibrillarin	X	
Fpgs	folylpolyglutamyl synthetase	X	X
Gaa	glucosidase, alpha, acid		X
Gns	glucosamine (N-acetyl)-6-sulfatase	X	
Gstm1	glutathione S-transferase, mu 1	X	
Hibadh	3-hydroxyisobutyrate dehydrogenase, mitochondrial precursor	X	
Hsd11b1	hydroxysteroid 11-beta dehydrogenase 1	X	
Itgb1	integrin beta 1 (fibronectin receptor beta)	X	
Lypla3	lysophospholipase 3	X	X
Mus81	MUS81 endonuclease		X
Parp1 3' end	ADP-ribosyltransferase (NAD+, poly (ADP-ribose) polymerase) 1	X	X
Khk 3' end	ketoheksokinase	X	X
Pgam2	phosphoglycerate mutase 2	X	X
Pgls	6-phosphogluconolactonase	X	
Ptgds	prostaglandin D2 synthase (brain)	X	X
Rdh9	retinol dehydrogenase 9	X	
Taldo1	transaldolase 1		X
Upp2	liver-specific uridine phosphorylase		X

Micro RNAs

mmu-mir-100 (-575 to +575)	<i>Mus musculus</i> miR-100	X	X
mmu-mir-138-2 (-2575 to -1425)	<i>Mus musculus</i> miR-138-2	X	X
mmu-mir-191 (-1575 to -425)	<i>Mus musculus</i> miR-191	X	X
mmu-mir-22 (-1575 to -425)	<i>Mus musculus</i> miR-22	X	X
mmu-mir-22 (-575 to +575)	<i>Mus musculus</i> miR-22	X	

Mitochondrion

1810044O22Rik	cytochrome b5 outer mitochondrial membrane precursor	X	X
Acat1	acetyl-Coenzyme A acetyltransferase 1 precursor	X	
Atpi	ATPase inhibitor	X	X
Chchd2	coiled-coil-helix-coiled-coil-helix domain containing 2	X	
Cox6a2	cytochrome c oxidase, subunit VI a, polypeptide 2	X	
Cox8b	cytochrome c oxidase, subunit VIIIb		X
Crat	carnitine acetyltransferase		X
D930010J01Rik	RIKEN cDNA D930010J01	X	
Dhodh	dihydroorotate dehydrogenase		X
Fpgs	folylpolyglutamyl synthetase	X	X
Gatm	glycine amidinotransferase (L-arginine:glycine amidinotransferase)	X	
Hibadh	3-hydroxyisobutyrate dehydrogenase, mitochondrial precursor	X	
Hspcb	heat shock protein 1, beta		X
Mrpl34	mitochondrial ribosomal protein L34	X	X
Cox6a2 3' end	cytochrome c oxidase, subunit VI a, polypeptide 2	X	
Ppox	protoporphyrinogen oxidase		X

Prdx3	peroxiredoxin 3		X
Trmt1	tRNA (5-methylaminomethyl-2-thiouridylate)-methyltransferase 1	X	X
Muscle			
Acta1	actin, alpha 1, skeletal muscle	X	X
Lsp1	lymphocyte specific 1	X	
Mef2c	myocyte enhancer factor 2C	X	X
Myod1	myogenic differentiation 1	X	
Myog	myogenin	X	X
Sox6	SRY-box containing gene 6	X	
Tnnc2	fast skeletal muscle troponin C	X	
Tnni2	troponin I, skeletal, fast 2	X	X
Tnnt2	troponin T2, cardiac	X	X
Tnnt3	troponin T3, skeletal, fast	X	X
Tpm2	tropomyosin 2, beta	X	X
Signaling/Receptors/Kinases			
1500012D09Rik	RAB2B protein	X	
1700112N14Rik	serine/threonine kinase 36		X
5830461H18Rik	RIKEN cDNA 5830461H18	X	X
Acbd3	acyl-Coenzyme A binding domain containing 3	X	
Adk	adenosine kinase		X
Adrb2	adrenergic receptor, beta 2	X	X
Agpt	angiopoietin 1	X	X
Agtrap	angiotensin II receptor-associated protein		X
Akt2	thymoma viral proto-oncogene 2	X	X
Asb10	ankyrin repeat and SOCS box-containing protein 10	X	X
Calm1	calmodulin 1		X
Camk1g	calcium/calmodulin-dependent protein kinase I gamma	X	
Ccrk	cell cycle related kinase		X
Cd51	CD5 antigen-like	X	X
Chrna1	cholinergic receptor, nicotinic, alpha polypeptide 1 (muscle)	X	X
Chrb1	cholinergic receptor, nicotinic, beta polypeptide 1 (muscle)	X	X
Chrng	cholinergic receptor, nicotinic, gamma polypeptide	X	X
Ckm	creatine kinase, muscle	X	X
Crkl	v-crk sarcoma virus CT10 oncogene homolog (avian)-like	X	
D8Wsu151e	Vac14 homolog	X	
Eps812	epidermal growth factor receptor pathway substrate 8-like protein 2	X	
Fgf7	fibroblast growth factor 7	X	X
Frk	fyn-related kinase	X	X
Fyn	protein-tyrosine kinase fyn		X
Gadd45g	growth arrest and DNA-damage-inducible 45 gamma		X
Gatm	glycine amidinotransferase (L-arginine:glycine amidinotransferase)	X	
Il4ra	interleukin 4 receptor, alpha		X
Il5	interleukin 5	X	

Il6	interleukin 6	x	
Itgb1	integrin beta 1 (fibronectin receptor beta)	x	
Itgbl1	integrin, beta-like 1	x	x
Lsp1	lymphocyte specific 1	x	
Map4k1	mitogen activated protein kinase kinase kinase kinase 1	x	
M6prbp1	mannose-6-phosphate receptor binding protein 1	x	x
Mmd	monocyte to macrophage differentiation-associated		x
Mta1	metastasis associated 1	x	
Mtnr1a	melatonin receptor 1A	x	x
Musk	muscle, skeletal, receptor tyrosine kinase	x	
Khk 3' end	ketohehexokinase	x	x
Nfkb2	nuclear factor of kappa light polypeptide gene enhancer in B-cells 2, p49/p100	x	
Nme1	nucleoside-diphosphate kinase 1		x
Pex13	peroxisomal biogenesis factor 13	x	
Pnrc2	proline-rich nuclear receptor coactivator 2	x	x
Prkar1a	protein kinase, cAMP dependent regulatory, type I, alpha	x	x
Ptprk	protein tyrosine phosphatase, receptor type, K	x	x
Rhoj	ras homolog gene family, member J	x	
Rhoq	ras homolog gene family, member Q	x	
Slc9a3r1	solute carrier family 9 (sodium/hydrogen exchanger), isoform 3 regulator 1		x
Snx15	sorting nexin 15	x	
Snx17	sorting nexin 17		x
Stat3	signal transducer and activator of transcription 3		x
Tgfbr2	transforming growth factor, beta receptor II		x
Ttk	Ttk protein kinase	x	

Structural/Cytoskeletal

Acta1	actin, alpha 1, skeletal muscle	x	x
Gaa	glucosidase, alpha, acid		x
Hspb7	heat shock protein family, member 7 (cardiovascular)	x	
Indo	indoleamine-pyrrole 2,3 dioxygenase	x	
Lsp1	lymphocyte specific 1	x	
Map4k1	mitogen activated protein kinase kinase kinase kinase 1	x	
Mapt	microtubule-associated protein tau	x	
Mylc2b	myosin regulatory light chain-like	x	x
Myo10	myosin X		x
Rapsn	receptor-associated protein of the synapse	x	
Rhoj	ras homolog gene family, member J	x	
Rhoq	ras homolog gene family, member Q	x	
Tnnc2	fast skeletal muscle troponin C	x	
Tnni2	troponin I, skeletal, fast 2	x	x
Tnnt2	troponin T2, cardiac	x	x
Tnnt3	troponin T3, skeletal, fast	x	x
Tpm2	tropomyosin 2, beta	x	x

Transport

1500012D09Rik	RAB2B protein	x	
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1810044O22Rik	cytochrome b5 outer mitochondrial membrane precursor	x	x
Ap3m1	adaptor-related protein complex 3, mu 1 subunit		x
Arl6ip5	ADP-ribosylation factor-like 6 interacting protein 5	x	x
Atp1a2	ATPase, Na ⁺ /K ⁺ transporting, alpha 2 polypeptide	x	
Bet1	blocked early in transport 1 homolog		x
Chrna1	cholinergic receptor, nicotinic, alpha polypeptide 1 (muscle)	x	x
Chrnbl	cholinergic receptor, nicotinic, beta polypeptide 1 (muscle)	x	x
Chrng	cholinergic receptor, nicotinic, gamma polypeptide	x	x
Clcn3	chloride channel 3 isoform a;chloride channel 3 isoform c		x
Cox6a2	cytochrome c oxidase, subunit VI a, polypeptide 2	x	
Cox8b	cytochrome c oxidase, subunit VIIIb		x
Crat	carnitine acetyltransferase		x
Fabp3	fatty acid binding protein 3, muscle and heart	x	
Gatm	glycine amidinotransferase (L-arginine:glycine amidinotransferase)	x	
Kcnj2	potassium inwardly-rectifying channel J2		x
Mcoln1	mucolipin 1	x	
Cox6a2 3' end	cytochrome c oxidase, subunit VI a, polypeptide 2	x	
Pex13	peroxisomal biogenesis factor 13	x	
Ppox	protoporphyrinogen oxidase		x
Ptgds	prostaglandin D2 synthase (brain)	x	x
Rad50	RAD50 homolog	x	
Scamp2	secretory carrier membrane protein 2		x
Slc13a2	solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 2	x	
Snx15	sorting nexin 15	x	
Stx8	syntaxin 8		x
Tap2	transporter 2, ATP-binding cassette, sub-family B	x	x
Tnni2	troponin I, skeletal, fast 2	x	x
Transcription and chromatin regulators			
Acin1	apoptotic chromatin condensation inducer 1	x	
Ankrd1	ankyrin repeat domain 1 (cardiac muscle)	x	x
Asb10	ankyrin repeat and SOCS box-containing protein 10	x	x
Atf4	activating transcription factor 4	x	x
Crsp8	transcriptional co-activator CRSP8 homolog	x	x
D10Bwg0791e	DNA segment, Chr 10, Brigham & Women's Genetics 0791 expressed		x
Dbp	D site albumin promoter binding protein	x	
Dnajc1	DnaJ (Hsp40) homolog, subfamily C, member 1	x	x
Foxp1	forkhead box P1	x	x
Hdac9	histone deacetylase 9		x
Hes6	hairy and enhancer of split 6	x	x
Idb1	inhibitor of DNA binding 1	x	
Jmjd2c	gene amplified in squamous cell carcinoma 1		x
Lmx1b	LIM homeobox transcription factor 1 beta	x	
Mcm2	minichromosome maintenance deficient 2 mitotin		x
Mef2c	myocyte enhancer factor 2C	x	x

Mllt3	myeloid/lymphoid or mixed lineage-leukemia translocation to 3 homolog	x	
Mta1	metastasis associated 1	x	
Mtf1	metal response element binding transcription factor 1		x
Myod1	myogenic differentiation 1	x	
Myog	myogenin	x	x
Myst1	MYST histone acetyltransferase 1	x	
Parp1 3' end	ADP-ribosyltransferase (NAD+, poly (ADP-ribose) polymerase) 1	x	x
Jund1 3' end	jun D proto-oncogene	x	
Nfkb2	nuclear factor of kappa light polypeptide gene enhancer in B-cells 2, p49/p100	x	
Nfkbil1	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor-like 1		x
Pbxip1	pre-B-cell leukemia transcription factor interacting protein 1	x	x
Rpo1-3	RNA polymerase 1-3	x	
Smyd1	SET and MYND domain containing 1	x	x
Snai2	snail homolog 2	x	x
Sox6	SRY-box containing gene 6	x	
Stat3	signal transducer and activator of transcription 3		x
Taf3	TAF3 RNA polymerase II, TATA box binding protein (TBP)-associated factor		x
Tcf12	transcription factor 12	x	
Tead2	TEA domain family member 2	x	x
Tef	thyrotroph embryonic factor	x	x
Tieg1	TGFB inducible early growth response 1	x	x
Trim27	tripartite motif protein 27	x	
Xbp1	X-box binding protein 1		x
Xrcc1	X-ray repair complementing defective repair in Chinese hamster cells 1	x	x
Zfp198	zinc finger protein 198	x	x
Zfp238	zinc finger protein 238	x	x
Zfp354b	zinc finger protein 354B		x
Zhx1	zinc finger and homeodomain protein 1	x	