

Predicted targets of miR-133

Gene product	Reference	Reference	Direct annotation		
Aif1l	GO:0070062	MGI:MGI:4834177	GO REF:0000096	extracellular vesicular exosome	
Aif1l	GO:0003779	MGI:MGI:1354194	GO REF:0000004	actin binding	
Aif1l	GO:0008150	MGI:MGI:2156816	GO REF:0000015	biological process	
Aif1l	GO:0005856	MGI:MGI:1354194	GO REF:0000004	cytoskeleton	
Aif1l	GO:0005886	MGI:MGI:1354194	GO REF:0000004	plasma membrane	
Aif1l	GO:0015629	MGI:MGI:4834177	GO REF:0000096	actin cytoskeleton	
Aif1l	GO:0042995	MGI:MGI:1354194	GO REF:0000004	cell projection	
Aif1l	GO:0005509	MGI:MGI:2152098	GO REF:0000002	calcium ion binding	
Aif1l	GO:0051015	MGI:MGI:4834177	GO REF:0000096	actin filament binding	
Aif1l	GO:0016020	MGI:MGI:1354194	GO REF:0000004	membrane	
Aif1l	GO:0005737	MGI:MGI:1354194	GO REF:0000004	cytoplasm	
Aif1l	colocalizes with	GO:0005884	MGI:MGI:4834177	GO REF:0000096	actin filament
Aif1l	GO:0046872	MGI:MGI:1354194	GO REF:0000004	metal ion binding	
Aif1l	GO:0005925	MGI:MGI:4834177	GO REF:0000096	focal adhesion	
Aif1l	GO:0043234	MGI:MGI:4417868	GO REF:0000096	protein complex	
Atp6ap2	GO:0060323	MGI:MGI:4834177	GO REF:0000096	head morphogenesis	
Atp6ap2	GO:0020003	MGI:MGI:4417868	GO REF:0000096	angiotensin maturation	
Atp6ap2	GO:0009897	MGI:MGI:4834177	GO REF:0000096	external side of plasma membrane	
Atp6ap2	GO:0044297	MGI:MGI:4417868	GO REF:0000096	cell body	
Atp6ap2	GO:0004872	MGI:MGI:2152098	GO REF:0000002	receptor activity	
Atp6ap2	GO:0006508	MGI:MGI:4834177	GO REF:0000096	proteolysis	
Atp6ap2	GO:0016021	MGI:MGI:1354194	GO REF:0000004	integral component of membrane	
Atp6ap2	GO:0043408	MGI:MGI:4834177	GO REF:0000096	regulation of MAPK cascade	
Atp6ap2	GO:0030177	MGI:MGI:4421218	PMID:20093472	positive regulation of Wnt signaling pathway	
Atp6ap2	GO:0021903	MGI:MGI:4834177	GO REF:0000096	rostrocaudal neural tube patterning	
Atp6ap2	GO:0002003	MGI:MGI:4834177	GO REF:0000096	angiotensin maturation	
Atp6ap2	GO:0004190	MGI:MGI:4834177	GO REF:0000096	aspartic-type endopeptidase activity	
Atp6ap2	GO:0043005	MGI:MGI:4417868	GO REF:0000096	neuron projection	
Atp6ap2	GO:0016020	MGI:MGI:1354194	GO REF:0000004	membrane	
Atp6ap2	GO:0019899	MGI:MGI:4417868	GO REF:0000096	enzyme binding	
Atp6ap2	GO:0030177	MGI:MGI:4834177	GO REF:0000096	positive regulation of Wnt signaling pathway	
Atp6ap2	GO:0048069	MGI:MGI:4834177	GO REF:0000096	eye pigmentation	
Atp6ap2	GO:0032914	MGI:MGI:4834177	GO REF:0000096	positive regulation of transforming growth factor beta1 production	
Atp6ap2	GO:0016021	MGI:MGI:2152098	GO REF:0000002	integral component of membrane	
Atp6ap2	GO:0070062	MGI:MGI:4834177	GO REF:0000096	extracellular vesicular exosome	
Col8a1	GO:0005604	MGI:MGI:1354194	GO REF:0000004	basement membrane	
Col8a1	GO:0005578	MGI:MGI:1354194	GO REF:0000004	proteinaceous extracellular matrix	
Col8a1	GO:0001525	MGI:MGI:1354194	GO REF:0000004	angiogenesis	
Col8a1	GO:0043231	MGI:MGI:4834177	GO REF:0000096	intracellular membrane-bounded organelle	
Col8a1	GO:0007155	MGI:MGI:1354194	GO REF:0000004	cell adhesion	
Col8a1	GO:0005581	MGI:MGI:1354194	GO REF:0000004	collagen trimer	
Col8a1	GO:0010811	MGI:MGI:3807344	PMID:18757743	positive regulation of cell-substrate adhesion	
Col8a1	GO:0005576	MGI:MGI:1354194	GO REF:0000004	extracellular region	
Col8a1	GO:0070062	MGI:MGI:4834177	GO REF:0000096	extracellular vesicular exosome	
Col8a1	GO:00050673	MGI:MGI:3587134	PMID:16051690	epithelial cell proliferation	
Col8a1	GO:0048593	MGI:MGI:3587134	PMID:16051690	camera-type eye morphogenesis	
Col8a1	colocalizes with	GO:0031012	MGI:MGI:4834177	GO REF:0000096	extracellular matrix
Srgap3	GO:0030336	MGI:MGI:4459044	GO REF:0000033	negative regulation of cell migration	
Srgap3	GO:0005622	MGI:MGI:2152098	GO REF:0000002	intracellular	
Srgap3	GO:0005515	MGI:MGI:2152475	PMID:11672528	protein binding	
Srgap3	GO:0030675	MGI:MGI:4459044	GO REF:0000033	Rac GTPase activator activity	
Srgap3	GO:0007165	MGI:MGI:2152098	GO REF:0000002	signal transduction	
Srgap3	GO:0005737	MGI:MGI:4459044	GO REF:0000033	cytoplasm	
Srgap3	GO:0005096	MGI:MGI:1354194	GO REF:0000004	GTPase activator activity	
Srgap3	GO:0048365	MGI:MGI:4459044	GO REF:0000033	Rac GTPase binding	
Srgap3	GO:0032855	MGI:MGI:4459044	GO REF:0000033	positive regulation of Rac GTPase activity	
Vat1	GO:0055114	MGI:MGI:1354194	GO REF:0000004	oxidation-reduction process	
Vat1	GO:0043883	MGI:MGI:2152096	GO REF:0000003	malolactic enzyme activity	
Vat1	GO:0043826	MGI:MGI:2152096	GO REF:0000003	sulfur oxygenase reductase activity	
Vat1	GO:0016020	MGI:MGI:1354194	GO REF:0000004	membrane	
Vat1	GO:0016491	MGI:MGI:2152098	GO REF:0000002	oxidoreductase activity	
Vat1	GO:0005741	MGI:MGI:4417868	GO REF:0000096	mitochondrial outer membrane	
Vat1	GO:0070062	MGI:MGI:4834177	GO REF:0000096	extracellular vesicular exosome	
Vat1	GO:0055114	MGI:MGI:2152098	GO REF:0000002	oxidation-reduction process	
Vat1	GO:0043914	MGI:MGI:2152096	GO REF:0000003	NADPH:sulfur oxidoreductase activity	
Vat1	GO:0016491	MGI:MGI:1354194	GO REF:0000004	oxidoreductase activity	
Vat1	GO:0043738	MGI:MGI:2152096	GO REF:0000003	reduced coenzyme F420 dehydrogenase activity	
Vat1	GO:0005739	MGI:MGI:1354194	GO REF:0000004	mitochondrion	
Vat1	GO:0008270	MGI:MGI:2152098	GO REF:0000002	zinc ion binding	
Vat1	GO:0010637	MGI:MGI:4834177	GO REF:0000096	negative regulation of mitochondrial fusion	
Vat1	GO:0005737	MGI:MGI:1354194	GO REF:0000004	cytoplasm	
Vat1	GO:0052693	MGI:MGI:2152096	GO REF:0000003	epoxyqueuosine reductase activity	
Vat1	GO:0008748	MGI:MGI:2152096	GO REF:0000003	N-ethylmaleimide reductase activity	

Predicted targets of miR-1

Gene product	Reference	Reference	Reference	Direct annotation	
Anxa2	GO:0005811	MGi:MGi:4834177	GO REF:0000096	lipid particle	
Anxa2	GO:0001725	MGi:MGi:2662669	PMID:12611902	stress fiber	
Anxa2	GO:0051099	MGi:MGi:3847621	PMID:17690254	positive regulation of binding	
Anxa2	GO:0005578	MGi:MGi:1354194	GO REF:0000004	proteinaceous extracellular matrix	
Anxa2	GO:0004859	MGi:MGi:2152098	GO REF:0000002	phospholipase inhibitor activity	
Anxa2	GO:0016020	MGi:MGi:4834177	GO REF:0000096	membrane	
Anxa2	GO:0044354	MGi:MGi:4417868	GO REF:0000096	macropinosome	
Anxa2	GO:0009986	MGi:MGi:4834177	GO REF:0000096	cell surface	
Anxa2	GO:0030496	MGi:MGi:4834177	GO REF:0000096	midbody	
Anxa2	GO:0017137	MGi:MGi:4417868	GO REF:0000096	Rab GTPase binding	
Anxa2	colocalizes with	GO:0045121	MGi:MGi:4834177	GO REF:0000096	membrane raft
Anxa2	GO:0005886	MGi:MGi:4417868	GO REF:0000096	plasma membrane	
Anxa2	GO:0005546	MGi:MGi:4834177	GO REF:0000096	phosphatidylinositol-4,5-bisphosphate binding	
Anxa2	GO:0005938	MGi:MGi:4417868	GO REF:0000096	cell cortex	
Anxa2	GO:0005886	MGi:MGi:4834177	GO REF:0000096	plasma membrane	
Anxa2	GO:0005768	MGi:MGi:4834177	GO REF:0000096	endosome	
Anxa2	GO:0005634	MGi:MGi:4834177	GO REF:0000096	nucleus	
Anxa2	GO:0005769	MGi:MGi:3045820	PMID:15078881	early endosome	
Anxa2	GO:0005737	MGi:MGi:3045820	PMID:15078881	cytoplasm	
Anxa2	GO:0072661	MGi:MGi:4417868	GO REF:0000096	protein targeting to plasma membrane	
Anxa2	GO:0071229	MGi:MGi:3847621	PMID:17690254	cellular response to acid chemical	
Anxa2	GO:0001726	MGi:MGi:4417868	GO REF:0000096	ruffle	
Anxa2	GO:0005546	MGi:MGi:4417868	GO REF:0000096	phosphatidylinositol-4,5-bisphosphate binding	
Anxa2	GO:0042730	MGi:MGi:3027337	PMID:14702107	fibrinolysis	
Anxa2	GO:0035749	MGi:MGi:4441217	PMID:20237282	myelin sheath adaxonal region	
Anxa2	GO:0031340	MGi:MGi:4834177	GO REF:0000096	positive regulation of vesicle fusion	
Anxa2	GO:0048471	MGi:MGi:4417868	GO REF:0000096	perinuclear region of cytoplasm	
Anxa2	GO:0001765	MGi:MGi:4834177	GO REF:0000096	membrane raft assembly	
Anxa2	GO:0016020	MGi:MGi:2662669	PMID:12611902	membrane	
Anxa2	GO:0019897	MGi:MGi:3847621	PMID:17690254	extrinsic component of plasma membrane	
Anxa2	GO:0005544	MGi:MGi:4834177	GO REF:0000096	calcium-dependent phospholipid binding	
Anxa2	GO:0019834	MGi:MGi:4834177	GO REF:0000096	phospholipase A2 inhibitor activity	
Anxa2	GO:0031982	MGi:MGi:4417868	GO REF:0000096	vesicle	
Anxa2	GO:0036035	MGi:MGi:4834177	GO REF:0000096	osteoclast development	
Anxa2	GO:0031902	MGi:MGi:4834177	GO REF:0000096	late endosome membrane	
Anxa2	GO:0030054	MGi:MGi:2662669	PMID:12611902	cell junction	
Anxa2	GO:0043086	MGi:MGi:4834177	GO REF:0000096	negative regulation of catalytic activity	
Anxa2	GO:0043220	MGi:MGi:4441217	PMID:20237282	Schmidt-Lanterman incisure	
Anxa2	GO:0005765	MGi:MGi:4834177	GO REF:0000096	lysosomal membrane	
Anxa2	GO:0007589	MGi:MGi:4417868	GO REF:0000096	body fluid secretion	
Anxa2	GO:0044548	MGi:MGi:4834177	GO REF:0000096	S100 protein binding	
Anxa2	GO:0005515	MGi:MGi:2683818	PMID:14506282	protein binding	
Anxa2	GO:0044822	MGi:MGi:4834177	GO REF:0000096	poly(A) RNA binding	
Anxa2	GO:0030199	MGi:MGi:3027337	PMID:14702107	collagen fibril organization	
Anxa2	GO:0031982	MGi:MGi:4834177	GO REF:0000096	vesicle	
Anxa2	GO:0043234	MGi:MGi:4417868	GO REF:0000096	protein complex	
Anxa2	GO:0005604	MGi:MGi:1354194	GO REF:0000004	basement membrane	
Anxa2	GO:0048306	MGi:MGi:4834177	GO REF:0000096	calcium-dependent protein binding	
Anxa2	GO:0001934	MGi:MGi:4417868	GO REF:0000096	positive regulation of protein phosphorylation	
Anxa2	GO:0006900	MGi:MGi:4834177	GO REF:0000096	membrane budding	
Anxa2	GO:0048146	MGi:MGi:4417868	GO REF:0000096	positive regulation of fibroblast proliferation	
Anxa2	GO:0005737	MGi:MGi:4417868	GO REF:0000096	cytoplasm	
Anxa2	GO:0005515	MGi:MGi:5469743	PMID:23415230	protein binding	
Anxa2	GO:0005576	MGi:MGi:1354194	GO REF:0000004	extracellular region	
Anxa2	GO:0008092	MGi:MGi:2152098	GO REF:0000002	cytoskeletal protein binding	
Anxa2	GO:0042383	MGi:MGi:2683818	PMID:14506282	sarcolemma	
Anxa2	GO:0001525	MGi:MGi:3027337	PMID:14702107	angiogenesis	
Anxa2	GO:0070062	MGi:MGi:4834177	GO REF:0000096	extracellular vesicular exosome	
Anxa2	GO:0051290	MGi:MGi:4834177	GO REF:0000096	protein heterotetramerization	
Anxa2	GO:0005615	MGi:MGi:4834177	GO REF:0000096	extracellular space	
Anxa2	GO:0005509	MGi:MGi:2152098	GO REF:0000002	calcium ion binding	

Predicted targets of miR-1

Anxa4		GO:0016324	MGi:MGi:2178719	PMID:11923205	apical plasma membrane
Anxa4		GO:0005634	MGi:MGi:4834177	GO REF:0000096	nucleus
Anxa4		GO:0005886	MGi:MGi:4834177	GO REF:0000096	plasma membrane
Anxa4		GO:0070062	MGi:MGi:4834177	GO REF:0000096	extracellular vesicular exosome
Anxa4		GO:0006357	MGi:MGi:4834177	GO REF:0000096	regulation of transcription from RNA polymerase II promoter
Anxa4		GO:0009986	MGi:MGi:4834177	GO REF:0000096	cell surface
Anxa4		GO:0048471	MGi:MGi:4834177	GO REF:0000096	perinuclear region of cytoplasm
Anxa4		GO:0012506	MGi:MGi:4834177	GO REF:0000096	vesicle membrane
Anxa4		GO:0048306	MGi:MGi:4834177	GO REF:0000096	calcium-dependent protein binding
Anxa4		GO:0051059	MGi:MGi:4834177	GO REF:0000096	NF-kappaB binding
Anxa4		GO:0042802	MGi:MGi:4834177	GO REF:0000096	identical protein binding
Anxa4		GO:0001822	MGi:MGi:2178719	PMID:11923205	kidney development
Anxa4		GO:0031965	MGi:MGi:4834177	GO REF:0000096	nuclear membrane
Anxa4		GO:0005509	MGi:MGi:4834177	GO REF:0000096	calcium ion binding
Anxa4		GO:0005737	MGi:MGi:4834177	GO REF:0000096	cytoplasm
Anxa4		GO:0032088	MGi:MGi:4834177	GO REF:0000096	negative regulation of NF-kappaB transcription factor activity
Anxa4		GO:2000483	MGi:MGi:4834177	GO REF:0000096	negative regulation of interleukin-8 secretion
Anxa4		GO:0005544	MGi:MGi:4834177	GO REF:0000096	calcium-dependent phospholipid binding

Atp6ap2		GO:0060323	MGi:MGi:4834177	GO REF:0000096	head morphogenesis
Atp6ap2		GO:0002003	MGi:MGi:4417868	GO REF:0000096	angiotensin maturation
Atp6ap2		GO:0009897	MGi:MGi:4834177	GO REF:0000096	external side of plasma membrane
Atp6ap2		GO:0044297	MGi:MGi:4417868	GO REF:0000096	cell body
Atp6ap2		GO:0004872	MGi:MGi:2152098	GO REF:0000002	receptor activity
Atp6ap2		GO:0006508	MGi:MGi:4834177	GO REF:0000096	proteolysis
Atp6ap2		GO:0016021	MGi:MGi:1354194	GO REF:0000004	integral component of membrane
Atp6ap2		GO:0043408	MGi:MGi:4834177	GO REF:0000096	regulation of MAPK cascade
Atp6ap2		GO:0030177	MGi:MGi:4421218	PMID:20093472	positive regulation of Wnt signaling pathway
Atp6ap2		GO:0021903	MGi:MGi:4834177	GO REF:0000096	rostrocaudal neural tube patterning
Atp6ap2		GO:0002003	MGi:MGi:4834177	GO REF:0000096	angiotensin maturation
Atp6ap2		GO:0004190	MGi:MGi:4834177	GO REF:0000096	aspartic-type endopeptidase activity
Atp6ap2		GO:0043005	MGi:MGi:4417868	GO REF:0000096	neuron projection
Atp6ap2		GO:0016020	MGi:MGi:1354194	GO REF:0000004	membrane
Atp6ap2		GO:0019899	MGi:MGi:4417868	GO REF:0000096	enzyme binding
Atp6ap2		GO:0030177	MGi:MGi:4834177	GO REF:0000096	positive regulation of Wnt signaling pathway
Atp6ap2		GO:0048069	MGi:MGi:4834177	GO REF:0000096	eye pigmentation
Atp6ap2		GO:0032914	MGi:MGi:4834177	GO REF:0000096	positive regulation of transforming growth factor beta1 production
Atp6ap2		GO:0016021	MGi:MGi:2152098	GO REF:0000002	integral component of membrane
Atp6ap2		GO:0070062	MGi:MGi:4834177	GO REF:0000096	extracellular vesicular exosome

Predicted targets of miR-1

Atp6v1a	GO:0005902	MGI:MGI:4943380	PMID:18667600	microvillus
Atp6v1a	GO:0015992	MGI:MGI:1354194	GO REF:0000004	proton transport
Atp6v1a	GO:0005765	MGI:MGI:4834177	GO REF:0000096	lysosomal membrane
Atp6v1a	GO:0005739	MGI:MGI:2682130	PMID:14651853	mitochondrion
Atp6v1a	GO:0016324	MGI:MGI:4943380	PMID:18667600	apical plasma membrane
Atp6v1a	GO:0070062	MGI:MGI:4834177	GO REF:0000096	extracellular vesicular exosome
Atp6v1a	GO:0033180	MGI:MGI:2152098	GO REF:0000002	proton-transporting V-type ATPase, V1 domain
Atp6v1a	GO:0000166	MGI:MGI:1354194	GO REF:0000004	nucleotide binding
Atp6v1a	GO:0015991	MGI:MGI:2152098	GO REF:0000002	ATP hydrolysis coupled proton transport
Atp6v1a	GO:0005524	MGI:MGI:1354194	GO REF:0000004	ATP binding
Atp6v1a	GO:0006810	MGI:MGI:1354194	GO REF:0000004	transport
Atp6v1a	GO:0005829	MGI:MGI:3850618	PMID:16177003	cytosol
Atp6v1a	GO:0043209	MGI:MGI:3834050	PMID:17634366	myelin sheath
Atp6v1a	GO:0016787	MGI:MGI:1354194	GO REF:0000004	hydrolase activity
Atp6v1a	GO:0033178	MGI:MGI:2152098	GO REF:0000002	proton-transporting two-sector ATPase complex, catalytic domain
Atp6v1a	GO:0005524	MGI:MGI:2152098	GO REF:0000002	ATP binding
Atp6v1a	GO:0046034	MGI:MGI:2152098	GO REF:0000002	ATP metabolic process
Atp6v1a	GO:0006811	MGI:MGI:1354194	GO REF:0000004	ion transport
Atp6v1a	GO:0015992	MGI:MGI:2152098	GO REF:0000002	proton transport
Atp6v1a	GO:0005886	MGI:MGI:3850618	PMID:16177003	plasma membrane
Atp6v1a	GO:0048961	MGI:MGI:2152098	GO REF:0000002	proton-transporting ATPase activity, rotational mechanism
Atp6v1a	GO:0016820	MGI:MGI:2152098	GO REF:0000002	hydrolase activity, acting on acid anhydrides, catalyzing transmembrane movement of substances
Azin1	GO:0003824	MGI:MGI:2152098	GO REF:0000002	catalytic activity
Azin1	GO:0006596	MGI:MGI:2152098	GO REF:0000002	polyamine biosynthetic process
Azin1	GO:0042177	MGI:MGI:4834177	GO REF:0000096	negative regulation of protein catabolic process
Azin1	GO:1902269	MGI:MGI:3803410	PMID:18508777	positive regulation of polyamine transmembrane transport
Azin1	GO:0006596	MGI:MGI:1354194	GO REF:0000004	polyamine biosynthetic process
Azin1	GO:0008073	MGI:MGI:4417868	GO REF:0000096	ornithine decarboxylase inhibitor activity
Azin1	GO:0042978	MGI:MGI:3695330	PMID:16916800	ornithine decarboxylase activator activity
Azin1	GO:0043086	MGI:MGI:4417868	GO REF:0000096	negative regulation of catalytic activity
Azin1	GO:0043085	MGI:MGI:3695330	PMID:16916800	positive regulation of catalytic activity
Azin1	GO:0042978	MGI:MGI:4834177	GO REF:0000096	ornithine decarboxylase activator activity
Azin1	GO:0006595	MGI:MGI:1354413	PMID:10698696	polyamine metabolic process
Azin1	GO:1902269	MGI:MGI:4834177	GO REF:0000096	positive regulation of polyamine transmembrane transport
Azin1	GO:0005634	MGI:MGI:5582167	PMID:19449338	nucleus
Azin1	GO:0043085	MGI:MGI:4834177	GO REF:0000096	positive regulation of catalytic activity

Predicted targets of miR-1

Coro1b	GO:0015629	MGI:MGI:4459044	GO REF:0000033	actin cytoskeleton
Coro1b	GO:0031529	MGI:MGI:4834177	GO REF:0000096	ruffle organization
Coro1b	GO:0005886	MGI:MGI:4834177	GO REF:0000096	plasma membrane
Coro1b	GO:0034316	MGI:MGI:4834177	GO REF:0000096	negative regulation of Arp2/3 complex-mediated actin nucleation
Coro1b	GO:0051015	MGI:MGI:4459044	GO REF:0000033	actin filament binding
Coro1b	GO:2000394	MGI:MGI:4834177	GO REF:0000096	positive regulation of lamellipodium morphogenesis
Coro1b	GO:0042060	MGI:MGI:4834177	GO REF:0000096	wound healing
Coro1b	GO:0031252	MGI:MGI:4834177	GO REF:0000096	cell leading edge
Coro1b	GO:0070062	MGI:MGI:4834177	GO REF:0000096	extracellular vesicular exosome
Coro1b	GO:0090135	MGI:MGI:4834177	GO REF:0000096	actin filament branching
Coro1b	GO:0042802	MGI:MGI:4834177	GO REF:0000096	identical protein binding
Coro1b	GO:0016477	MGI:MGI:4834177	GO REF:0000096	cell migration
Coro1b	GO:0003779	MGI:MGI:1354194	GO REF:0000004	actin binding
Coro1b	GO:0030027	MGI:MGI:4834177	GO REF:0000096	lamellipodium
Coro1b	GO:0071933	MGI:MGI:4834177	GO REF:0000096	Arp2/3 complex binding
Coro1b	GO:0001725	MGI:MGI:4834177	GO REF:0000096	stress fiber
Coro1b	GO:0035767	MGI:MGI:4834177	GO REF:0000096	endothelial cell chemotaxis
Coro1b	GO:0051015	MGI:MGI:4834177	GO REF:0000096	actin filament binding
Coro1b	GO:1902463	MGI:MGI:4834177	GO REF:0000096	protein localization to cell leading edge
Coro1b	GO:0005737	MGI:MGI:4834177	GO REF:0000096	cytoplasm
Coro1b	GO:0005856	MGI:MGI:1354194	GO REF:0000004	cytoskeleton
Coro1b	GO:0005925	MGI:MGI:4834177	GO REF:0000096	focal adhesion
Coro1b	GO:0005515	MGI:MGI:3818245	PMID:18836449	protein binding
Coro1b	GO:0030036	MGI:MGI:4459044	GO REF:0000033	actin cytoskeleton organization
Coro1b	GO:0051017	MGI:MGI:4834177	GO REF:0000096	actin filament bundle assembly
Coro1b	GO:0005884	MGI:MGI:4834177	GO REF:0000096	actin filament

Predicted targets of miR-1

G6pdx		GO:0004345	MGI:MGI:87492 PMID:9169132	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0004345	MGI:MGI:4417868 GO REF:0000096	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0019322	MGI:MGI:49164 PMID:1953691	pentose biosynthetic process
G6pdx		GO:0043231	MGI:MGI:4417868 GO REF:0000096	intracellular membrane-bounded organelle
G6pdx		GO:0005634	MGI:MGI:4417868 GO REF:0000096	nucleus
G6pdx		GO:0004345	MGI:MGI:1261671 PMID:9627357	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0043249	MGI:MGI:4834177 GO REF:0000096	erythrocyte maturation
G6pdx		GO:0006741	MGI:MGI:49164 PMID:1953691	NADP biosynthetic process
G6pdx		GO:0006741	MGI:MGI:1349468 PMID:3377761	NADP biosynthetic process
G6pdx		GO:0019322	MGI:MGI:3694178 PMID:15998684	pentose biosynthetic process
G6pdx		GO:0005975	MGI:MGI:1354194 GO REF:0000004	carbohydrate metabolic process
G6pdx		GO:0004345	MGI:MGI:581777 PMID:3243423	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0009051	MGI:MGI:4417868 GO REF:0000096	pentose-phosphate shunt, oxidative branch
G6pdx		GO:0042802	MGI:MGI:4834177 GO REF:0000096	identical protein binding
G6pdx		GO:0051156	MGI:MGI:4834177 GO REF:0000096	glucose 6-phosphate metabolic process
G6pdx		GO:0006741	MGI:MGI:1202104 PMID:9539108	NADP biosynthetic process
G6pdx		GO:0005737	MGI:MGI:4834177 GO REF:0000096	cytoplasm
G6pdx		GO:0009051	MGI:MGI:4834177 GO REF:0000096	pentose-phosphate shunt, oxidative branch
G6pdx		GO:0006979	MGI:MGI:3581936 PMID:15817708	response to oxidative stress
G6pdx		GO:0019322	MGI:MGI:1202104 PMID:9539108	pentose biosynthetic process
G6pdx		GO:0019322	MGI:MGI:1097071 PMID:9330624	pentose biosynthetic process
G6pdx		GO:0050661	MGI:MGI:4417868 GO REF:0000096	NADP binding
G6pdx		GO:0051114	MGI:MGI:2387962 PMID:7489710	oxidation-reduction process
G6pdx		GO:0004345	MGI:MGI:54095 PMID:943046	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0006741	MGI:MGI:2387959 PMID:10627286	NADP biosynthetic process
G6pdx		GO:0045471	MGI:MGI:4417868 GO REF:0000096	response to ethanol
G6pdx		GO:0006979	MGI:MGI:2387959 PMID:10627286	response to oxidative stress
G6pdx		GO:0004345	MGI:MGI:53579 PMID:5764873	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0032613	MGI:MGI:3581936 PMID:15817708	interleukin-12 production
G6pdx		GO:0006740	MGI:MGI:4834177 GO REF:0000096	NADPH regeneration
G6pdx		GO:0006741	MGI:MGI:1261671 PMID:9627357	NADP biosynthetic process
G6pdx		GO:0004345	MGI:MGI:49164 PMID:1953691	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0006741	MGI:MGI:3607389 PMID:14757696	NADP biosynthetic process
G6pdx		GO:0006979	MGI:MGI:2387962 PMID:7489710	response to oxidative stress
G6pdx		GO:0006979	MGI:MGI:3607389 PMID:14757696	response to oxidative stress
G6pdx		GO:0004345	MGI:MGI:1349468 PMID:3377761	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0019322	MGI:MGI:1261671 PMID:9627357	pentose biosynthetic process
G6pdx		GO:0034599	MGI:MGI:4834177 GO REF:0000096	cellular response to oxidative stress
G6pdx		GO:0004345	MGI:MGI:3607389 PMID:14757696	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0006741	MGI:MGI:3522057 PMID:15271799	NADP biosynthetic process
G6pdx		GO:0009898	MGI:MGI:4834177 GO REF:0000096	cytoplasmic side of plasma membrane
G6pdx		GO:0070062	MGI:MGI:4834177 GO REF:0000096	extracellular vesicular exosome
G6pdx		GO:0004345	MGI:MGI:3522057 PMID:15271799	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0002033	MGI:MGI:3694178 PMID:15998684	vasodilation by angiotensin involved in regulation of systemic arterial blood pressure
G6pdx		GO:0006979	MGI:MGI:3527298 PMID:14751857	response to oxidative stress
G6pdx		GO:0004345	MGI:MGI:4834177 GO REF:0000096	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0006006	MGI:MGI:1354194 GO REF:0000004	glucose metabolic process
G6pdx		GO:0004345	MGI:MGI:61105 PMID:8491670	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0016491	MGI:MGI:1354194 GO REF:0000004	oxidoreductase activity
G6pdx		GO:0006741	MGI:MGI:85983 PMID:9067418	NADP biosynthetic process
G6pdx		GO:0050661	MGI:MGI:4834177 GO REF:0000096	NADP binding
G6pdx		GO:0001998	MGI:MGI:3694178 PMID:15998684	angiotensin mediated vasoconstriction involved in regulation of systemic arterial blood pressure
G6pdx		GO:0004345	MGI:MGI:2387962 PMID:7489710	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0042803	MGI:MGI:87492 PMID:9169132	protein homodimerization activity
G6pdx		GO:0019322	MGI:MGI:4834177 GO REF:0000096	pentose biosynthetic process
G6pdx		GO:0004345	MGI:MGI:3527298 PMID:14751857	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0005815	MGI:MGI:4834177 GO REF:0000096	microtubule organizing center
G6pdx		GO:0006749	MGI:MGI:2449252 PMID:12521604	glutathione metabolic process
G6pdx		GO:0043231	MGI:MGI:4834177 GO REF:0000096	intracellular membrane-bounded organelle
G6pdx		GO:0004345	MGI:MGI:1097071 PMID:9330624	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0040014	MGI:MGI:2387959 PMID:10627286	regulation of multicellular organism growth
G6pdx		GO:0006006	MGI:MGI:2152098 GO REF:0000002	glucose metabolic process
G6pdx		GO:0006098	MGI:MGI:4834177 GO REF:0000096	pentose-phosphate shunt
G6pdx		GO:0006741	MGI:MGI:87492 PMID:9169132	NADP biosynthetic process
G6pdx		GO:0051114	MGI:MGI:4834177 GO REF:0000096	oxidation-reduction process
G6pdx		GO:0004345	MGI:MGI:3054313 PMID:15155459	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0001816	MGI:MGI:4834177 GO REF:0000096	cytokine production
G6pdx		GO:0048821	MGI:MGI:3527298 PMID:14751857	erythrocyte development
G6pdx		GO:0004345	MGI:MGI:2449252 PMID:12521604	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0010734	MGI:MGI:4834177 GO REF:0000096	negative regulation of protein glutathionylation
G6pdx		GO:0019322	MGI:MGI:3607389 PMID:14757696	pentose biosynthetic process
G6pdx		GO:0006749	MGI:MGI:4834177 GO REF:0000096	glutathione metabolic process
G6pdx		GO:0006741	MGI:MGI:1097071 PMID:9330624	NADP biosynthetic process
G6pdx		GO:0004345	MGI:MGI:2387959 PMID:10627286	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0006741	MGI:MGI:54902 PMID:7439685	NADP biosynthetic process
G6pdx		GO:0046390	MGI:MGI:4834177 GO REF:0000096	ribose phosphate biosynthetic process
G6pdx		GO:0042803	MGI:MGI:4834177 GO REF:0000096	protein homodimerization activity
G6pdx		GO:0043523	MGI:MGI:4417868 GO REF:0000096	regulation of neuron apoptotic process
G6pdx		GO:0004345	MGI:MGI:1202104 PMID:9539108	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0048821	MGI:MGI:3522057 PMID:15271799	erythrocyte development
G6pdx		GO:0006739	MGI:MGI:4834177 GO REF:0000096	NADP metabolic process
G6pdx		GO:0001816	MGI:MGI:3581936 PMID:15817708	cytokine production
G6pdx		GO:0004345	MGI:MGI:3694178 PMID:15998684	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0006098	MGI:MGI:4417868 GO REF:0000096	pentose-phosphate shunt
G6pdx		GO:0030246	MGI:MGI:4417868 GO REF:0000096	carbohydrate binding
G6pdx		GO:0032613	MGI:MGI:3581936 PMID:15817708	interleukin-10 production
G6pdx		GO:0005813	MGI:MGI:4834177 GO REF:0000096	centrosome
G6pdx		GO:0004345	MGI:MGI:85983 PMID:9067418	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0016020	MGI:MGI:4834177 GO REF:0000096	membrane
G6pdx		GO:0006741	MGI:MGI:3694178 PMID:15998684	NADP biosynthetic process
G6pdx		GO:0005829	MGI:MGI:4417868 GO REF:0000096	cytosol
G6pdx		GO:0005536	MGI:MGI:4417868 GO REF:0000096	glucose binding
G6pdx		GO:0051156	MGI:MGI:4417868 GO REF:0000096	glucose 6-phosphate metabolic process
G6pdx		GO:0005536	MGI:MGI:4834177 GO REF:0000096	glucose binding
G6pdx		GO:0006979	MGI:MGI:3694178 PMID:15998684	response to oxidative stress
G6pdx		GO:0006695	MGI:MGI:4834177 GO REF:0000096	cholesterol biosynthetic process
G6pdx		GO:0004345	MGI:MGI:54902 PMID:7439685	glucose-6-phosphate dehydrogenase activity
G6pdx		GO:0019322	MGI:MGI:54902 PMID:7439685	pentose biosynthetic process
G6pdx		GO:0005829	MGI:MGI:4834177 GO REF:0000096	cytosol
G6pdx		GO:0019322	MGI:MGI:61105 PMID:8491670	pentose biosynthetic process

Predicted targets of miR-1

H3f3b		GO:1902340	MGi:MGi:5502235	PMID:23903189	negative regulation of chromosome condensation
H3f3b		GO:0000980	MGi:MGi:4834177	GO REF:0000096	RNA polymerase II distal enhancer sequence-specific DNA binding
H3f3b		GO:0006997	MGi:MGi:5474379	PMID:23570311	nucleus organization
H3f3b		GO:0001649	MGi:MGi:5430686	PMID:22705305	osteoblast differentiation
H3f3b		GO:0043234	MGi:MGi:4834177	GO REF:0000096	protein complex
H3f3b		GO:0005634	MGi:MGi:4834177	GO REF:0000096	nucleus
H3f3b		GO:0042692	MGi:MGi:5430686	PMID:22705305	muscle cell differentiation
H3f3b		GO:0000979	MGi:MGi:4834177	GO REF:0000096	RNA polymerase II core promoter sequence-specific DNA binding
H3f3b		GO:0000788	MGi:MGi:4834177	GO REF:0000096	nuclear nucleosome
H3f3b		GO:0070062	MGi:MGi:4834177	GO REF:0000096	extracellular vesicular exosome
H3f3b		GO:0031492	MGi:MGi:4834177	GO REF:0000096	nucleosomal DNA binding
H3f3b		GO:0005634	MGi:MGi:5474379	PMID:23570311	nucleus
H3f3b		GO:0000228	MGi:MGi:4834177	GO REF:0000096	nuclear chromosome
H3f3b		GO:0090230	MGi:MGi:5474379	PMID:23570311	regulation of centromere complex assembly
Serp1		GO:0001501	MGi:MGi:3619104	PMID:16415102	skeletal system development
Serp1		GO:0045727	MGi:MGi:3619104	PMID:16415102	positive regulation of translation
Serp1		GO:0015031	MGi:MGi:1354194	GO REF:0000004	protein transport
Serp1		GO:0030968	MGi:MGi:3619104	PMID:16415102	endoplasmic reticulum unfolded protein response
Serp1		GO:0006486	MGi:MGi:4417868	GO REF:0000096	protein glycosylation
Serp1		GO:0009791	MGi:MGi:3629369	PMID:16705175	post-embryonic development
Serp1		GO:0032024	MGi:MGi:3619104	PMID:16415102	positive regulation of insulin secretion
Serp1		GO:0006006	MGi:MGi:3619104	PMID:16415102	glucose metabolic process
Serp1		GO:0010259	MGi:MGi:3629369	PMID:16705175	multicellular organismal aging
Serp1		GO:0005783	MGi:MGi:2152098	GO REF:0000002	endoplasmic reticulum
Serp1		GO:0016020	MGi:MGi:1354194	GO REF:0000004	membrane
Serp1		GO:0006810	MGi:MGi:1354194	GO REF:0000004	transport
Serp1		GO:0048644	MGi:MGi:3619104	PMID:16415102	muscle organ morphogenesis
Serp1		GO:0046622	MGi:MGi:3619104	PMID:16415102	positive regulation of organ growth
Serp1		GO:0005881	MGi:MGi:4834177	GO REF:0000096	cytoplasmic microtubule
Serp1		GO:0016021	MGi:MGi:1354194	GO REF:0000004	integral component of membrane
Serp1		GO:0060124	MGi:MGi:3619104	PMID:16415102	positive regulation of growth hormone secretion
Serp1		GO:0005783	MGi:MGi:1354194	GO REF:0000004	endoplasmic reticulum
Sh3bgrl3		GO:0045454	MGi:MGi:2152098	GO REF:0000002	cell redox homeostasis
Sh3bgrl3		GO:0030834	MGi:MGi:4834177	GO REF:0000096	regulation of actin filament depolymerization
Sh3bgrl3		GO:0032956	MGi:MGi:4834177	GO REF:0000096	regulation of actin cytoskeleton organization
Sh3bgrl3		GO:0005634	MGi:MGi:1354194	GO REF:0000004	nucleus
Sh3bgrl3		GO:0005100	MGi:MGi:4834177	GO REF:0000096	Rho GTPase activator activity
Sh3bgrl3		GO:0009055	MGi:MGi:2152098	GO REF:0000002	electron carrier activity
Sh3bgrl3		GO:0030027	MGi:MGi:4834177	GO REF:0000096	lamellipodium
Sh3bgrl3		GO:0030215	MGi:MGi:4834177	GO REF:0000096	semaphorin receptor binding
Sh3bgrl3		GO:0005737	MGi:MGi:1354194	GO REF:0000004	cytoplasm
Sh3bgrl3		GO:0032321	MGi:MGi:4834177	GO REF:0000096	positive regulation of Rho GTPase activity
Sh3bgrl3		GO:0043535	MGi:MGi:4834177	GO REF:0000096	regulation of blood vessel endothelial cell migration
Sh3bgrl3		GO:0015035	MGi:MGi:2152098	GO REF:0000002	protein disulfide oxidoreductase activity
Sh3bgrl3		GO:0070062	MGi:MGi:4834177	GO REF:0000096	extracellular vesicular exosome
Zfp36l2		GO:1900153	MGi:MGi:5320815	PMID:22367205	positive regulation of nuclear-transcribed mRNA catabolic process, deadenylation-dependent decay
Zfp36l2		GO:0043488	MGi:MGi:3511379	PMID:15467755	regulation of mRNA stability
Zfp36l2		GO:0035925	MGi:MGi:5500826	PMID:23748442	mRNA 3'-UTR AU-rich region binding
Zfp36l2		GO:2000737	MGi:MGi:5500826	PMID:23748442	negative regulation of stem cell differentiation
Zfp36l2		GO:0003723	MGi:MGi:1354194	GO REF:0000004	RNA binding
Zfp36l2		GO:0003677	MGi:MGi:1354194	GO REF:0000004	DNA binding
Zfp36l2		GO:0017091	MGi:MGi:4834177	GO REF:0000096	AU-rich element binding
Zfp36l2		GO:0046872	MGi:MGi:2152098	GO REF:0000002	metal ion binding
Zfp36l2		GO:0006402	MGi:MGi:5320815	PMID:22367205	mRNA catabolic process
Zfp36l2		GO:0005634	MGi:MGi:5320815	PMID:22367205	nucleus
Zfp36l2		GO:0044822	MGi:MGi:4834177	GO REF:0000096	poly(A) RNA binding
Zfp36l2		GO:0035925	MGi:MGi:5320815	PMID:22367205	mRNA 3'-UTR AU-rich region binding
Zfp36l2		GO:0005737	MGi:MGi:2177366	PMID:11796723	cytoplasm
Zfp36l2		GO:0030097	MGi:MGi:5500826	PMID:23748442	hemopoiesis
Zfp36l2		GO:0033077	MGi:MGi:4818820	PMID:20622884	T cell differentiation in thymus
Zfp36l2		GO:0000288	MGi:MGi:3589099	PMID:15814898	nuclear-transcribed mRNA catabolic process, deadenylation-dependent decay
Zfp36l2		GO:0005634	MGi:MGi:2177366	PMID:11796723	nucleus
Zfp36l2		GO:0035019	MGi:MGi:5500826	PMID:23748442	somatic stem cell maintenance
Zfp36l2		GO:0005737	MGi:MGi:5320815	PMID:22367205	cytoplasm
Zfp36l2		GO:0046872	MGi:MGi:1354194	GO REF:0000004	metal ion binding
Zfp36l2		GO:0048103	MGi:MGi:5500826	PMID:23748442	somatic stem cell division
Zfp36l2		GO:0060216	MGi:MGi:4360416	PMID:19633199	definitive hemopoiesis
Zfp36l2		GO:0030097	MGi:MGi:4360416	PMID:19633199	hemopoiesis

Predicted targets of miR-378

Gene product	Reference	Reference	Reference	Direct annotation
H3f3b	GO:1902340	MGI:MGI:5502235	PMID:23903189	negative regulation of chromosome condensation
H3f3b	GO:000980	MGI:MGI:4834177	GO_REF:0000096	RNA polymerase II distal enhancer sequence-specific DNA binding
H3f3b	GO:0006997	MGI:MGI:5474379	PMID:23570311	nucleus organization
H3f3b	GO:0001649	MGI:MGI:5430686	PMID:22705305	osteoblast differentiation
H3f3b	GO:0043234	MGI:MGI:4834177	GO_REF:0000096	protein complex
H3f3b	GO:0005634	MGI:MGI:4834177	GO_REF:0000096	nucleus
H3f3b	GO:0042692	MGI:MGI:5430686	PMID:22705305	muscle cell differentiation
H3f3b	GO:0000979	MGI:MGI:4834177	GO_REF:0000096	RNA polymerase II core promoter sequence-specific DNA binding
H3f3b	GO:0000788	MGI:MGI:4834177	GO_REF:0000096	nuclear nucleosome
H3f3b	GO:0070062	MGI:MGI:4834177	GO_REF:0000096	extracellular vesicular exosome
H3f3b	GO:0031492	MGI:MGI:4834177	GO_REF:0000096	nucleosomal DNA binding
H3f3b	GO:0005634	MGI:MGI:5474379	PMID:23570311	nucleus
H3f3b	GO:0000228	MGI:MGI:4834177	GO_REF:0000096	nuclear chromosome
H3f3b	GO:0090230	MGI:MGI:5474379	PMID:23570311	regulation of centromere complex assembly

Vat1	GO:0055114	MGI:MGI:1354194	GO_REF:0000004	oxidation-reduction process
Vat1	GO:0043883	MGI:MGI:2152096	GO_REF:0000003	malolactic enzyme activity
Vat1	GO:0043826	MGI:MGI:2152096	GO_REF:0000003	sulfur oxygenase reductase activity
Vat1	GO:0016020	MGI:MGI:1354194	GO_REF:0000004	membrane
Vat1	GO:0016491	MGI:MGI:2152098	GO_REF:0000002	oxidoreductase activity
Vat1	GO:0005741	MGI:MGI:4417868	GO_REF:0000096	mitochondrial outer membrane
Vat1	GO:0070062	MGI:MGI:4834177	GO_REF:0000096	extracellular vesicular exosome
Vat1	GO:0055114	MGI:MGI:2152098	GO_REF:0000002	oxidation-reduction process
Vat1	GO:0043914	MGI:MGI:2152096	GO_REF:0000003	NADPH:sulfur oxidoreductase activity
Vat1	GO:0016491	MGI:MGI:1354194	GO_REF:0000004	oxidoreductase activity
Vat1	GO:0043738	MGI:MGI:2152096	GO_REF:0000003	reduced coenzyme F420 dehydrogenase activity
Vat1	GO:0005739	MGI:MGI:1354194	GO_REF:0000004	mitochondrion
Vat1	GO:0008270	MGI:MGI:2152098	GO_REF:0000002	zinc ion binding
Vat1	GO:0010637	MGI:MGI:4834177	GO_REF:0000096	negative regulation of mitochondrial fusion
Vat1	GO:0005737	MGI:MGI:1354194	GO_REF:0000004	cytoplasm
Vat1	GO:0052693	MGI:MGI:2152096	GO_REF:0000003	epoxyqueuosine reductase activity
Vat1	GO:0008748	MGI:MGI:2152096	GO_REF:0000003	N-ethylmaleimide reductase activity