Supplemental table 2: List of genes regulated by aging in the anterior pituitary

Gene Symbol	Gene Title	RefSeq Transcript ID	Fold change	Gene Ontology Biological Process
Up-regulated				
Reg3b	regenerating islet-derived 3 beta	NM_053289	**5,77**	acute-phase response
Igha	immunoglobulin heavy chain, alpha	---	**5,41**	
Calcr	calcitonin receptor	NM_001034015 /// NM_053816	**4,91**	signal transduction
IgG-2a	gamma-2a immunoglobulin heavy chain	XM_002726773	**3,88**	
C4-2 /// C4b	complement component 4, gene 2 /// complement component 4B	NM_001002805 /// NM_031504	**3,51**	inflammatory response
Pcsk2	proprotein convertase subtilisin/kexin type 2	NM_012746	**3,42**	proteolysis
Slc6a15	solute carrier family 6 (neutral amino acid transporter), member 15	NM_172321	**3,33**	transport
Olfm3	olfactomedin 3	NM_145777	**3,32**	eye photoreceptor cell development
Esm1	endothelial cell-specific molecule 1	NM_022604	**3,28**	regulation of cell growth
Krt25	keratin 25	NM_001008822	**3,22**	hair follicle morphogenesis
Apod	apolipoprotein D	NM_012777	**3,19**	transport
Sez6	seizure related 6 homolog (mouse)	NM_001105754 /// XM_001080832 /// XM_239260	**2,96**	
Igfbp3	insulin-like growth factor binding protein 3	NM_012588	**2,89**	regulation of cell growth
Reg3a	regenerating islet-derived 3 alpha	NM_001145846 /// NM_172077	**2,68**	acute-phase response
Id3	inhibitor of DNA binding 3	NM_013058	**2,67**	negative regulation of transcription from RNA polymerase II promoter
Klk1b3	kallikrein 1-related peptidase b3	NM_031523	**2,64**	proteolysis
Tagln3	transgelin 3	NM_001035236 /// NM_031676	**2,56**	muscle organ development
Gpx2	glutathione peroxidase 2	NM_183403	**2,56**	temperature homeostasis
Akr1c19	aldo-keto reductase family 1, member C19	NM_001100576	**2,50**	oxidation reduction
Syn2	synapsin II	NM_001034020 /// NM_019159	**2,44**	neurotransmitter secretion
Cldn7	claudin 7	NM_031702	**2,40**	calcium-independent cell-cell adhesion
C1qa	complement component 1, q subcomponent, A chain	NM_001008515	**2,37**	complement activation, classical pathway
Nol3	nucleolar protein 3 (apoptosis repressor with CARD domain)	NM_053516	**2,36**	response to hypoxia
Igf1	insulin-like growth factor 1	NM_001082477 /// NM_001082478 /// NM_001082479 /// NM_178866	**2,32**	osteoblast differentiation
Cpxm2	carboxypeptidase X (M14 family), member 2	NM_001106306	**2,29**	proteolysis
Rasd1	RAS, dexamethasone-induced 1	XM_001077321 /// XM_340809	**2,28**	signal transduction
Serping1	serine (or cysteine) peptidase inhibitor, clade G, member 1	NM_199093	**2,28**	negative regulation of complement activation, lectin pathway
Trhr	thyrotropin releasing hormone receptor	NM_013047	**2,26**	signal transduction
Ascl1	achaete-scute complex homolog 1 (Drosophila)	NM_022384	**2,23**	neuron migration
Lix1	Lix1 homolog (chicken)	NM_001106214	**2,22**	
Ngb	neuroglobin	NM_033359	**2,21**	transport
Gpnmb	glycoprotein (transmembrane) nmb	NM_133298	**2,20**	osteoblast differentiation
Sncb	synuclein, beta	NM_080777	**2,19**	dopamine metabolic process
Fmo5	flavin containing monooxygenase 5	NM_144739	**2,19**	oxidation reduction
Rgs5	regulator of G-protein signaling 5	NM_019341	**2,16**	signal transduction

Lrrc4c	leucine rich repeat containing 4C	NM_001107753	**2,15**	regulation of axonogenesis
C1qc	complement component 1, q subcomponent, C chain	NM_001008524	**2,14**	complement activation, classical pathway
Xdh	xanthine dehydrogenase	NM_017154	**2,12**	lactation
Nefh	neurofilament, heavy polypeptide	NM_012607	**2,11**	microtubule cytoskeleton organization
Nol4	nucleolar protein 4	NM_001107401	**2,11**	
Tmem229a	transmembrane protein 229A	NM_001109480	**2,10**	
Gfra3	GDNF family receptor alpha 3	NM_053398	**2,09**	neuron migration
Gucy1a3	guanylate cyclase 1, soluble, alpha 3	NM_017090	**2,08**	cGMP biosynthetic process
Lgals1	lectin, galactoside-binding, soluble, 1	NM_019904	**2,06**	negative regulation of cell-substrate adhesion
Cys1	cystin 1	NM_001109597	**2,01**	
Nt5dc1	5'-nucleotidase domain containing 1	NM_001106393	**1,99**	
Fcgr2a	Fc fragment of IgG, low affinity IIa, receptor (CD32) /// Fc gamma receptor II b	NM_001135992 /// NM_053843	**1,99**	antibody-dependent cellular cytotoxicity
Htra1	HtrA serine peptidase 1	NM_031721	**1,97**	regulation of cell growth
Apoe	apolipoprotein E	NM_138828	**1,95**	negative regulation of endothelial cell proliferation
Suds3	Suppressor of defective silencing 3 homolog (S. cerevisiae)	XM_001080131 /// XM_341092	**1,95**	negative regulation of transcription
Pcdh19	protocadherin 19	NM_001169129	**1,95**	cell adhesion
Myo1b	myosin Ib	NM_053986	**1,93**	nervous system development
Rnf180	ring finger protein 180	NM_001134986	**1,93**	positive regulation of proteasomal ubiquitin-dependent protein catabo
Gabra1	gamma-aminobutyric acid (GABA) A receptor, alpha 1	NM_183326	**1,93**	transport
Ptp4a3	protein tyrosine phosphatase 4a3	NM_001114405	**1,93**	protein dephosphorylation
Crtac1	cartilage acidic protein 1	NM_134401	**1,92**	
Mtmr1	Myotubularin related protein 1	NM_001191725 /// XM_001059230 /// XM_228644	**1,91**	dephosphorylation
Gabrg2	gamma-aminobutyric acid (GABA) A receptor, gamma 2	NM_183327	**1,91**	transport
Rhobtb3	Rho-related BTB domain containing 3	NM_001107645	**1,90**	retrograde transport, endosome to Golgi
Ccdc88b	coiled-coil domain containing 88B	NM_001108517	**1,90**	protein phosphorylation
Plekhb1	pleckstrin homology domain containing, family B (evectins) member 1	NM_172033	**1,89**	regulation of cell differentiation
Cdcp1	CUB domain containing protein 1	NM_001106869	**1,87**	
Retsat	retinol saturase (all trans retinol 13,14 reductase)	NM_145084	**1,87**	retinol metabolic process
Brunol5	bruno-like 5, RNA binding protein (Drosophila)	NM_001135603	**1,87**	
Efhd1	EF-hand domain family, member D1	NM_001109310	**1,86**	neuron projection development
Gria4	glutamate receptor, ionotropic, AMPA4	NM_001113184 /// NM_001113185 /// NM_017263	**1,86**	transport
Myo1d	myosin ID	NM_012983	**1,84**	transport
Lppr5	lipid phosphate phosphatase-related protein type 5	NM_001107720	**1,84**	
Ahcyl2	adenosylhomocysteinase-like 2	NM_001173510 /// XM_001062287 /// XM_231564	**1,84**	one-carbon metabolic process
Arsb	arylsulfatase B	NM_033443	**1,83**	autophagy
Vegfa	vascular endothelial growth factor A	NM_001110333 /// NM_001110334 /// NM_001110335 /// NM_001110336 /// NM_031836	**1,82**	angiogenesis
Adipoq	adiponectin, C1Q and collagen domain containing	NM_144744	**1,82**	response to hypoxia
Agtr1b	angiotensin II receptor, type 1b	NM_031009	**1,82**	blood vessel development

Cdkn1c	cyclin-dependent kinase inhibitor 1C	NM_001033757 /// NM_001033758 /// NM_182735	**1,81**	negative regulation of transcription from RNA polymerase II promoter
Kitlg	KIT ligand	NM_021843 /// NM_021844	**1,80**	ovarian follicle development
Gulp1	GULP, engulfment adaptor PTB domain containing 1	NM_001013171	**1,79**	transport
Atp2b3	ATPase, Ca++ transporting, plasma membrane 3	NM_133288	**1,79**	neural retina development
Cadps2	Ca++-dependent secretion activator 2	XM_001060172 /// XM_002726328 /// XM_002726329 /// XM_002726330 /// XM_002726331	**1,78**	positive regulation of exocytosis
Accn4	amiloride-sensitive cation channel 4, pituitary	NM_022234	**1,77**	transport
Khdrbs2	KH domain containing, RNA binding, signal transduction associated 2	NM_133318	**1,77**	transcription
Aqp1	aquaporin 1	NM_012778	**1,77**	glomerular filtration
Glrx1	glutaredoxin 1	NM_022278	**1,77**	transport
Sox4	SRY (sex determining region Y)-box 4	XM_001068302 /// XM_344594	**1,77**	response to hypoxia
Rimklb	ribosomal modification protein rimK-like family member B	XM_001060530 /// XM_342749	**1,76**	protein modification process
Plch2	Phospholipase C, eta 2	XM_001077247 /// XM_233728	**1,76**	lipid metabolic process
Ifitm1	interferon induced transmembrane protein 1	NM_001106314	**1,76**	response to biotic stimulus
Fcgrt	Fc fragment of IgG, receptor, transporter, alpha	NM_033351	**1,75**	immune response
Gpr162	G protein-coupled receptor 162	NM_001108646	**1,74**	G-protein coupled receptor protein signaling pathway
Gabrd	gamma-aminobutyric acid (GABA) A receptor, delta	NM_017289	**1,74**	transport
Myh14	myosin, heavy chain 14	NM_001100690	**1,73**	ATP catabolic process
Dync1i1	dynein cytoplasmic 1 intermediate chain 1	NM_019234	**1,71**	transport
Zbtb4	zinc finger and BTB domain containing 4	XM_001079524 /// XM_220612	**1,71**	
Bend5	BEN domain containing 5	NM_001108672	**1,71**	
Ssfa2	sperm specific antigen 2	NM_001107738	**1,70**	
Ap1s2	adaptor-related protein complex 1, sigma 2 subunit	NM_001127531	**1,69**	transport
Pgcp	plasma glutamate carboxypeptidase	NM_031640	**1,68**	proteolysis
Stmn2	stathmin-like 2	NM_053440	**1,68**	negative regulation of microtubule depolymerization
Igf2	insulin-like growth factor 2	NM_001190162 /// NM_001190163 /// NM_031511	**1,68**	ossification
Dgkb	diacylglycerol kinase, beta	NM_019304	**1,68**	activation of protein kinase C activity by G-protein coupled receptor
Ccdc30	coiled-coil domain containing 30	XM_001073839 /// XM_342899	**1,68**	cell-matrix adhesion
Fam151b	family with sequence similarity 151, member B	NM_001134748	**1,67**	
Cgnl1	cingulin-like 1	NM_001108164	**1,67**	
Kcnq2	potassium voltage-gated channel, KQT-like subfamily, member 2	NM_133322	**1,66**	transport
C1qb	complement component 1, q subcomponent, B chain	NM_019262	**1,66**	immune response
Pah	phenylalanine hydroxylase	NM_012619	**1,65**	L-phenylalanine metabolic process
Fos	FBJ osteosarcoma oncogene	NM_022197	**1,65**	conditioned taste aversion
Cndp2	CNDP dipeptidase 2 (metallopeptidase M20 family)	NM_001010920	**1,65**	proteolysis
Sept_4	septin 4	NM_001011893	**1,64**	cell cycle
Sh3kbp1	SH3-domain kinase binding protein 1	NM_053360	**1,64**	endocytosis
Anxa4	annexin A4	NM_024155	**1,64**	exocytosis
Lgals3bp	lectin, galactoside-binding, soluble, 3 binding protein	NM_139096	**1,64**	cell adhesion
Cirbp	cold inducible RNA binding protein	NM_031147	**1,63**	response to stress
Atp5s	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit s (factor B)	NM_001007749	**1,63**	ATP biosynthetic process

Hspb8	heat shock protein B8	NM_053612	**1,63**	response to stress
Ubxn8	UBX domain protein 8	NM_001106086	**1,63**	
Palmd	palmdelphin	NM_001025688	**1,62**	regulation of cell shape
Ptprd	protein tyrosine phosphatase, receptor type, D	XM_001067936 /// XM_233065	**1,62**	protein dephosphorylation
Amn1	antagonist of mitotic exit network 1 homolog (S. cerevisiae)	NM_001008333	**1,62**	
Map2k6	mitogen-activated protein kinase kinase 6	NM_053703	**1,62**	MAPKKK cascade
Rbbp9	retinoblastoma binding protein 9	NM_019219	**1,62**	regulation of cell proliferation
Nup54	nucleoporin 54	NM_017361	**1,62**	protein targeting
Pde1a	phosphodiesterase 1A, calmodulin-dependent	NM_030871	**1,62**	cAMP catabolic process
Gphn	gephyrin	NM_022865	**1,62**	protein targeting
F2r	coagulation factor II (thrombin) receptor	NM_012950	**1,61**	activation of MAPKK activity
Ttyh1	tweety homolog 1 (Drosophila)	NM_001106225	**1,61**	transport
Ccnd1	cyclin D1	NM_171992	**1,61**	G1/S transition of mitotic cell cycle
Cmbl	carboxymethylenebutenolidase homolog (Pseudomonas)	NM_001008770	**1,61**	
Mlc1	megalencephalic leukoencephalopathy with subcortical cysts 1 homolog (human)	NM_001108105	**1,61**	
Ctss	cathepsin S	NM_017320	**1,60**	proteolysis
Ptgr1	prostaglandin reductase 1	NM_138863	**1,60**	metabolic process
Flot1	flotillin 1	NM_022701	**1,60**	
Cebpd	CCAAT/enhancer binding protein (C/EBP), delta	NM_013154	**1,60**	transcription
Krt18	keratin 18	NM_053976	**1,59**	apoptosis
Pdxp	pyridoxal (pyridoxine, vitamin B6) phosphatase	NM_001135819	**1,59**	metabolic process
Ddx41	DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	NM_001108046	**1,59**	
Mmgt2	membrane magnesium transporter 2	NM_001013967	**1,59**	transport
Pex5l	peroxisomal biogenesis factor 5-like	NM_173152	**1,59**	regulation of membrane potential
Tapbp	TAP binding protein	NM_033098	**1,58**	MHC class I protein complex assembly
Skap2	src kinase associated phosphoprotein 2	NM_130413	**1,58**	negative regulation of cell proliferation
Tnr	tenascin R	NM_013045	**1,58**	cell adhesion
Npas2	neuronal PAS domain protein 2	NM_001108214	**1,58**	regulation of transcription, DNA-dependent
S100a6	S100 calcium binding protein A6	NM_053485	**1,58**	
Gpm6a	glycoprotein m6a	NM_178105	**1,58**	
Klhl13	kelch-like 13 (Drosophila)	XM_001061200 /// XM_002727661 /// XM_002730180 /// XM_233297	**1,57**	cytokinesis
Soat1	sterol O-acyltransferase 1	NM_031118	**1,57**	lipid metabolic process
Tgfbi	transforming growth factor, beta induced	NM_053802	**1,57**	chondrocyte differentiation
Znf521	zinc finger protein 521	NM_001107403	**1,57**	
Ppp4r2	protein phosphatase 4, regulatory subunit 2	NM_001106613	**1,57**	
Lrrc23	leucine rich repeat containing 23	NM_001013165	**1,57**	
Evl	Enah/Vasp-like	NM_024147	**1,57**	cellular component movement
Camta1	similar to KIAA0833 protein	NM_001195559 /// NM_001195560 /// XM_002726619 /// XM_002729575	**1,57**	
Pcbp3	poly(rC) binding protein 3	NM_001011945	**1,56**	
Zbtb22	zinc finger and BTB domain containing 22	NM_001009172	**1,56**	
Syne1	spectrin repeat containing, nuclear envelope 1	NM_001029909	**1,55**	Golgi organization
Vipr2	vasoactive intestinal peptide receptor 2	NM_017238	**1,55**	signal transduction
Nosip	nitric oxide synthase interacting protein	NM_001106260	**1,55**	negative regulation of catalytic activity
Fchsd2	FCH and double SH3 domains 2	NM_001107539	**1,55**	

Kcnip4	Kv channel interacting protein 4	NM_181365	**1,55**	transport
Pir	pirin (iron-binding nuclear protein)	NM_001009474	**1,55**	
Xpa	xeroderma pigmentosum, complementation group A	NM_001106656	**1,54**	nucleotide-excision repair, DNA damage removal
Cdo1	cysteine dioxygenase, type I	NM_052809	**1,54**	cysteine metabolic process
Rprm	reprimo, TP53 dependent G2 arrest mediator candidate	NM_001044276	**1,54**	cell cycle arrest
Caly	calcyon neuron-specific vesicular protein	NM_001190399 /// NM_138915	**1,54**	endocytosis
Ehd3	EH-domain containing 3	NM_138890	**1,54**	
Kcnd3	potassium voltage-gated channel, Shal-related subfamily, member 3	NM_031739	**1,54**	transport
Rrm1	ribonucleotide reductase M1	NM_001013236	**1,53**	DNA replication
Traf3ip2	Traf3 interacting protein 2	NM_001044248	**1,53**	B cell apoptosis
Eid2b	EP300 interacting inhibitor of differentiation 2B	XM_002725600 /// XM_574407	**1,53**	
Id2	inhibitor of DNA binding 2	NM_013060	**1,53**	negative regulation of transcription from RNA polymerase II promoter
Raph1	Ras association (RalGDS/AF-6) and pleckstrin homology domains 1	NM_001108798	**1,53**	signal transduction
Wfdc2	WAP four-disulfide core domain 2	NM_173109	**1,53**	
Tcf20	transcription factor 20	NM_001130574	**1,53**	positive regulation of gene-specific transcription from RNA polymeras
Tspan8	tetraspanin 8	NM_133526	**1,53**	negative regulation of blood coagulation
Tspo	translocator protein	NM_012515	**1,53**	steroid biosynthetic process
Etv1	Ets variant 1	NM_001108709 /// NM_001163156	**1,53**	regulation of transcription, DNA-dependent
Pcdhb9	protocadherin beta 9	NM_001109390	**1,53**	cell adhesion
Hist2h2be	histone cluster 2, H2be	XM_001061909 /// XM_227459	**1,52**	nucleosome assembly
Sorbs2	sorbin and SH3 domain containing 2	NM_053770	**1,52**	
Nfix	nuclear factor I/X (CCAAT-binding transcription factor)	NM_030866	**1,52**	DNA replication
Cpne5	copine V	NM_001107616	**1,52**	
Tox3	TOX high mobility group box family member 3	NM_001106171	**1,52**	
Zfhx4	zinc finger homeobox 4	NM_001191702 /// XM_001058915 /// XM_226964	**1,52**	regulation of transcription, DNA-dependent
Galm	galactose mutarotase (aldose 1-epimerase)	NM_001007704	**1,52**	carbohydrate metabolic process
Rpa2	replication protein A2	NM_021582	**1,52**	nucleotide-excision repair, DNA damage removal
Klc3	kinesin light chain 3	NM_138520	**1,52**	metabolic process
Fam172a	family with sequence similarity 172, member A	NM_001106401	**1,52**	
Csgalnact1	chondroitin sulfate N-acetylgalactosaminyltransferase 1	NM_001107309	**1,51**	UDP-N-acetylgalactosamine metabolic process
Slc12a5	solute carrier family 12 (potassium-chloride transporter), member 5	NM_134363	**1,51**	transport
Gstz1	glutathione transferase zeta 1	NM_001109445	**1,51**	aromatic amino acid family metabolic process
Chchd6	coiled-coil-helix-coiled-coil-helix domain containing 6	NM_001106608	**1,51**	
Pex7	peroxisomal biogenesis factor 7	NM_001034147	**1,51**	neuron migration
Fam117b	family with sequence similarity 117, member B	NM_001108797	**1,50**	
Agtrap	angiotensin II receptor-associated protein	NM_001007654	**1,50**	response to hypoxia
Tfpi	tissue factor pathway inhibitor (lipoprotein-associated coagulation inhibitor)	NM_001177321 /// NM_017200	**1,50**	blood coagulation
Ppap2b	phosphatidic acid phosphatase type 2B	NM_138905	**1,50**	blood vessel development
Gpsm1	G-protein signaling modulator 1 (AGS3-like, C. elegans)	NM_001145469 /// NM_144745	**1,50**	signal transduction

Dpp6	dipeptidylpeptidase 6	NM_022850	**1,50**	proteolysis
Vangl1	vang-like 1 (van gogh, Drosophila)	NM_001109584	**1,49**	multicellular organismal development
Rab34	RAB34, member RAS oncogene family	NM_001012140	**1,49**	GTP catabolic process
Atl1	atlastin GTPase 1	NM_001009831	**1,49**	endoplasmic reticulum organization
H2afj	H2A histone family, member J	NM_001109610	**1,49**	nucleosome assembly
Capn1	calpain 1	NM_019152	**1,49**	proteolysis
Fam110c	family with sequence similarity 110, member C	NM_001025051	**1,49**	
Srbd1	S1 RNA binding domain 1	XM_001059624 /// XM_237474	**1,49**	nucleobase, nucleoside, nucleotide and nucleic acid metabolic process
Rfc4	replication factor C (activator 1) 4	NM_001105869	**1,49**	DNA replication
Fam173a	family with sequence similarity 173, member A	NM_001127447	**1,49**	
Cd82	Cd82 molecule	NM_031797	**1,49**	
Med30	mediator complex subunit 30	NM_001130539	**1,48**	transcription initiation from RNA polymerase II promoter
Pcgf6	polycomb group ring finger 6	NM_001013154	**1,48**	transcription
Apbb1	amyloid beta (A4) precursor protein-binding, family B, member 1 (Fe65)	NM_080478	**1,48**	neuron migration
Dnlz	DNL-type zinc finger	NM_001130990 /// NR_024073	**1,48**	
Jun	Jun oncogene	NM_021835	**1,48**	angiogenesis
Efcab4a	EF-hand calcium binding domain 4A	NM_001127541	**1,47**	store-operated calcium entry
Pbxip1	pre-B-cell leukemia homeobox interacting protein 1	NM_001100976	**1,47**	
Cpt1a	carnitine palmitoyltransferase 1a, liver	NM_031559	**1,47**	long-chain fatty acid metabolic process
Eef2k	eukaryotic elongation factor-2 kinase	NM_012947	**1,47**	protein phosphorylation
Ntan1	N-terminal asparagine amidase	NM_001025124	**1,47**	memory
Bat5	HLA-B associated transcript 5	NM_212531	**1,47**	
Pde6d	phosphodiesterase 6D, cGMP-specific, rod, delta	NM_001108806	**1,47**	visual perception
Cadm1	cell adhesion molecule 1	NM_001012201	**1,47**	liver development
Ift81	intraflagellar transport 81 homolog (Chlamydomonas)	NM_199120	**1,47**	multicellular organismal development
Rtn1	reticulon 1	NM_053865	**1,47**	neuron differentiation
Kcnc2	potassium voltage gated channel, Shaw-related subfamily, member 2	NM_139216 /// NM_139217	**1,47**	transport
Tradd	TNFRSF1A-associated via death domain	NM_001100480	**1,47**	apoptosis
Tmem106a	transmembrane protein 106A	NM_001024967	**1,47**	
Cfb	complement factor B	NM_212466	**1,46**	proteolysis
Rab3c	RAB3C, member RAS oncogene family	NM_133536	**1,46**	transport
Slc43a2	solute carrier family 43, member 2	NM_001105812	**1,46**	amino acid transmembrane transport
Pcca	propionyl-coenzyme A carboxylase, alpha polypeptide	NM_019330	**1,46**	metabolic process
Rsbn1	round spermatid basic protein 1	NM_001191710 /// XM_001065582 /// XM_227540	**1,46**	
Blcap	bladder cancer associated protein homolog (human)	NM_133582	**1,46**	apoptosis
Pm20d2	peptidase M20 domain containing 2	NM_001107922	**1,45**	metabolic process
Amigo2	adhesion molecule with Ig like domain 2	NM_182816	**1,45**	anti-apoptosis
Pcmtd2	protein-L-isoaspartate (D-aspartate) O-methyltransferase domain containing 2	NM_001107810	**1,45**	protein modification process
Rgs10	regulator of G-protein signaling 10	NM_019337	**1,45**	regulation of G-protein coupled receptor protein signaling pathway
Rbmx	RNA binding motif protein, X-linked	NM_001025663	**1,45**	mRNA splice site selection
Ubxn6	UBX domain protein 6	NM_001108812	**1,45**	
Nsbp1	nucleosomal binding protein 1	NM_001134706	**1,45**	transcription
Prkcz	protein kinase C, zeta	NM_022507	**1,45**	microtubule cytoskeleton organization

Calhm2	calcium homeostasis modulator 2	NM_001008306	**1,45**	
Meis1	Meis homeobox 1	NM_001134702	**1,45**	angiogenesis
Ccl11	chemokine (C-C motif) ligand 11	NM_019205	**1,45**	positive regulation of endothelial cell proliferation
Ccdc90b	coiled-coil domain containing 90B	NM_001024885	**1,44**	
Apc2	adenomatosis polyposis coli 2	NM_001106769	**1,44**	Wnt receptor signaling pathway
Dnajc12	DnaJ (Hsp40) homolog, subfamily C, member 12	NM_001034032	**1,44**	
Klc4	kinesin light chain 4	NM_001009601	**1,44**	
Fcho2	FCH domain only 2	NM_001191632 /// XM_002728999 /// XM_219503	**1,44**	
Aldh16a1	aldehyde dehydrogenase 16 family, member A1	NM_001033706	**1,44**	metabolic process
St18	suppression of tumorigenicity 18	NM_153310	**1,44**	negative regulation of transcription from RNA polymerase II promoter
Ifitm3	interferon induced transmembrane protein 3	NM_001136124	**1,44**	negative regulation of cell proliferation
Rsrc1	arginine/serine-rich coiled-coil 1	NM_001014172	**1,44**	alternative nuclear mRNA splicing, via spliceosome
Syngr2	synaptogyrin 2	NM_053553	**1,43**	protein targeting
Gpr149	G protein-coupled receptor 149	NM_138891	**1,43**	signal transduction
Ncor1	Nuclear receptor co-repressor 1	XM_001077495 /// XM_577103	**1,43**	negative regulation of transcription from RNA polymerase II promoter
Znf467	zinc finger protein 467	NM_001024327	**1,43**	transcription
Odf2l	outer dense fiber of sperm tails 2-like	NM_001134708	**1,43**	
Ebna1bp2	EBNA1 binding protein 2	NM_001008721	**1,43**	
Mettl7a	methyltransferase like 7A	NM_001037355	**1,43**	metabolic process
Cnnm3	cyclin M3	NM_001106901	**1,43**	
Tspan33	tetraspanin 33	NM_001109227	**1,43**	
Tob1	transducer of ErbB-2.1	NM_133317	**1,43**	SMAD protein nuclear translocation
Ctnnbl1	catenin, beta like 1	NM_001024870	**1,43**	apoptosis
Klc1	kinesin light chain 1	NM_001081972 /// NM_001081973 /// NM_001081974	**1,43**	axon cargo transport
Suclg2	succinate-CoA ligase, GDP-forming, beta subunit	NM_001100750	**1,43**	tricarboxylic acid cycle
Cd151	CD151 molecule (Raph blood group)	NM_022523	**1,43**	hemidesmosome assembly
Sh3bgrl3	SH3 domain binding glutamic acid-rich protein-like 3	NM_001106688	**1,43**	cell redox homeostasis
Gcnt2	glucosaminyl (N-acetyl) transferase 2, I-branching enzyme	NM_001001511	**1,42**	metabolic process
Hes1	hairy and enhancer of split 1 (Drosophila)	NM_024360	**1,42**	negative regulation of transcription from RNA polymerase II promoter
Ltbp3	latent transforming growth factor beta binding protein 3	NM_001191561 /// XM_002725776 /// XM_002728859	**1,42**	skeletal system development
L1cam	L1 cell adhesion molecule	NM_017345	**1,42**	cell adhesion
Arse	arylsulfatase E (chondrodysplasia punctata 1)	NM_001047885	**1,42**	metabolic process
Rassf6	Ras association (RalGDS/AF-6) domain family member 6	NM_001025671	**1,42**	apoptosis
Aif1	allograft inflammatory factor 1	NM_017196	**1,42**	positive regulation of protein phosphorylation
Eif5a2	eukaryotic translation initiation factor 5A2	NM_001100697 /// XM_001063995 /// XM_226974	**1,42**	translational frameshifting
Ryr2	ryanodine receptor 2, cardiac	NM_001191043 /// NM_032078	**1,42**	detection of calcium ion
B3galnt1	beta-1,3-N-acetylgalactosaminyltransferase 1	NM_001013158	**1,42**	protein glycosylation
Rundc3b	RUN domain containing 3B	NM_001047116	**1,42**	
Ctbp2	C-terminal binding protein 2	NM_053335	**1,42**	transcription
Gpx4	glutathione peroxidase 4	NM_001039849 /// NM_017165	**1,42**	chromatin organization

Fbxl4	F-box and leucine-rich repeat protein 4	NM_001107919	**1,41**	
Slco3a1	Solute carrier organic anion transporter family, member 3a1	NM_177481	**1,41**	transport
Bcap29	B-cell receptor-associated protein 29	NM_001006980	**1,41**	intracellular protein transport
Ctsz	cathepsin Z	NM_183330	**1,41**	proteolysis
Exoc2	exocyst complex component 2	NM_134414	**1,41**	transport
Camk2d	calcium/calmodulin-dependent protein kinase II delta	NM_012519	**1,41**	G1/S transition of mitotic cell cycle
Msl1	male-specific lethal 1 homolog (Drosophila)	NM_001107048	**1,41**	
St6gal1	ST6 beta-galactosamide alpha-2,6-sialyltranferase 1	NM_001113344 /// NM_147205	**1,41**	protein glycosylation
Aarsd1	alanyl-tRNA synthetase domain containing 1	NM_001034109	**1,41**	translation
Nme4	non-metastatic cells 4, protein expressed in	NM_001109478	**1,41**	GTP biosynthetic process
Lmo4	LIM domain only 4	NM_001009708	**1,41**	neural tube closure
Cadps	Ca++-dependent secretion activator	NM_013219	**1,41**	transport
Lman2l	lectin, mannose-binding 2-like	NM_001106900	**1,41**	protein transport
Pnpla2	patatin-like phospholipase domain containing 2	NM_001108509	**1,41**	lipid metabolic process
Nrxn1	neurexin 1	NM_021767	**1,41**	cell adhesion
Lrg1	leucine-rich alpha-2-glycoprotein 1	NM_001009717	**1,41**	brown fat cell differentiation
Znf292	zinc finger protein 292	NM_001008879	**1,40**	
Camk1	calcium/calmodulin-dependent protein kinase I	NM_134468	**1,40**	protein phosphorylation
Vwc2	von Willebrand factor C domain containing 2	NM_001109312	**1,40**	positive regulation of cell-substrate adhesion
Ublcp1	ubiquitin-like domain containing CTD phosphatase 1	NM_001014117	**1,40**	
Mlh3	mutL homolog 3 (E. coli)	NM_001108043	**1,40**	mismatch repair
Gstp1	glutathione S-transferase pi 1	NM_012577	**1,40**	glutathione metabolic process
Chrac1	chromatin accessibility complex 1	NM_001134880	**1,39**	
Hopx	HOP homeobox	NM_133621	**1,39**	negative regulation of transcription from RNA polymerase II promoter
Fancl	Fanconi anemia, complementation group L	NM_001191684 /// XM_001064256 /// XM_223701	**1,39**	gamete generation
Nudt14	nudix (nucleoside diphosphate linked moiety X)-type motif 14	NM_001106760	**1,39**	
Gtpbp10	GTP-binding protein 10 (putative)	NM_001100815	**1,39**	
Dlg3	discs, large homolog 3 (Drosophila)	NM_031639	**1,39**	
Grk6	G protein-coupled receptor kinase 6	NM_001112712 /// NM_001112713 /// NM_031657	**1,39**	protein phosphorylation
Mdga2	MAM domain containing glycosylphosphatidylinositol anchor 2	NM_199269	**1,39**	spinal cord motor neuron differentiation
Ppdpf	pancreatic progenitor cell differentiation and proliferation factor homolog (zeb	NM_001009316	**1,39**	multicellular organismal development
Fam60a	family with sequence similarity 60, member A	NM_001134711 /// NM_001134712	**1,39**	
Sec16a	SEC16 homolog A (S. cerevisiae)	XM_002726072 /// XM_002729145	**1,39**	lipid metabolic process
Acn9	ACN9 homolog (S. cerevisiae)	NM_001047914	**1,39**	
Inpp1	inositol polyphosphate-1-phosphatase	NM_001012131	**1,39**	
Six1	SIX homeobox 1	NM_053759	**1,39**	ureteric bud development
Zc4h2	zinc finger, C4H2 domain containing	NM_001126374	**1,38**	
Hbxip	hepatitis B virus x interacting protein	NM_001106462	**1,38**	anti-apoptosis
Snn	stannin	NM_001034083	**1,38**	
Amigo1	adhesion molecule with Ig like domain 1	NM_206881	**1,38**	cell adhesion
Znrf2	zinc and ring finger 2	NM_001108628	**1,38**	
Cenpv	centromere protein V	XM_002724504 /// XM_577104	**1,38**	metabolic process

Hmgb3	high mobility group box 3	NM_001173341 /// XM_001067329 /// XM_002727293 /// XM_002730310 /// XM_223440	**1,38**	negative regulation of B cell differentiation
Nap1l3	nucleosome assembly protein 1-like 3	NM_133402	**1,38**	nucleosome assembly
Nubp1	nucleotide binding protein 1	NM_001009619	**1,38**	cellular iron ion homeostasis
Lrsam1	leucine rich repeat and sterile alpha motif containing 1	NM_001107833	**1,38**	protein polyubiquitination
Xrcc5	X-ray repair complementing defective repair in Chinese hamster cells 5	NM_177419	**1,38**	double-strand break repair
Ccdc124	coiled-coil domain containing 124	NM_001106071	**1,37**	
Tmem206	transmembrane protein 206	NM_001007679	**1,37**	
Pcgf2	polycomb group ring finger 2	NM_001105836	**1,37**	negative regulation of transcription from RNA polymerase II promoter
Lrrc20	leucine rich repeat containing 20	NM_001109171	**1,37**	
Dazap2	DAZ associated protein 2	NM_001013107	**1,37**	
Hmg20b	high mobility group 20 B	NM_001108731	**1,37**	
Mrpl44	mitochondrial ribosomal protein L44	NM_001031650	**1,37**	RNA processing
Sts	steroid sulfatase	NM_012661	**1,37**	lipid metabolic process
Calm3	calmodulin 3	NM_012518	**1,37**	muscle contraction
Mllt6	Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); tran	XM_001081378 /// XM_239329	**1,37**	
Ier3	immediate early response 3	NM_212505	**1,37**	
Ptgr2	prostaglandin reductase 2	NM_001015009	**1,37**	metabolic process
Aatk	apoptosis-associated tyrosine kinase	NM_001168703	**1,37**	apoptosis
Abcc3	ATP-binding cassette, sub-family C (CFTR/MRP), member 3	NM_080581	**1,37**	transport
Jmjd5	jumonji domain containing 5	NM_001037196	**1,37**	G2/M transition of mitotic cell cycle
Mfng	MFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase	NM_199110	**1,37**	pattern specification process
Ccdc52	coiled-coil domain containing 52	NM_001008285	**1,37**	cell cycle
Cast	calpastatin	NM_001033715 /// NM_001033716 /// NM_053295	**1,37**	myoblast fusion
Lias	lipoic acid synthetase	NM_001012037	**1,37**	inflammatory response
Ccl2	chemokine (C-C motif) ligand 2	NM_031530	**1,37**	response to hypoxia
Tubb3	tubulin, beta 3	NM_139254	**1,37**	neuron migration
Plscr3	phospholipid scramblase 3	NM_001012139	**1,36**	glucose homeostasis
Fuca2	fucosidase, alpha-L- 2, plasma	NM_001004218	**1,36**	carbohydrate metabolic process
Prkcq	protein kinase C, theta	XM_001064127 /// XM_341553	**1,36**	response to hypoxia
Arrdc2	arrestin domain containing 2	NM_001107303	**1,36**	signal transduction
Grik2	glutamate receptor, ionotropic, kainate 2	NM_019309	**1,36**	behavioral fear response
Aip	aryl-hydrocarbon receptor-interacting protein	NM_172327	**1,36**	protein folding
Pdzd4	PDZ domain containing 4	NM_001135836	**1,36**	
Rab7l1	RAB7, member RAS oncogene family-like 1	NM_133590	**1,36**	transport
Banf1	barrier to autointegration factor 1	NM_053631	**1,36**	DNA integration
Epc2	enhancer of polycomb homolog 2 (Drosophila)	NM_001108581	**1,36**	
Atp6ap2	ATPase, H+ transporting, lysosomal accessory protein 2	XM_001060853 /// XM_217592	**1,36**	angiotensin maturation
Nek7	NIMA (never in mitosis gene a)-related kinase 7	NM_001108346	**1,36**	protein phosphorylation
Acot2	Acyl-CoA thioesterase 2	NM_138907	**1,36**	very long-chain fatty acid metabolic process

Rnf123	ring finger protein 123	NM_001191580 /// XM_002727136 /// XM_002729963	**1,35**	
Tmem147	transmembrane protein 147	NM_001038494	**1,35**	
Podxl2	podocalyxin-like 2	NM_001106607	**1,35**	
Manbal	mannosidase, beta A, lysosomal-like	NM_001173380 /// XM_001067976 /// XM_002726286 /// XM_002729245 /// XM_575279	**1,35**	
Atp6v1e1	ATPase, H+ transporting, lysosomal V1 subunit E1	NM_198745	**1,35**	ATP catabolic process
Ankrd40	ankyrin repeat domain 40	NM_001134699	**1,35**	
Rab25	RAB25, member RAS oncogene family	NM_001107687	**1,35**	small GTPase mediated signal transduction
Nacc2	nucleus accumbens associated 2, BEN and BTB (POZ) domain containing	NM_001100533	**1,35**	
Fbxo23	F-box only protein 23	NM_001013138	**1,35**	
Kctd13	potassium channel tetramerisation domain containing 13	NM_198736	**1,35**	DNA replication
Qsox2	quiescin Q6 sulfhydryl oxidase 2	NM_001109434	**1,35**	cell redox homeostasis
Tysnd1	trypsin domain containing 1	NM_001108932	**1,35**	proteolysis
Mrpl54	mitochondrial ribosomal protein L54	NM_001106770	**1,35**	
Reep6	receptor accessory protein 6	NM_001013218	**1,34**	
Timp2	TIMP metallopeptidase inhibitor 2	NM_021989	**1,34**	spermatogenesis
Igbp1	immunoglobulin (CD79A) binding protein 1	NM_031624	**1,34**	response to biotic stimulus
Ergic3	ERGIC and golgi 3	NM_001106533	**1,34**	
Pold4	polymerase (DNA-directed), delta 4	NM_001013195	**1,34**	positive regulation of endothelial cell proliferation
Bloc1s1	biogenesis of lysosomal organelles complex-1, subunit 1	NM_001105941	**1,34**	post-Golgi vesicle-mediated transport
Ocel1	occludin/ELL domain containing 1	NM_001106065	**1,34**	
Aplp2	amyloid beta (A4) precursor-like protein 2	XM_001056214 /// XM_343513	**1,34**	suckling behavior
Bdh1	3-hydroxybutyrate dehydrogenase, type 1	NM_053995	**1,34**	liver development
Gba	glucosidase, beta, acid	NM_001127639	**1,34**	carbohydrate metabolic process
Mrps18a	mitochondrial ribosomal protein S18A	NM_198756	**1,34**	translation
Gle1	GLE1 RNA export mediator homolog (yeast)	NM_001025731	**1,34**	transport
Pnkd	paroxysmal nonkinesiogenic dyskinesia	NM_001134750 /// NM_001134751 /// NM_001134753	**1,34**	
Clpb	ClpB caseinolytic peptidase B homolog (E. coli)	NM_022947	**1,34**	cellular response to heat
Stxbp1	syntaxin binding protein 1	NM_013038	**1,34**	platelet degranulation
Ift81	intraflagellar transport 81 homolog (Chlamydomonas)	NM_199120	**1,34**	multicellular organismal development
Snca	synuclein, alpha (non A4 component of amyloid precursor)	NM_019169	**1,34**	microglial cell activation
Tspan14	Tetraspanin 14	NM_001169127	**1,34**	
Lactb2	lactamase, beta 2	NM_001024247	**1,33**	
Pnpt1	polyribonucleotide nucleotidyltransferase 1	NM_001142371	**1,33**	RNA processing
Tpp1	tripeptidyl peptidase I	NM_031357	**1,33**	proteolysis
Gstm1	glutathione S-transferase mu 1	NM_017014	**1,33**	glutathione metabolic process
Coro1a	coronin, actin binding protein 1A	NM_130411	**1,33**	phagolysosome assembly
Vtn	vitronectin	NM_019156	**1,33**	immune response
Dhx16	DEAH (Asp-Glu-Ala-His) box polypeptide 16	NM_212496	**1,33**	
Rsph9	radial spoke head 9 homolog (Chlamydomonas)	NM_001108205	**1,33**	cilium movement
Setd8 /// Setd8-ps1	SET domain containing (lysine methyltransferase) 8 /// SET domain containing (ly	XM_001072149 /// XM_002724818 /// XM_573394	**1,33**	negative regulation of transcription

Cdkn2c	cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)	NM_131902	**1,33**	regulation of cyclin-dependent protein kinase activity
Clns1a	chloride channel, nucleotide-sensitive, 1A	NM_031719	**1,33**	spliceosomal snRNP assembly
Sqstm1	sequestosome 1	NM_175843 /// NM_181550	**1,33**	positive regulation of protein phosphorylation
Atrx	alpha thalassemia/mental retardation syndrome X-linked (RAD54 homolog, S. cerevi	NM_001105757	**1,33**	DNA repair
Atp9a /// Atp9b	ATPase, class II, type 9A /// ATPase, class II, type 9B	NM_001106130 /// XM_002726282	**1,33**	ATP biosynthetic process
Sepp1	selenoprotein P, plasma, 1	NM_001083911 /// NM_019192	**1,33**	selenium metabolic process
Jmjd8	jumonji domain containing 8	NM_001014116	**1,33**	
Tmem192	transmembrane protein 192	NM_001014141	**1,33**	
Polr2g	polymerase (RNA) II (DNA directed) polypeptide G	NM_053948	**1,33**	transcription
Tm7sf3	transmembrane 7 superfamily member 3	NM_001011970	**1,33**	
Bsn	bassoon	NM_019146	**1,33**	cytoskeleton organization
Vrk1	vaccinia related kinase 1	NM_001012194	**1,33**	protein phosphorylation
Hsd17b12	hydroxysteroid (17-beta) dehydrogenase 12	NM_032066	**1,32**	steroid biosynthetic process
Camk2n1	Calcium/calmodulin-dependent protein kinase II inhibitor 1	NM_173337	**1,32**	synaptic transmission
Dnajc27	DnaJ (Hsp40) homolog, subfamily C, member 27	NM_206845	**1,32**	small GTPase mediated signal transduction
Rnf44	Ring finger protein 44	NM_001024795	**1,32**	
Gfm1	G elongation factor, mitochondrial 1	NM_053625	**1,32**	translation
Dctn6	dynactin 6	NM_001106085	**1,32**	
Cenpq	centromere protein Q	NM_001014215	**1,32**	
Chid1	chitinase domain containing 1	NM_001047854	**1,32**	carbohydrate metabolic process
Cep70	centrosomal protein 70kDa	NM_001017470	**1,32**	
Adh5	alcohol dehydrogenase 5	NM_001126120	**1,32**	retinoid metabolic process
Igfbp7	insulin-like growth factor binding protein 7	NM_001013048	**1,32**	regulation of cell growth
Bin3	bridging integrator 3	NM_001013186	**1,32**	barrier septum formation
Smyd4	SET and MYND domain containing 4	NM_001105810	**1,32**	
Cspg5	chondroitin sulfate proteoglycan 5	NM_019284 /// NM_133652	**1,32**	multicellular organismal development
Rabac1	Rab acceptor 1 (prenylated)	NM_031774	**1,32**	vesicle-mediated transport
Plekhg5	pleckstrin homology domain containing, family G (with RhoGef domain) member 5	NM_201272	**1,32**	apoptosis
Pcna	proliferating cell nuclear antigen	NM_022381	**1,32**	DNA replication
Gltscr2	glioma tumor suppressor candidate region gene 2	NM_207591	**1,32**	
Crbn	cereblon	NM_001015003	**1,32**	proteolysis
Nsg2	neuron specific gene family member 2	NM_001034152	**1,32**	dopamine receptor signaling pathway
Mapkapk5	mitogen-activated protein kinase-activated protein kinase 5	NM_001025761 /// NM_001164043	**1,32**	protein phosphorylation
Tmem59l	transmembrane protein 59-like	XM_001067996 /// XM_224729	**1,32**	
Cnot8	CCR4-NOT transcription complex, subunit 8	NM_001008382	**1,32**	
Commd7	COMM domain containing 7	NM_001030029	**1,32**	negative regulation of transcription
Phf20	PHD finger protein 20	NM_001107795	**1,32**	
Cdk5rap2	CDK5 regulatory subunit associated protein 2	NM_173134 /// XM_001059116 /// XM_575844	**1,31**	microtubule cytoskeleton organization
Lxn	latexin	NM_031655	**1,31**	negative regulation of endopeptidase activity
Mtus1	mitochondrial tumor suppressor 1	NM_178093	**1,31**	cell cycle
Mex3b	mex3 homolog B (C. elegans)	NM_001191626 /// XM_001068105 /// XM_218846	**1,31**	

Cyth2	cytohesin 2	NM_053911	**1,31**	dendrite development
Tmpo	thymopoietin	NM_012887	**1,31**	nuclear envelope reassembly
Eif2b3	eukaryotic translation initiation factor 2B, subunit 3 gamma	NM_133609	**1,31**	translation
Tcf19	transcription factor 19	NM_213561	**1,31**	
H3f3b	H3 histone, family 3B	NM_053985	**1,31**	nucleosome assembly
Tusc2	tumor suppressor candidate 2	NM_001109297	**1,31**	
Rnf208	ring finger protein 208	NM_001109195	**1,31**	
Tmem176a	transmembrane protein 176A	NM_001039008	**1,31**	
Tspan6	tetraspanin 6	NM_001100672	**1,31**	positive regulation of I-kappaB kinase/NF-kappaB cascade
Exoc7	exocyst complex component 7	NM_022691	**1,31**	transport
Ephx1	epoxide hydrolase 1, microsomal	NM_001034090 /// NM_012844	**1,31**	cellular aromatic compound metabolic process
Zfp91	zinc finger protein 91	NM_001169120	**1,31**	
Wdr8	WD repeat domain 8	NM_001014262	**1,31**	
Prdm2	PR domain containing 2, with ZNF domain	NM_001077648	**1,31**	transcription
Alkbh2	alkB, alkylation repair homolog 2 (E. coli)	NM_001126273	**1,31**	DNA dealkylation involved in DNA repair
Sil1	SIL1 homolog, endoplasmic reticulum chaperone (S. cerevisiae)	NM_199376	**1,31**	transport
Morn1	MORN repeat containing 1	NM_001005544	**1,31**	
Spata6	spermatogenesis associated 6	NM_134392	**1,31**	multicellular organismal development
Stmn1	stathmin 1	NM_017166	**1,31**	microtubule depolymerization
Tnfsf12	tumor necrosis factor ligand superfamily member 12	NM_001001513	**1,31**	immune response
Slpi	secretory leukocyte peptidase inhibitor	NM_053372	**1,31**	
Snx9	sorting nexin 9	NM_001127637	**1,31**	cell communication
Abhd8	abhydrolase domain containing 8	NM_001107301	**1,30**	
Ddx20	DEAD (Asp-Glu-Ala-Asp) box polypeptide 20	NM_001191711 /// XM_001066705 /// XM_227558	**1,30**	negative regulation of transcription from RNA polymerase II promoter
Mllt4	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); tran	NM_013217	**1,30**	cell adhesion
Parl	presenilin associated, rhomboid-like	NM_001035249	**1,30**	
Decr2 /// Rab11fip3	2,4-dienoyl CoA reductase 2, peroxisomal /// RAB11 family interacting protein 3	NM_171996 /// XM_001062691 /// XM_002724662 /// XM_002727755 /// XM_220262	**1,30**	cytokinesis
Evi2a	ecotropic viral integration site 2A	NM_001044287	**1,30**	
Sirt5	sirtuin (silent mating type information regulation 2 homolog) 5 (S. cerevisiae)	NM_001004256	**1,30**	chromatin silencing
Slit2	slit homolog 2 (Drosophila)	NM_022632	**1,30**	luteolysis
Bace2	beta-site APP-cleaving enzyme 2	NM_001002802	**1,30**	proteolysis
Asmtl	acetylserotonin O-methyltransferase-like	NM_001105915	**1,30**	
Pmp22	peripheral myelin protein 22	NM_017037	**1,30**	cell cycle
Hn1	hematological and neurological expressed 1	NM_001005876	**1,30**	
Plod1	procollagen-lysine 1, 2-oxoglutarate 5-dioxygenase 1	NM_053827	**1,30**	response to hypoxia
Pola1	polymerase (DNA directed), alpha 1	NM_053479 /// XM_001064735 /// XM_242396	**1,30**	S phase of mitotic cell cycle
Down-regulated				
Mybpc1	myosin binding protein C, slow type	NM_001100758 /// XM_001076591 /// XM_343196	**-7,42**	muscle contraction

Hspb7	heat shock protein family, member 7 (cardiovascular)	NM_031607	**-4,50**	response to stress
Fgl2	fibrinogen-like 2	NM_053455	**-4,04**	signal transduction
Bean	brain expressed, associated with Nedd4	XM_001057606 /// XM_341638	**-3,59**	
Pycr1	pyrroline-5-carboxylate reductase 1	NM_001105857	**-3,10**	proline biosynthetic process
Enpep	glutamyl aminopeptidase	NM_022251	**-2,97**	proteolysis
RT1-Ba	RT1 class II antigen, Ba chain	NM_001008831	**-2,96**	antigen processing and presentation of peptide
Rbp4	retinol binding protein 4, plasma	NM_013162	**-2,74**	eye development
Ptprz1	protein tyrosine phosphatase, receptor-type, Z polypeptide 1	NM_001170685 /// NM_013080	**-2,68**	protein dephosphorylation
Sstr2	somatostatin receptor 2	NM_019348	**-2,66**	regulation of muscle contraction
Clcnkb	chloride channel Kb	NM_173103	**-2,60**	transport
Gpc3	glypican 3	NM_012774	**-2,60**	branching involved in ureteric bud morphogenesis
Dlk1	delta-like 1 homolog (Drosophila)	NM_053744	**-2,57**	embryo development
Colec11	collectin sub-family member 11	XM_002726687 /// XM_002729610	**-2,49**	
Grb10	growth factor receptor bound protein 10	NM_001109093	**-2,43**	signal transduction
Abcc8	ATP-binding cassette, sub-family C (CFTR/MRP), member 8	NM_013039	**-2,40**	transport
Es1	esterase 1 /// microsomal carboxyesterase E1-like	NM_017004 /// XM_002725379	**-2,35**	metabolic process
Ntrk2	neurotrophic tyrosine kinase, receptor, type 2	NM_001163168 /// NM_001163169 /// NM_012731	**-2,35**	vasculogenesis
Nckap1l	NCK associated protein 1 like	NM_001108119	**-2,31**	B cell homeostasis
Ccnd2	cyclin D2	NM_022267	**-2,28**	G1/S transition of mitotic cell cycle
Ppm1j	protein phosphatase 1J	NM_001005540	**-2,10**	protein dephosphorylation
Rem2	RAS (RAD and GEM) like GTP binding 2	NM_022685	**-2,09**	regulation of transcription, DNA-dependent
Slc16a1	solute carrier family 16, member 1 (monocarboxylic acid transporter 1)	NM_012716	**-2,08**	transport
Rab3d	RAB3D, member RAS oncogene family	NM_080580	**-2,05**	transport
H2-Ea	MHC class II RT1D alpha chain antigen	NM_001008847	**-2,04**	antigen processing and presentation of peptide or polysaccharide anti
Amigo3	adhesion molecule with Ig like domain 3	NM_178144	**-2,02**	cell adhesion
Ndn	necdin homolog (mouse)	NM_001008558	**-2,01**	neuron migration
Vldlr	very low density lipoprotein receptor	NM_013155	**-1,98**	response to hypoxia
Fshb	follicle stimulating hormone, beta polypeptide	NM_001007597	**-1,97**	transforming growth factor beta receptor signaling pathway
HLA-drb1	MHC class II RT1D beta1 chain antigen	NM_001008884	**-1,96**	antigen processing and presentation of peptide or polysaccharide anti
Col24a1	collagen, type XXIV, alpha 1	XM_002726055 /// XM_575056	**-1,96**	cell adhesion
Rcn3	reticulocalbin 3, EF-hand calcium binding domain	NM_001008694	**-1,94**	
Oaf	OAF homolog (Drosophila)	NM_001014090	**-1,93**	
Tubb6	tubulin, beta 6	NM_001025675	**-1,93**	microtubule-based process
Ace	angiotensin I converting enzyme (peptidyl-dipeptidase A) 1	NM_012544	**-1,91**	response to hypoxia
Scnn1g	sodium channel, nonvoltage-gated 1, gamma	NM_017046	**-1,88**	response to hypoxia
Spp1	secreted phosphoprotein 1	NM_012881	**-1,87**	ossification
Lhb	luteinizing hormone beta	NM_001033975 /// NM_012858	**-1,87**	
Kcnj11	potassium inwardly rectifying channel, subfamily J, member 11	NM_031358	**-1,87**	glucose metabolic process
Cd74	Cd74 molecule, major histocompatibility complex, class II invariant chain	NM_013069	**-1,86**	activation of MAPK activity

Elovl5	ELOVL family member 5, elongation of long chain fatty acids (yeast)	NM_134382	**-1,86**	fatty acid biosynthetic process
Mapkapk3	mitogen-activated protein kinase-activated protein kinase 3	NM_001012127	**-1,85**	protein phosphorylation
Sfxn1	sideroflexin 1	NM_001012213	**-1,84**	transport
Bcan	brevican	NM_001033665 /// NM_012916	**-1,83**	cell adhesion
Lamc2	laminin, gamma 2	NM_001100640	**-1,83**	cell adhesion
Spata1	spermatogenesis associated 1	NM_001014177	**-1,81**	proteolysis
Lepre1	leucine proline-enriched proteoglycan (leprecan) 1	NM_053667	**-1,80**	cell growth
Slc41a2	Solute carrier family 41, member 2	NM_001108742	**-1,80**	
Aldh18a1	aldehyde dehydrogenase 18 family, member A1	NM_001108524	**-1,79**	proline biosynthetic process
Htatip2	HIV-1 tat interactive protein 2, homolog (human)	NM_001106263	**-1,78**	cellular amino acid metabolic process
Fxyd6	FXYD domain-containing ion transport regulator 6	NM_022005	**-1,76**	transport
Rnd3	Rho family GTPase 3	NM_001007641	**-1,76**	small GTPase mediated signal transduction
Usp13	Ubiquitin specific protease 13 (isopeptidase T-3)	NM_001107665	**-1,76**	ubiquitin-dependent protein catabolic process
Fam114a1	Family with sequence similarity 114, member A1	XM_001078310 /// XM_573600	**-1,76**	
Ptpn3	protein tyrosine phosphatase, non-receptor type 3	XM_001055793 /// XM_001059757	**-1,75**	protein dephosphorylation
Adamtsl4	ADAMTS-like 4	NM_001034012	**-1,75**	apoptosis
Pcdh21	protocadherin 21	NM_053572	**-1,75**	cell adhesion
Ppap2c	phosphatidic acid phosphatase type 2c	NM_139252	**-1,74**	
Mx2	myxovirus (influenza virus) resistance 2	NM_134350	**-1,73**	response to virus
Rtn4r	reticulon 4 receptor	NM_053613	**-1,72**	axonogenesis
Lyz2	lysozyme 2	NM_012771	**-1,72**	metabolic process
Camk1g	calcium/calmodulin-dependent protein kinase IG	NM_182842	**-1,72**	protein phosphorylation
Gmppb	GDP-mannose pyrophosphorylase B	NM_001108781	**-1,71**	biosynthetic process
Fitm1	fat storage-inducing transmembrane protein 1	NM_001106037	**-1,69**	positive regulation of sequestering of triglyceride
Epor	erythropoietin receptor	NM_017002	**-1,69**	signal transduction
Plat	plasminogen activator, tissue	NM_013151	**-1,67**	response to hypoxia
Chpt1	choline phosphotransferase 1	NM_001007750	**-1,66**	phosphatidylcholine biosynthetic process
Dsp	desmoplakin	XM_001058477 /// XM_225259	**-1,66**	cell-cell adhesion
Dpp3	dipeptidylpeptidase 3 /// similar to Dipeptidyl-peptidase 3 (Dipeptidyl-peptidas	NM_053748 /// XM_001053134	**-1,66**	proteolysis
Heatr5a	HEAT repeat containing 5A	XM_001075318 /// XM_343061	**-1,65**	
Gga2	golgi associated, gamma adaptin ear containing, ARF binding protein 2	NM_001100519	**-1,64**	intracellular protein transport
Arhgap9	Rho GTPase activating protein 9	NM_001012198 /// NM_001080789	**-1,63**	signal transduction
Pabpc4	poly(A) binding protein, cytoplasmic 4	NM_001100538	**-1,63**	
Srm	spermidine synthase	NM_053464	**-1,61**	spermidine biosynthetic process
Scly	selenocysteine lyase	NM_001007755	**-1,61**	metabolic process
Tesc	tescalcin	XM_001076953 /// XM_213790	**-1,61**	negative regulation of cell proliferation
Sec24d	SEC24 family, member D (S. cerevisiae)	NM_001107723	**-1,60**	transport
Trim5	tripartite motif-containing 5	NM_001014023	**-1,60**	protein trimerization
Map2k3	mitogen activated protein kinase kinase 3	NM_001100674	**-1,59**	MAPKKK cascade
Gsdma	gasdermin A	NM_001108297	**-1,59**	induction of apoptosis
Prrc1	proline-rich coiled-coil 1	NM_001033887	**-1,59**	
Pelo	pelota homolog (Drosophila)	NM_001007634	**-1,59**	translation
Kcnk10	potassium channel, subfamily K, member 10	NM_023096	**-1,59**	transport
Nab1	Ngfi-A binding protein 1	NM_022856	**-1,58**	endochondral ossification
Scn5a	sodium channel, voltage-gated, type V, alpha subunit	NM_001160162 /// NM_013125	**-1,57**	transport

Trim54	tripartite motif-containing 54	NM_001013217	**-1,56**	negative regulation of microtubule depolymerization
Gltpd1	glycolipid transfer protein domain containing 1	NM_001007703	**-1,56**	glycolipid transport
Fkbp11	FK506 binding protein 11	NM_001013105	**-1,56**	protein folding
Gas5	growth arrest specific 5	NR_002704	**-1,55**	
Ifi44	interferon-induced protein 44	NM_001107729	**-1,55**	
Steap2	six transmembrane epithelial antigen of the prostate 2	NM_001107846	**-1,54**	Golgi to plasma membrane transport
Tmem165	transmembrane protein 165	NM_001024802	**-1,54**	
Spire1	spire homolog 1 (Drosophila)	NM_001107381	**-1,54**	Golgi vesicle transport
Samd4a	Sterile alpha motif domain containing 4A	NM_001107254	**-1,54**	regulation of translation
Sstr3	somatostatin receptor 3	NM_133522	**-1,54**	signal transduction
Itsn1	intersectin 1 (SH3 domain protein)	NM_001136096 /// NM_019227	**-1,54**	exocytosis
Rcn1	reticulocalbin 1, EF-hand calcium binding domain	NM_001108586	**-1,54**	
Rtn4r	reticulon 4 receptor	NM_053613	**-1,53**	axonogenesis
Slc38a10	solute carrier family 38, member 10	XM_001081798 /// XM_001081800 /// XM_002724582 /// XM_002727846 /// XM_002727847	**-1,53**	
Mtmr2	myotubularin related protein 2	NM_001108123	**-1,53**	dephosphorylation
Acsl1	acyl-CoA synthetase long-chain family member 1	NM_012820	**-1,52**	lipid metabolic process
Rps6ka1	ribosomal protein S6 kinase polypeptide 1	NM_031107	**-1,52**	protein phosphorylation
Fkbp14	FK506 binding protein 14	NM_001013210	**-1,52**	protein folding
Golt1b	golgi transport 1 homolog B (S. cerevisiae)	NM_001113783	**-1,51**	vesicle-mediated transport
St8sia3	ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 3	NM_013029	**-1,50**	protein glycosylation
Pfkfb4	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4	NM_019333	**-1,50**	fructose metabolic process
Ltbp4	latent transforming growth factor beta binding protein 4	NM_001170336	**-1,50**	transforming growth factor beta receptor signaling pathway
Tmem150a	transmembrane protein 150A	NM_139107	**-1,49**	catabolic process
Iqsec3	IQ motif and Sec7 domain 3	NM_207617	**-1,48**	regulation of ARF protein signal transduction
Ednra	endothelin receptor type A	NM_012550	**-1,48**	patterning of blood vessels
Mlec	malectin	NM_001013983	**-1,47**	carbohydrate metabolic process
Abcc5	ATP-binding cassette, sub-family C (CFTR/MRP), member 5	NM_053924	**-1,47**	transport
Oasl	2'-5'-oligoadenylate synthetase-like	NM_001009681	**-1,47**	immune response
Grb14	growth factor receptor bound protein 14	NM_031623	**-1,47**	signal transduction
Cnih	cornichon homolog (Drosophila)	NM_001106029	**-1,46**	intracellular signaling pathway
Ptprk	protein tyrosine phosphatase, receptor type, K, extracellular region	NM_001029902	**-1,46**	protein dephosphorylation
Ap2a2	adaptor-related protein complex 2, alpha 2 subunit	NM_031008	**-1,46**	transport
Hr	hairless	NM_024364	**-1,46**	transcription
Otud7a	OTU domain containing 7A	XM_001058176 /// XM_219703	**-1,46**	
Degs1	degenerative spermatocyte homolog 1, lipid desaturase (Drosophila)	NM_053323	**-1,46**	lipid metabolic process
Plcg2	phospholipase C, gamma 2	NM_017168	**-1,46**	follicular B cell differentiation
Gcs1	glucosidase 1	NM_031749	**-1,46**	metabolic process
Plxna3	plexin A3	NM_001107581	**-1,46**	signal transduction
Nrsn1	neurensin 1	NM_001106109	**-1,45**	nervous system development
Ivns1abp	influenza virus NS1A binding protein	NM_001047085	**-1,44**	

Camk2b	calcium/calmodulin-dependent protein kinase II beta	NM_001042354 /// NM_001042356 /// NM_021739	**-1,44**	G1/S transition of mitotic cell cycle
Slc35e1	solute carrier family 35, member E1	NM_001109107	**-1,44**	transport
Tmem185a	transmembrane protein 185A	NM_001135712	**-1,44**	
Homer2	homer homolog 2 (Drosophila)	NM_053309	**-1,44**	
Iars	isoleucyl-tRNA synthetase	NM_001100572	**-1,44**	translation
Igsf1	immunoglobulin superfamily, member 1	NM_175763	**-1,43**	signal transduction
Chka	choline kinase alpha	NM_017127	**-1,43**	phosphatidylethanolamine biosynthetic process
Csgalnact2	chondroitin sulfate N-acetylgalactosaminyltransferase 2	NM_001106616	**-1,43**	proteoglycan biosynthetic process
Cad	carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase	NM_001105710	**-1,43**	'de novo' pyrimidine base biosynthetic process
Col2a1	collagen, type II, alpha 1	NM_012929	**-1,43**	skeletal system development
Doc2b	double C2-like domains, beta	NM_031142	**-1,43**	transport
Copb2	coatomer protein complex, subunit beta 2 (beta prime)	NM_021765	**-1,42**	transport
Rab2b	RAB2B, member RAS oncogene family	NM_001037645	**-1,42**	small GTPase mediated signal transduction
Tmem39a	transmembrane protein 39a	NM_001013865	**-1,42**	
Isg20	interferon stimulated exonuclease gene 20	NM_001008510	**-1,42**	DNA catabolic process, exonucleolytic
Dnajb5	DnaJ (Hsp40) homolog, subfamily B, member 5	NM_001108004	**-1,42**	negative regulation of transcription from RNA polymerase II promoter
Col1a1	collagen, type I, alpha 1	NM_053304	**-1,42**	skeletal system development
Synm	synemin, intermediate filament protein	NM_001134858	**-1,42**	
Hdlbp	high density lipoprotein binding protein	NM_172039	**-1,42**	lipid metabolic process
Ppfibp1	PTPRF interacting protein, binding protein 1 (liprin beta 1)	NM_001107896	**-1,42**	
Pdyn	prodynorphin	NM_019374	**-1,41**	neuropeptide signaling pathway
Ddx25	DEAD (Asp-Glu-Ala-Asp) box polypeptide 25	NM_031630	**-1,41**	ATP catabolic process
Srp72	signal recognition particle 72	NM_001170601 /// XM_001066751 /// XM_001074215	**-1,41**	SRP-dependent cotranslational protein targeting to membrane
Sez6l2	seizure related 6 homolog (mouse)-like 2	NM_001107550	**-1,41**	
Fndc3b	fibronectin type III domain containing 3B	NM_001191704 /// XM_001057133 /// XM_226988	**-1,41**	positive regulation of fat cell differentiation
Slc2a4	solute carrier family 2 (facilitated glucose transporter), member 4	NM_012751	**-1,41**	transport
Slc35e3	solute carrier family 35, member E3	NM_001134687	**-1,41**	
Uba5	ubiquitin-like modifier activating enzyme 5	NM_001009669	**-1,40**	metabolic process
Golga3	golgi autoantigen, golgin subfamily a, 3	NM_001107847	**-1,40**	
Marveld1	MARVEL domain containing 1	NM_001107590	**-1,40**	
Cobl	cordon-bleu homolog (mouse)	NM_001107236	**-1,40**	neural tube closure
Txndc11	thioredoxin domain containing 11	NM_001127532	**-1,40**	cell redox homeostasis
Syncrip	Synaptotagmin binding, cytoplasmic RNA interacting protein	NM_001047916	**-1,40**	mRNA processing
Fam107a	family with sequence similarity 107, member A /// downregulated in renal cell ca	NM_001025129 /// XM_002725042 /// XM_002725043	**-1,39**	regulation of cell growth
Fam98a	family with sequence similarity 98, member A	NM_001014073	**-1,39**	
Oxnad1	oxidoreductase NAD-binding domain containing 1	NM_001107295	**-1,39**	oxidation reduction
Mark1	MAP/microtubule affinity-regulating kinase 1	NM_053947	**-1,39**	microtubule cytoskeleton organization
Ppapdc1b	phosphatidic acid phosphatase type 2 domain containing 1B	NM_001109411	**-1,39**	

Ostc	oligosaccharyltransferase complex subunit	NM_001108566	**-1,39**	
Gramd1b	GRAM domain containing 1B	NM_001191616 /// XM_001059472 /// XM_217113	**-1,39**	
Icam5	intercellular adhesion molecule 5, telencephalin	NM_001172079 /// XM_001077293 /// XM_233737	**-1,39**	phagocytosis
Lynx1	Ly6/neurotoxin 1	NM_001130546	**-1,38**	pathogenesis
Nlgn3	Neuroligin 3	NM_134336	**-1,38**	regulation of respiratory gaseous exchange by neurological system pro
Adamtsl2	ADAMTS-like 2	XM_001078833 /// XM_231125	**-1,38**	
Cnih2	cornichon homolog 2 (Drosophila)	NM_001025132	**-1,38**	intracellular signaling pathway
Pcp4	Purkinje cell protein 4	NM_013002	**-1,38**	
Aldh1l2	aldehyde dehydrogenase 1 family, member L2	NM_001191778 /// XM_001079663 /// XM_235005	**-1,38**	one-carbon metabolic process
Ubash3b	ubiquitin associated and SH3 domain containing, B	NM_001191792 /// XM_001065047 /// XM_236104	**-1,38**	
Bzw1	basic leucine zipper and W2 domains 1	NM_198789	**-1,38**	transcription
Zcchc12	zinc finger, CCHC domain containing 12	NM_001014065	**-1,37**	transcription
Zfp853	zinc finger protein 853	XM_002724787 /// XM_221915	**-1,37**	
Cables1	Cdk5 and Abl enzyme substrate 1	NM_001107404	**-1,37**	nervous system development
Ptk7	PTK7 protein tyrosine kinase 7	NM_001106889	**-1,37**	neural tube closure
Ttyh3	tweety homolog 3 (Drosophila)	NM_001107124	**-1,37**	
Man1b1	mannosidase, alpha, class 1B, member 1	XM_001077558 /// XM_575086	**-1,37**	metabolic process
Glb1l2	galactosidase, beta 1-like 2	NM_001192018 /// XM_001053731 /// XM_578717	**-1,37**	carbohydrate metabolic process
Fam98a	family with sequence similarity 98, member A	NM_001014073	**-1,37**	
Dgkz	diacylglycerol kinase zeta	NM_031143	**-1,36**	activation of protein kinase C activity by G-protein coupled receptor
Aldh1a2	aldehyde dehydrogenase 1 family, member A2	NM_053896	**-1,36**	blood vessel development
Ddx39	DEAD (Asp-Glu-Ala-Asp) box polypeptide 39	NM_053563	**-1,35**	nuclear mRNA splicing, via spliceosome
Alox15	arachidonate 15-lipoxygenase	NM_031010	**-1,35**	ossification
Ppargc1b	peroxisome proliferator-activated receptor gamma, coactivator 1 beta	NM_176075	**-1,35**	transcription
Znf536	zinc finger protein 536	XM_001077206 /// XM_218522	**-1,35**	
Atg9a	ATG9 autophagy related 9 homolog A (S. cerevisiae)	NM_001014218	**-1,35**	autophagic vacuole assembly
Epas1	endothelial PAS domain protein 1	NM_023090	**-1,35**	angiogenesis
Eprs	glutamyl-prolyl-tRNA synthetase	NM_001024238	**-1,35**	translation
Ap3m1	adaptor-related protein complex 3, mu 1 subunit	NM_133593	**-1,35**	transport
Zyx	zyxin	NM_053761	**-1,35**	regulation of inflammatory response
Ggct	gamma-glutamyl cyclotransferase	NM_001108629	**-1,35**	
Fhdc1	FH2 domain containing 1	NM_001106437	**-1,35**	cellular component organization
Myl9	myosin, light chain 9, regulatory	NM_001100885	**-1,35**	muscle contraction
Rab27a	RAB27A, member RAS oncogene family	NM_017317	**-1,34**	protein targeting
Hyou1	hypoxia up-regulated 1	NM_001034028 /// NM_138867	**-1,34**	response to hypoxia
Atf5	activating transcription factor 5	NM_172336	**-1,34**	transcription
Hcfc2	host cell factor C2	NM_001008357	**-1,34**	
Tram1	translocation associated membrane protein 1	NM_001007701	**-1,34**	transport
Lnx2	ligand of numb-protein X 2	NM_001108329	**-1,34**	protein homooligomerization
Nos1ap	nitric oxide synthase 1 (neuronal) adaptor protein	NM_138922	**-1,34**	neurotransmitter secretion
Umps	uridine monophosphate synthetase	NM_001025402	**-1,34**	'de novo' pyrimidine base biosynthetic process

Dgka	diacylglycerol kinase, alpha	NM_080787	**-1,34**	activation of protein kinase C activity by G-protein coupled receptor
Ehd4	EH-domain containing 4	NM_139324	**-1,34**	pinocytosis
Trabd	TraB domain containing	NM_001106788	**-1,33**	
Prdx4	peroxiredoxin 4	NM_053512	**-1,33**	cell redox homeostasis
Fig4	FIG4 homolog (S. cerevisiae)	NM_001047096	**-1,33**	vacuole organization
Ipo4	importin 4	NM_001106038	**-1,33**	intracellular protein transport
Ddx19a /// Ddx19b	DEAD (Asp-Glu-Ala-Asp) box polypeptide 19a /// DEAD (Asp-Glu-Ala-As) box polypep	NM_001005381 /// NM_001005895 /// XM_001075251 /// XM_002725392	**-1,32**	induction of apoptosis
Psmd5	proteasome (prosome, macropain) 26S subunit, non-ATPase, 5	NM_001106569	**-1,32**	anaphase-promoting complex-dependent proteasomal ubiquitin-dependent
Mxra8	matrix-remodelling associated 8	NM_001007002	**-1,32**	
Necab3	N-terminal EF-hand calcium binding protein 3	NM_001098724	**-1,32**	antibiotic biosynthetic process
Ccdc28b	coiled coil domain containing 28B	NM_001134689	**-1,32**	
Mier2	mesoderm induction early response 1, family member 2	NM_001108737	**-1,32**	
Slc20a2	solute carrier family 20 (phosphate transporter), member 2	NM_017223	**-1,32**	transport
Tmem57	transmembrane protein 57	NM_001025699	**-1,31**	
Pdp2	pyruvate dehyrogenase phosphatase catalytic subunit 2	NM_145091	**-1,31**	protein dephosphorylation
Fam101b	family with sequence similarity 101, member B	NM_001007611	**-1,31**	
Galnt1	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase	NM_024373	**-1,31**	protein O-linked glycosylation
Ctdspl	CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small phosphatas	NM_001106865	**-1,31**	
Cdc42bpa	CDC42 binding protein kinase alpha	NM_053657	**-1,31**	microtubule cytoskeleton organization
Arfgap1	ADP-ribosylation factor GTPase activating protein 1	NM_145090	**-1,31**	transport
Tmem164	transmembrane protein 164	NM_001109014	**-1,31**	
Dopey2	dopey family member 2	NM_001191660 /// XM_001055500 /// XM_002724703 /// XM_002727866 /// XM_221640	**-1,30**	
Batf3	basic leucine zipper transcription factor, ATF-like 3	NM_021865	**-1,30**	transcription
Dad1	defender against cell death 1	NM_138910	**-1,30**	blastocyst development
Diaph1	Diaphanous homolog 1 (Drosophila)	NM_001107393	**-1,30**	cellular component organization
Fam20c	family with sequence similarity 20, member C	NM_001012238	**-1,30**	

* *P* value = 0.029, was obtained by permutation analysis. Fold change ≥ 1.3.