Table S2. Differentially expressed genes between WT control and VILI-exposed WT mice

| Gene symbol | Gene title | FC[a] | FDR (%) |
|---|---|---|---|
| *Zfp467* | zinc finger protein 467 | 0.05 | 0.0 |
| *Hspa1a* | heat shock protein 1A | 0.06 | 0.0 |
| *Hspa1b* | heat shock protein 1B | 0.06 | 0.0 |
| *Gm1337* | predicted gene 1337 | 0.07 | 0.0 |
| *Gm15453 /// Rbm3* | predicted gene 15453 /// RNA binding motif protein 3 | 0.09 | 0.0 |
| *Dbp* | D site albumin promoter binding protein | 0.10 | 0.0 |
| *Car3* | carbonic anhydrase 3 | 0.13 | 0.0 |
| *Gm8267* | predicted gene 8267 | 0.15 | 0.0 |
| *Foxj1* | forkhead box J1 | 0.18 | 0.0 |
| *Sox18* | SRY-box containing gene 18 | 0.19 | 0.0 |
| *Per3* | Period homolog 3 (Drosophila) | 0.19 | 0.0 |
| *2210020M01Rik* | RIKEN cDNA 2210020M01 gene | 0.19 | 0.0 |
| *Fbxo30* | F-box protein 30 | 0.20 | 0.0 |
| *Klhdc5* | kelch domain containing 5 | 0.20 | 0.0 |
| *Akap14* | A kinase (PRKA) anchor protein 14 | 0.20 | 0.0 |
| *Fam13a* | family with sequence similarity 13, member A | 0.21 | 0.0 |
| *Klf2* | Kruppel-like factor 2 (lung) | 0.21 | 0.0 |
| *2810055F11Rik* | RIKEN cDNA 2810055F11 gene | 0.21 | 0.0 |
| *Cyp2a4 /// Cyp2a5* | cytochrome P450, family 2, subfamily a, polypeptide 4 /// cytochrome P450, family 2, subfamily a, polypeptide 5 | 0.21 | 0.0 |
| *Thap2* | THAP domain containing, apoptosis associated protein 2 | 0.22 | 0.0 |
| *Ggta1* | glycoprotein galactosyltransferase alpha 1, 3 | 0.22 | 0.0 |
| *Rassf9* | Ras association (RalGDS/AF-6) domain family (N-terminal) member 9 | 0.23 | 0.0 |
| *Ptger2* | prostaglandin E receptor 2 (subtype EP2) | 0.23 | 0.0 |
| *Zfp667* | zinc finger protein 667 | 0.23 | 0.0 |
| *6720407P12Rik* | RIKEN cDNA 6720407P12 gene | 0.23 | 0.0 |
| *Ccdc25* | coiled-coil domain containing 25 | 0.23 | 0.0 |
| *Tppp* | tubulin polymerization promoting protein | 0.23 | 0.0 |
| *Rreb1* | ras responsive element binding protein 1 | 0.23 | 0.0 |
| *Ttc3* | tetratricopeptide repeat domain 3 | 0.24 | 0.0 |
| *Myb* | myeloblastosis oncogene | 0.24 | 0.0 |
| *AU021034* | expressed sequence AU021034 | 0.24 | 0.0 |
| *Gpr182* | G protein-coupled receptor 182 | 0.24 | 0.0 |
| *Fam47e* | family with sequence similarity 47, member E | 0.24 | 0.0 |
| *A430108G06Rik* | RIKEN cDNA A430108G06 gene | 0.24 | 0.0 |
| *Capn5* | calpain 5 | 0.25 | 0.0 |
| *2900006K08Rik* | RIKEN cDNA 2900006K08 gene | 0.25 | 0.0 |
| *D4Wsu53e* | DNA segment, Chr 4, Wayne State University 53, expressed | 0.26 | 0.0 |
| *4930451C15Rik* | RIKEN cDNA 4930451C15 gene | 0.26 | 0.0 |
| *Nck1* | non-catalytic region of tyrosine kinase adaptor protein 1 | 0.26 | 0.0 |
| *Npy1r* | neuropeptide Y receptor Y1 | 0.26 | 0.0 |
| *Calcrl* | calcitonin receptor-like | 0.26 | 0.0 |
| *Thsd1* | thrombospondin, type I, domain 1 | 0.26 | 0.0 |
| *Tekt4* | tektin 4 | 0.27 | 0.0 |

| | | | |
|---|---|---|---|
| *2210019G11Rik* | RIKEN cDNA 2210019G11 gene | 0.27 | 0.0 |
| *Kank4* | KN motif and ankyrin repeat domains 4 | 0.27 | 0.0 |
| *Dcdc2b* | doublecortin domain containing 2b | 0.27 | 0.0 |
| *A330076H08Rik* | RIKEN cDNA A330076H08 gene | 0.27 | 0.0 |
| *Cml3* | camello-like 3 | 0.27 | 0.0 |
| *Lrrc36* | leucine rich repeat containing 36 | 0.27 | 0.0 |
| *Fads6* | fatty acid desaturase domain family, member 6 | 0.27 | 0.0 |
| *Polk* | polymerase (DNA directed), kappa | 0.28 | 0.0 |
| *Ubxn10* | UBX domain protein 10 | 0.28 | 0.0 |
| *H2-T24* | histocompatibility 2, T region locus 24 | 0.28 | 0.0 |
| *A530020G20Rik* | RIKEN cDNA A530020G20 gene | 0.28 | 0.0 |
| *Atat1* | alpha tubulin acetyltransferase 1 | 0.28 | 0.0 |
| *D630039A03Rik* | RIKEN cDNA D630039A03 gene | 0.29 | 0.0 |
| *Dnajb1* | DnaJ (Hsp40) homolog, subfamily B, member 1 | 0.29 | 0.0 |
| *2010007H06Rik* | RIKEN cDNA 2010007H06 gene | 0.29 | 0.0 |
| *N4bp3* | NEDD4 binding protein 3 | 0.29 | 0.0 |
| *Grtp1* | GH regulated TBC protein 1 | 0.29 | 0.0 |
| *Meox2* | mesenchyme homeobox 2 | 0.29 | 0.0 |
| *Stard9* | START domain containing 9 | 0.29 | 0.0 |
| *4833427G06Rik* | RIKEN cDNA 4833427G06 gene | 0.29 | 0.0 |
| *Dyx1c1* | dyslexia susceptibility 1 candidate 1 homolog (human) | 0.29 | 0.0 |
| *Lrrc17* | leucine rich repeat containing 17 | 0.29 | 0.0 |
| *Cys1* | cystin 1 | 0.29 | 0.0 |
| *Hlf* | hepatic leukemia factor | 0.30 | 0.0 |
| *Kif26b* | kinesin family member 26B | 0.30 | 0.0 |
| *Ube2b* | ubiquitin-conjugating enzyme E2B | 0.30 | 0.0 |
| *Hspa12b* | heat shock protein 12B | 0.30 | 0.0 |
| *Zfp420* | zinc finger protein 420 | 0.31 | 7.8 |
| *Agphd1* | aminoglycoside phosphotransferase domain containing 1 | 0.31 | 0.0 |
| *Chchd7* | Coiled-coil-helix-coiled-coil-helix domain containing 7 | 0.31 | 0.0 |
| *Uty* | ubiquitously transcribed tetratricopeptide repeat gene, Y chromosome | 0.31 | 0.0 |
| *Zbtb46* | zinc finger and BTB domain containing 46 | 0.31 | 0.0 |
| *Senp7* | SUMO1/sentrin specific peptidase 7 | 0.31 | 0.0 |
| *Cep70* | centrosomal protein 70 | 0.31 | 0.0 |
| *Mxi1* | Max interacting protein 1 | 0.31 | 0.0 |
| *Zfp760* | zinc finger protein 760 | 0.31 | 0.0 |
| *Fgfr3* | fibroblast growth factor receptor 3 | 0.31 | 0.0 |
| *Herc6* | hect domain and RLD 6 | 0.31 | 0.0 |
| *Fhl1* | four and a half LIM domains 1 | 0.32 | 0.0 |
| *Caps2* | calcyphosphine 2 | 0.32 | 0.0 |
| *Hdac11* | histone deacetylase 11 | 0.32 | 0.0 |
| *Prr18* | proline rich region 18 | 0.32 | 0.0 |
| *1190005F20Rik* | RIKEN cDNA 1190005F20 gene | 0.32 | 0.0 |
| *Ezh1* | enhancer of zeste homolog 1 (Drosophila) | 0.32 | 0.0 |
| *Tcf21* | transcription factor 21 | 0.32 | 0.0 |
| *Mtus2* | microtubule associated tumor suppressor candidate 2 | 0.32 | 0.0 |
| *5430414B12Rik* | RIKEN cDNA 5430414B12 gene | 0.32 | 0.0 |
| *BB182297* | expressed sequence BB182297 | 0.32 | 0.0 |
| *Fam55c* | family with sequence similarity 55, member C | 0.32 | 0.0 |

| | | | |
|---|---|---|---|
| *Igh-VJ558 /// Igha* | immunoglobulin heavy chain (J558 family) /// immunoglobulin heavy constant alpha | 0.33 | 7.8 |
| *6430706D22Rik /// A730008H23Rik /// Hjurp* | RIKEN cDNA 6430706D22 gene /// RIKEN cDNA A730008H23 gene /// Holliday junction recognition protein | 0.33 | 0.0 |
| *Wdr19* | WD repeat domain 19 | 0.33 | 0.0 |
| *Zxdc* | ZXD family zinc finger C | 0.33 | 2.8 |
| *9130015G15Rik* | RIKEN cDNA 9130015G15 gene | 0.33 | 0.0 |
| *2810055G20Rik* | RIKEN cDNA 2810055G20 gene | 0.33 | 0.0 |
| *Fancc* | Fanconi anemia, complementation group C | 0.33 | 0.0 |
| *Trim14* | tripartite motif-containing 14 | 0.34 | 0.0 |
| *Prrx1* | paired related homeobox 1 | 0.34 | 0.0 |
| *Agbl5* | ATP/GTP binding protein-like 5 | 0.34 | 0.0 |
| *Kcna2* | potassium voltage-gated channel, shaker-related subfamily, member 2 | 0.34 | 0.0 |
| *Pla2g15* | phospholipase A2, group XV | 0.34 | 0.0 |
| *E130308A19Rik* | RIKEN cDNA E130308A19 gene | 0.34 | 0.0 |
| *Dusp19* | dual specificity phosphatase 19 | 0.34 | 2.8 |
| *Mdh1b* | malate dehydrogenase 1B, NAD (soluble) | 0.34 | 0.0 |
| *Ints3* | integrator complex subunit 3 | 0.34 | 0.0 |
| *Cd59a* | CD59a antigen | 0.34 | 0.0 |
| *Mettl8* | methyltransferase like 8 | 0.34 | 0.0 |
| *4932425I24Rik* | RIKEN cDNA 4932425I24 gene | 0.35 | 0.0 |
| *Map3k12* | mitogen-activated protein kinase kinase kinase 12 | 0.35 | 0.0 |
| *Rps6ka5* | ribosomal protein S6 kinase, polypeptide 5 | 0.35 | 0.0 |
| *4833442J19Rik* | RIKEN cDNA 4833442J19 gene | 0.35 | 0.0 |
| *Rab36* | RAB36, member RAS oncogene family | 0.35 | 0.0 |
| *Plekha2* | pleckstrin homology domain-containing, family A (phosphoinositide binding specific) member 2 | 0.35 | 0.0 |
| *Tead2* | TEA domain family member 2 | 0.35 | 0.0 |
| *Dixdc1* | DIX domain containing 1 | 0.35 | 0.0 |
| *Fmo5* | flavin containing monooxygenase 5 | 0.36 | 0.0 |
| *Zfp54* | zinc finger protein 54 | 0.36 | 0.0 |
| *Bivm* | basic, immunoglobulin-like variable motif containing | 0.36 | 0.0 |
| *6330439K17Rik* | RIKEN cDNA 6330439K17 gene | 0.36 | 0.0 |
| *Snapc3* | small nuclear RNA activating complex, polypeptide 3 | 0.36 | 0.0 |
| *Ripply3* | ripply3 homolog (zebrafish) | 0.36 | 0.0 |
| *Asb14* | ankyrin repeat and SOCS box-containing 14 | 0.36 | 0.0 |
| *Tet1* | tet methylcytosine dioxygenase 1 | 0.36 | 0.0 |
| *Stk33* | serine/threonine kinase 33 | 0.37 | 0.0 |
| *Nek1* | NIMA (never in mitosis gene a)-related expressed kinase 1 | 0.37 | 0.0 |
| *Smad6* | SMAD family member 6 | 0.37 | 0.0 |
| *Rsph4a* | radial spoke head 4 homolog A (Chlamydomonas) | 0.37 | 0.0 |
| *Tfb1m* | transcription factor B1, mitochondrial | 0.37 | 0.0 |
| *Ces1f* | carboxylesterase 1F | 0.37 | 0.0 |
| *Wdyhv1* | WDYHV motif containing 1 | 0.37 | 0.0 |
| *Rab38* | RAB38, member of RAS oncogene family | 0.37 | 0.0 |
| *Rasgef1a* | RasGEF domain family, member 1A | 0.37 | 0.0 |
| *Dtna* | dystrobrevin alpha | 0.37 | 0.0 |

| | | | |
|---|---|---|---|
| *Ak3* | adenylate kinase 3 | 0.37 | 0.0 |
| *Gm129* | predicted gene 129 | 0.37 | 0.0 |
| *Nr1d2* | nuclear receptor subfamily 1, group D, member 2 | 0.38 | 0.0 |
| *Tnfsf10* | tumor necrosis factor (ligand) superfamily, member 10 | 0.38 | 2.8 |
| *C80889* | expressed sequence C80889 | 0.38 | 0.0 |
| *Hist3h2a* | histone cluster 3, H2a | 0.38 | 0.0 |
| *Amigo2* | adhesion molecule with Ig like domain 2 | 0.38 | 0.0 |
| *Ttc21b* | tetratricopeptide repeat domain 21B | 0.38 | 0.0 |
| *Zfp934* | zinc finger protein 934 | 0.38 | 0.0 |
| *Slc15a2* | solute carrier family 15 (H+/peptide transporter), member 2 | 0.38 | 2.8 |
| *Nudt7* | nudix (nucleoside diphosphate linked moiety X)-type motif 7 | 0.38 | 0.0 |
| *9430047G12Rik* | RIKEN cDNA 9430047G12 gene | 0.38 | 0.0 |
| *Wrn* | Werner syndrome homolog (human) | 0.38 | 0.0 |
| *Kctd21* | potassium channel tetramerisation domain containing 21 | 0.38 | 0.0 |
| *Calhm2* | calcium homeostasis modulator 2 | 0.38 | 0.0 |
| *Gm5595* | predicted gene 5595 | 0.38 | 0.0 |
| *A130004G11Rik* | RIKEN cDNA A130004G11 gene | 0.38 | 0.0 |
| *Tslp* | thymic stromal lymphopoietin | 0.38 | 0.0 |
| *Plscr4* | phospholipid scramblase 4 | 0.38 | 0.0 |
| *A730054J21Rik* | RIKEN cDNA A730054J21 gene | 0.38 | 0.0 |
| *Kank3* | KN motif and ankyrin repeat domains 3 | 0.39 | 0.0 |
| *Rarg* | retinoic acid receptor, gamma | 0.39 | 0.0 |
| *Pknox2* | Pbx/knotted 1 homeobox 2 | 0.39 | 0.0 |
| *Il17rd* | interleukin 17 receptor D | 0.39 | 0.0 |
| *Ankrd26* | ankyrin repeat domain 26 | 0.39 | 0.0 |
| *Lyl1* | lymphoblastomic leukemia 1 | 0.39 | 0.0 |
| *Efcab1* | EF hand calcium binding domain 1 | 0.39 | 0.0 |
| *Edc3* | enhancer of mRNA decapping 3 homolog (S. cerevisiae) | 0.39 | 0.0 |
| *Phf21a* | PHD finger protein 21A | 0.39 | 0.0 |
| *Lrrc51* | leucine rich repeat containing 51 | 0.39 | 0.0 |
| *Tmem206* | transmembrane protein 206 | 0.39 | 2.8 |
| *Hist3h2a /// Trim17* | histone cluster 3, H2a /// tripartite motif-containing 17 | 0.39 | 0.0 |
| *Yes1* | Yamaguchi sarcoma viral (v-yes) oncogene homolog 1 | 0.39 | 0.0 |
| *Il15* | interleukin 15 | 0.39 | 0.0 |
| *G0s2* | G0/G1 switch gene 2 | 0.39 | 0.0 |
| *Mns1* | meiosis-specific nuclear structural protein 1 | 0.39 | 0.0 |
| *AA386476 /// LOC100504975* | expressed sequence AA386476 /// uncharacterized LOC100504975 | 0.40 | 0.0 |
| *Arhgap12* | Rho GTPase activating protein 12 | 0.40 | 0.0 |
| *Dnmt3a* | DNA methyltransferase 3A | 0.40 | 0.0 |
| *Hs1bp3* | HCLS1 binding protein 3 | 0.40 | 0.0 |
| *9430020K01Rik* | RIKEN cDNA 9430020K01 gene | 0.40 | 0.0 |
| *Slc46a3* | solute carrier family 46, member 3 | 0.40 | 0.0 |
| *Ip6k2* | inositol hexaphosphate kinase 2 | 0.40 | 0.0 |
| *Trp53bp1* | transformation related protein 53 binding protein 1 | 0.40 | 2.8 |
| *Zfp846* | zinc finger protein 846 | 0.40 | 0.0 |
| *Cckar* | cholecystokinin A receptor | 0.40 | 0.0 |
| *Cdon* | cell adhesion molecule-related/down-regulated by | 0.40 | 0.0 |

| | | | |
|---|---|---|---|
| | oncogenes | | |
| *Cd97* | CD97 antigen | 0.40 | 0.0 |
| *1700013F07Rik* | RIKEN cDNA 1700013F07 gene | 0.40 | 0.0 |
| *Nab2* | Ngfi-A binding protein 2 | 0.40 | 2.8 |
| *Card10* | caspase recruitment domain family, member 10 | 0.40 | 0.0 |
| *Klhl24* | kelch-like 24 (Drosophila) | 0.40 | 0.0 |
| *Lpar3* | lysophosphatidic acid receptor 3 | 0.40 | 0.0 |
| *Six5* | sine oculis-related homeobox 5 homolog (Drosophila) | 0.40 | 0.0 |
| *Zfp82* | zinc finger protein 82 | 0.40 | 7.8 |
| *C77648* | expressed sequence C77648 | 0.40 | 0.0 |
| *Sigmar1* | sigma non-opioid intracellular receptor 1 | 0.41 | 2.8 |
| *Wdr78* | WD repeat domain 78 | 0.41 | 0.0 |
| *Dynlt1f* | dynein light chain Tctex-type 1F | 0.41 | 0.0 |
| *Ccdc141* | coiled-coil domain containing 141 | 0.41 | 7.8 |
| *Gemin8* | gem (nuclear organelle) associated protein 8 | 0.41 | 0.0 |
| *Senp8* | SUMO/sentrin specific peptidase 8 | 0.41 | 2.8 |
| *Ttc14* | tetratricopeptide repeat domain 14 | 0.41 | 0.0 |
| *Purg* | purine-rich element binding protein G | 0.41 | 0.0 |
| *Frem1* | Fras1 related extracellular matrix protein 1 | 0.41 | 0.0 |
| *D730048J04Rik* | RIKEN cDNA D730048J04 gene | 0.41 | 0.0 |
| *Ganc* | glucosidase, alpha; neutral C | 0.41 | 0.0 |
| *Shisa2* | shisa homolog 2 (Xenopus laevis) | 0.41 | 0.0 |
| *Zfp790* | zinc finger protein 790 | 0.41 | 0.0 |
| *Gm5918* | predicted gene 5918 | 0.41 | 0.0 |
| *Glis2* | GLIS family zinc finger 2 | 0.41 | 0.0 |
| *Ccdc28b* | coiled coil domain containing 28B | 0.41 | 0.0 |
| *Cc2d2a* | coiled-coil and C2 domain containing 2A | 0.41 | 0.0 |
| *BC046404* | cDNA sequence BC046404 | 0.41 | 7.8 |
| *Eef2k* | eukaryotic elongation factor-2 kinase | 0.41 | 0.0 |
| *Wscd1* | WSC domain containing 1 | 0.41 | 0.0 |
| *Grrp1* | glycine/arginine rich protein 1 | 0.42 | 0.0 |
| *1700049G17Rik* | RIKEN cDNA 1700049G17 gene | 0.42 | 0.0 |
| *Ccdc30* | coiled-coil domain containing 30 | 0.42 | 0.0 |
| *Rnf186* | ring finger protein 186 | 0.42 | 0.0 |
| *Sox17* | SRY-box containing gene 17 | 0.42 | 0.0 |
| *LOC100861749 /// Sfi1* | protein SFI1 homolog /// Sfi1 homolog, spindle assembly associated (yeast) | 0.42 | 0.0 |
| *Nudcd1* | NudC domain containing 1 | 0.42 | 0.0 |
| *Trim37* | tripartite motif-containing 37 | 0.42 | 0.0 |
| *Rab2b* | RAB2B, member RAS oncogene family | 0.42 | 0.0 |
| *Zfp266* | zinc finger protein 266 | 0.42 | 0.0 |
| *Aspa* | aspartoacylase | 0.42 | 0.0 |
| *Fgfr4* | fibroblast growth factor receptor 4 | 0.42 | 0.0 |
| *Hibch* | 3-hydroxyisobutyryl-Coenzyme A hydrolase | 0.42 | 0.0 |
| *Per2* | period homolog 2 (Drosophila) | 0.42 | 0.0 |
| *Dnali1* | dynein, axonemal, light intermediate polypeptide 1 | 0.42 | 0.0 |
| *Zfp524* | zinc finger protein 524 | 0.42 | 0.0 |
| *Gm11944* | predicted gene 11944 | 0.42 | 0.0 |
| *Pcdh18* | protocadherin 18 | 0.42 | 0.0 |
| *Sord* | sorbitol dehydrogenase | 0.42 | 0.0 |

| | | | |
|---|---|---|---|
| *Fzd7* | frizzled homolog 7 (Drosophila) | 0.42 | 0.0 |
| *Gm626* | predicted gene 626 | 0.42 | 0.0 |
| *Cep350* | centrosomal protein 350 | 0.42 | 0.0 |
| *Vps13a* | vacuolar protein sorting 13A (yeast) | 0.43 | 0.0 |
| *4922501C03Rik* | RIKEN cDNA 4922501C03 gene | 0.43 | 0.0 |
| *Dleu2* | deleted in lymphocytic leukemia, 2 | 0.43 | 2.8 |
| *Hyal1 /// Nat6* | hyaluronoglucosaminidase 1 /// N-acetyltransferase 6 | 0.43 | 0.0 |
| *Igj* | immunoglobulin joining chain | 0.43 | 0.0 |
| *Gulp1* | GULP, engulfment adaptor PTB domain containing 1 | 0.43 | 0.0 |
| *Adamts20* | a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 20 | 0.43 | 0.0 |
| *Rnf135* | ring finger protein 135 | 0.43 | 0.0 |
| *Xiap* | X-linked inhibitor of apoptosis | 0.43 | 2.8 |
| *Hsph1* | heat shock 105kDa/110kDa protein 1 | 0.43 | 0.0 |
| *Baz1b* | bromodomain adjacent to zinc finger domain, 1B | 0.43 | 0.0 |
| *Jam2* | junction adhesion molecule 2 | 0.43 | 0.0 |
| *Invs* | inversin | 0.43 | 0.0 |
| *Plch1* | phospholipase C, eta 1 | 0.43 | 0.0 |
| *Nuak1* | NUAK family, SNF1-like kinase, 1 | 0.43 | 0.0 |
| *Cthrc1* | collagen triple helix repeat containing 1 | 0.43 | 2.8 |
| *Slc25a27* | Solute carrier family 25, member 27 | 0.43 | 0.0 |
| *1700029J07Rik* | RIKEN cDNA 1700029J07 gene | 0.43 | 0.0 |
| *Gm19935* | predicted gene, 19935 | 0.43 | 0.0 |
| *Ephb4* | Eph receptor B4 | 0.43 | 0.0 |
| *Gm19439* | predicted gene, 19439 | 0.43 | 0.0 |
| *1810063B05Rik* | RIKEN cDNA 1810063B05 gene | 0.43 | 0.0 |
| *Csnk2a1* | casein kinase 2, alpha 1 polypeptide | 0.43 | 0.0 |
| *Nkd2* | naked cuticle 2 homolog (Drosophila) | 0.43 | 0.0 |
| *2900092E17Rik* | RIKEN cDNA 2900092E17 gene | 0.43 | 0.0 |
| *Gga2* | golgi associated, gamma adaptin ear containing, ARF binding protein 2 | 0.44 | 0.0 |
| *Efhc1* | EF-hand domain (C-terminal) containing 1 | 0.44 | 0.0 |
| *Fbxl20* | F-box and leucine-rich repeat protein 20 | 0.44 | 0.0 |
| *Spice1* | spindle and centriole associated protein 1 | 0.44 | 0.0 |
| *Scaper* | S phase cyclin A-associated protein in the ER | 0.44 | 0.0 |
| *Atf7ip* | activating transcription factor 7 interacting protein | 0.44 | 0.0 |
| *Nudt21* | nudix (nucleoside diphosphate linked moiety X)-type motif 21 | 0.44 | 7.8 |
| *1110017F19Rik* | RIKEN cDNA 1110017F19 gene | 0.44 | 0.0 |
| *Tbc1d24* | TBC1 domain family, member 24 | 0.44 | 0.0 |
| *Klc1* | kinesin light chain 1 | 0.44 | 0.0 |
| *Atf2 /// LOC100047997* | activating transcription factor 2 /// cyclic AMP-dependent transcription factor ATF-2-like | 0.44 | 0.0 |
| *Khnyn* | KH and NYN domain containing | 0.44 | 0.0 |
| *Cep68* | centrosomal protein 68 | 0.44 | 0.0 |
| *Angpt1* | angiopoietin 1 | 0.44 | 0.0 |
| *1810012P15Rik* | RIKEN cDNA 1810012P15 gene | 0.44 | 0.0 |
| *Nudt5* | nudix (nucleoside diphosphate linked moiety X)-type motif 5 | 0.44 | 0.0 |
| *Chia* | chitinase, acidic | 0.44 | 0.0 |

| | | | |
|---|---|---|---|
| *Fam120b* | family with sequence similarity 120, member B | 0.44 | 0.0 |
| *Robo2* | roundabout homolog 2 (Drosophila) | 0.44 | 2.8 |
| *Chd9* | chromodomain helicase DNA binding protein 9 | 0.44 | 0.0 |
| *Zfp248* | zinc finger protein 248 | 0.44 | 2.8 |
| *Etv1* | ets variant gene 1 | 0.44 | 0.0 |
| *Traf1* | TNF receptor-associated factor 1 | 0.44 | 0.0 |
| *Ttc29* | tetratricopeptide repeat domain 29 | 0.44 | 0.0 |
| *C2cd2* | C2 calcium-dependent domain containing 2 | 0.44 | 0.0 |
| *2810410L24Rik* | RIKEN cDNA 2810410L24 gene | 0.44 | 0.0 |
| *Flt3l /// Rpl13a* | FMS-like tyrosine kinase 3 ligand /// ribosomal protein L13A | 0.44 | 0.0 |
| *Ikzf2* | IKAROS family zinc finger 2 | 0.45 | 0.0 |
| *1700094D03Rik* | RIKEN cDNA 1700094D03 gene | 0.45 | 0.0 |
| *Sh3d19* | SH3 domain protein D19 | 0.45 | 0.0 |
| *Synpo2* | synaptopodin 2 | 0.45 | 7.8 |
| *Hs6st2* | heparan sulfate 6-O-sulfotransferase 2 | 0.45 | 0.0 |
| *4930420K17Rik* | RIKEN cDNA 4930420K17 gene | 0.45 | 0.0 |
| *Tfcp2* | transcription factor CP2 | 0.45 | 0.0 |
| *Ttc9c* | tetratricopeptide repeat domain 9C | 0.45 | 2.8 |
| *Gja4* | gap junction protein, alpha 4 | 0.45 | 0.0 |
| *Rhebl1* | Ras homolog enriched in brain like 1 | 0.45 | 0.0 |
| *Plcb3* | phospholipase C, beta 3 | 0.45 | 0.0 |
| *Ptgfr* | prostaglandin F receptor | 0.45 | 0.0 |
| *2900046F13Rik* | RIKEN cDNA 2900046F13 gene | 0.45 | 0.0 |
| *Mynn* | myoneurin | 0.45 | 0.0 |
| *Golph3l* | golgi phosphoprotein 3-like | 0.45 | 0.0 |
| *C920008N22Rik* | RIKEN cDNA C920008N22 gene | 0.45 | 0.0 |
| *Yeats2* | YEATS domain containing 2 | 0.45 | 0.0 |
| *Aass* | aminoadipate-semialdehyde synthase | 0.45 | 0.0 |
| *Trim34a /// Trim34b* | tripartite motif-containing 34A /// tripartite motif-containing 34B | 0.45 | 0.0 |
| *Cenpj* | centromere protein J | 0.45 | 0.0 |
| *Dzip1l* | DAZ interacting protein 1-like | 0.45 | 0.0 |
| *Thap3* | THAP domain containing, apoptosis associated protein 3 | 0.45 | 0.0 |
| *Mdm4* | transformed mouse 3T3 cell double minute 4 | 0.45 | 0.0 |
| *4933411K20Rik* | RIKEN cDNA 4933411K20 gene | 0.45 | 0.0 |
| *Fert2* | fer (fms/fps related) protein kinase, testis specific 2 | 0.45 | 0.0 |
| *Elmod1* | ELMO domain containing 1 | 0.45 | 0.0 |
| *Fam82b* | family with sequence similarity 82, member B | 0.45 | 0.0 |
| *Crebzf* | CREB/ATF bZIP transcription factor | 0.45 | 0.0 |
| *Lrrc6* | leucine rich repeat containing 6 (testis) | 0.45 | 0.0 |
| *2410002O22Rik* | RIKEN cDNA 2410002O22 gene | 0.45 | 0.0 |
| *Sirt5* | sirtuin 5 (silent mating type information regulation 2 homolog) 5 (S. cerevisiae) | 0.45 | 0.0 |
| *Ubxn7* | UBX domain protein 7 | 0.46 | 2.8 |
| *Akr1c19* | aldo-keto reductase family 1, member C19 | 0.46 | 0.0 |
| *5031426D15Rik* | RIKEN cDNA 5031426D15 gene | 0.46 | 0.0 |
| *Ints6* | integrator complex subunit 6 | 0.46 | 2.8 |
| *E430024I08Rik* | RIKEN cDNA E430024I08 gene | 0.46 | 0.0 |
| *D4Bwg0951e* | DNA segment, Chr 4, Brigham & Women's Genetics 0951 | 0.46 | 0.0 |

| | | | |
|---|---|---|---|
| | expressed | | |
| *Pisd-ps1 /// Pisd-ps3* | phosphatidylserine decarboxylase, pseudogene 1 /// phosphatidylserine decarboxylase, pseudogene 3 | 0.46 | 0.0 |
| *Zfp14* | zinc finger protein 14 | 0.46 | 0.0 |
| *Dnahc12* | dynein, axonemal, heavy chain 12 | 0.46 | 0.0 |
| *Pgpep1* | pyroglutamyl-peptidase I | 0.46 | 0.0 |
| *Ints8* | integrator complex subunit 8 | 0.46 | 0.0 |
| *Scai* | suppressor of cancer cell invasion | 0.46 | 0.0 |
| *Papss2* | 3'-phosphoadenosine 5'-phosphosulfate synthase 2 | 0.46 | 2.8 |
| *Slc38a6* | solute carrier family 38, member 6 | 0.46 | 0.0 |
| *Itsn1* | intersectin 1 (SH3 domain protein 1A) | 0.46 | 0.0 |
| *Zmat1* | zinc finger, matrin type 1 | 0.46 | 0.0 |
| *Gm10374* | predicted gene 10374 | 0.46 | 0.0 |
| *Zfp260* | zinc finger protein 260 | 0.46 | 0.0 |
| *Rbm5* | RNA binding motif protein 5 | 0.46 | 0.0 |
| *Vps33a* | vacuolar protein sorting 33A (yeast) | 0.46 | 0.0 |
| *Esyt3* | extended synaptotagmin-like protein 3 | 0.46 | 0.0 |
| *1110032A04Rik* | RIKEN cDNA 1110032A04 gene | 0.46 | 0.0 |
| *Lbh* | limb-bud and heart | 0.46 | 0.0 |
| *9230114K14Rik* | RIKEN cDNA 9230114K14 gene | 0.46 | 0.0 |
| *Dcun1d2* | DCN1, defective in cullin neddylation 1, domain containing 2 (S. cerevisiae) | 0.46 | 2.8 |
| *Hey1* | hairy/enhancer-of-split related with YRPW motif 1 | 0.46 | 0.0 |
| *Bcl11a* | B cell CLL/lymphoma 11A (zinc finger protein) | 0.46 | 7.8 |
| *1810011O10Rik* | RIKEN cDNA 1810011O10 gene | 0.46 | 0.0 |
| *Ptprz1* | protein tyrosine phosphatase, receptor type Z, polypeptide 1 | 0.46 | 7.8 |
| *Tcap* | titin-cap | 0.46 | 2.8 |
| *Rasal2* | RAS protein activator like 2 | 0.46 | 0.0 |
| *2610507I01Rik* | RIKEN cDNA 2610507I01 gene | 0.46 | 0.0 |
| *Lca5* | Leber congenital amaurosis 5 (human) | 0.46 | 0.0 |
| *Chst7* | carbohydrate (N-acetylglucosamino) sulfotransferase 7 | 0.46 | 0.0 |
| *Gpt2* | glutamic pyruvate transaminase (alanine aminotransferase) 2 | 0.46 | 2.8 |
| *Olfml1* | olfactomedin-like 1 | 0.46 | 0.0 |
| *Slc6a2* | solute carrier family 6 (neurotransmitter transporter, noradrenalin), member 2 | 0.46 | 0.0 |
| *Rab3ip* | RAB3A interacting protein | 0.46 | 0.0 |
| *Atic* | 5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase/IMP cyclohydrolase | 0.47 | 0.0 |
| *Stx3* | syntaxin 3 | 0.47 | 0.0 |
| *Tardbp* | TAR DNA binding protein | 0.47 | 0.0 |
| *Chordc1* | cysteine and histidine-rich domain (CHORD)-containing, zinc-binding protein 1 | 0.47 | 0.0 |
| *Cpeb1* | cytoplasmic polyadenylation element binding protein 1 | 0.47 | 0.0 |
| *Dusp18* | dual specificity phosphatase 18 | 0.47 | 0.0 |
| *Ckmt1* | creatine kinase, mitochondrial 1, ubiquitous | 0.47 | 2.8 |
| *Stat1* | signal transducer and activator of transcription 1 | 0.47 | 0.0 |
| *Sept8* | septin 8 | 0.47 | 0.0 |
| *Rph3al* | rabphilin 3A-like (without C2 domains) | 0.47 | 0.0 |

| | | | |
|---|---|---|---|
| *6820402A03Rik* | RIKEN cDNA 6820402A03 gene | 0.47 | 0.0 |
| *Mtcp1* | mature T cell proliferation 1 | 0.47 | 0.0 |
| *Dzip1* | DAZ interacting protein 1 | 0.47 | 0.0 |
| *Slc6a15* | solute carrier family 6 (neurotransmitter transporter), member 15 | 0.47 | 0.0 |
| *Nqo2* | NAD(P)H dehydrogenase, quinone 2 | 0.47 | 2.8 |
| *Caprin1* | cell cycle associated protein 1 | 0.47 | 0.0 |
| *Dnaja4* | DnaJ (Hsp40) homolog, subfamily A, member 4 | 0.47 | 0.0 |
| *Nr1h3* | nuclear receptor subfamily 1, group H, member 3 | 0.47 | 2.8 |
| *Wdr96* | WD repeat domain 96 | 0.47 | 0.0 |
| *Gpd1l* | glycerol-3-phosphate dehydrogenase 1-like | 0.47 | 0.0 |
| *Rarb* | retinoic acid receptor, beta | 0.47 | 0.0 |
| *She* | src homology 2 domain-containing transforming protein E | 0.47 | 0.0 |
| *Nnt* | nicotinamide nucleotide transhydrogenase | 0.47 | 0.0 |
| *Fgf7* | fibroblast growth factor 7 | 0.47 | 0.0 |
| *Grasp* | GRP1 (general receptor for phosphoinositides 1)-associated scaffold protein | 0.47 | 0.0 |
| *Ogt* | O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase) | 0.47 | 0.0 |
| *Gm20559* | predicted gene, 20559 | 0.47 | 0.0 |
| *Hhip* | Hedgehog-interacting protein | 0.47 | 0.0 |
| *Fam46c* | family with sequence similarity 46, member C | 0.47 | 7.8 |
| *Slc4a1* | solute carrier family 4 (anion exchanger), member 1 | 0.47 | 0.0 |
| *2900072G11Rik* | RIKEN cDNA 2900072G11 gene | 0.47 | 0.0 |
| *Csrnp2* | cysteine-serine-rich nuclear protein 2 | 0.47 | 2.8 |
| *Gm12942 /// Zmym6* | predicted gene 12942 /// zinc finger, MYM-type 6 | 0.47 | 0.0 |
| *Pank1* | pantothenate kinase 1 | 0.47 | 0.0 |
| *Cdkn2c* | cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4) | 0.47 | 0.0 |
| *Osbpl6* | oxysterol binding protein-like 6 | 0.47 | 0.0 |
| *Tdp1* | tyrosyl-DNA phosphodiesterase 1 | 0.47 | 0.0 |
| *Hoxa5* | homeobox A5 | 0.47 | 0.0 |
| *Dnaja1* | DnaJ (Hsp40) homolog, subfamily A, member 1 | 0.47 | 0.0 |
| *Ccng2* | cyclin G2 | 0.47 | 0.0 |
| *Inpp5e* | inositol polyphosphate-5-phosphatase E | 0.47 | 0.0 |
| *Ccdc162* | coiled-coil domain containing 162 | 0.47 | 0.0 |
| *Six4* | sine oculis-related homeobox 4 homolog (Drosophila) | 0.47 | 0.0 |
| *Zfp60* | zinc finger protein 60 | 0.47 | 0.0 |
| *Ddo* | D-aspartate oxidase | 0.47 | 0.0 |
| *Sytl4* | synaptotagmin-like 4 | 0.47 | 0.0 |
| *Gm16136* | predicted gene 16136 | 0.47 | 0.0 |
| *Mapk12* | mitogen-activated protein kinase 12 | 0.47 | 0.0 |
| *Stmn2* | stathmin-like 2 | 0.48 | 0.0 |
| *Tril* | TLR4 interactor with leucine-rich repeats | 0.48 | 0.0 |
| *Prkar2b* | protein kinase, cAMP dependent regulatory, type II beta | 0.48 | 0.0 |
| *6330403M23Rik /// Pura* | RIKEN cDNA 6330403M23 gene /// purine rich element binding protein A | 0.48 | 0.0 |
| *Zfp161* | zinc finger protein 161 | 0.48 | 0.0 |
| *Rnf141* | ring finger protein 141 | 0.48 | 0.0 |

| | | | |
|---|---|---|---|
| *Samd5* | sterile alpha motif domain containing 5 | 0.48 | 2.8 |
| *Mlh3* | mutL homolog 3 (E coli) | 0.48 | 0.0 |
| *Mfsd9* | major facilitator superfamily domain containing 9 | 0.48 | 0.0 |
| *Id1* | inhibitor of DNA binding 1 | 0.48 | 0.0 |
| *2210018M11Rik* | RIKEN cDNA 2210018M11 gene | 0.48 | 0.0 |
| *Casp12* | caspase 12 | 0.48 | 0.0 |
| *Gse1* | genetic suppressor element 1 | 0.48 | 0.0 |
| *Tmeff1* | transmembrane protein with EGF-like and two follistatin-like domains 1 | 0.48 | 0.0 |
| *Lrrn3* | leucine rich repeat protein 3, neuronal | 0.48 | 2.8 |
| *Skp2* | S-phase kinase-associated protein 2 (p45) | 0.48 | 7.8 |
| *Dzip3* | DAZ interacting protein 3, zinc finger | 0.48 | 0.0 |
| *Btbd3* | BTB (POZ) domain containing 3 | 0.48 | 0.0 |
| *Tjp3* | tight junction protein 3 | 0.48 | 0.0 |
| *Bpifa1* | BPI fold containing family A, member 1 | 0.48 | 7.8 |
| *Rasgrp2* | RAS, guanyl releasing protein 2 | 0.48 | 0.0 |
| *Pex26* | peroxisomal biogenesis factor 26 | 0.48 | 0.0 |
| *4930430F08Rik* | RIKEN cDNA 4930430F08 gene | 0.48 | 0.0 |
| *Tatdn3* | TatD DNase domain containing 3 | 0.48 | 0.0 |
| *Dnmt1* | DNA methyltransferase (cytosine-5) 1 | 0.48 | 0.0 |
| *Mbtps1* | membrane-bound transcription factor peptidase, site 1 | 0.48 | 7.8 |
| *Zscan22* | zinc finger and SCAN domain containing 22 | 0.48 | 0.0 |
| *Map4k3* | Mitogen-activated protein kinase kinase kinase kinase 3 | 0.48 | 0.0 |
| *Mtrr* | 5-methyltetrahydrofolate-homocysteine methyltransferase reductase | 0.48 | 0.0 |
| *Ssx2ip* | synovial sarcoma, X breakpoint 2 interacting protein | 0.48 | 0.0 |
| *Cpt1c* | carnitine palmitoyltransferase 1c | 0.48 | 0.0 |
| *Ccdc45* | coiled-coil domain containing 45 | 0.48 | 0.0 |
| *Efcab7* | EF-hand calcium binding domain 7 | 0.48 | 0.0 |
| *Tecpr2* | tectonin beta-propeller repeat containing 2 | 0.48 | 0.0 |
| *Myo9a* | myosin IXa | 0.48 | 0.0 |
| *Lsm10* | U7 snRNP-specific Sm-like protein LSM10 | 0.48 | 0.0 |
| *Tmem116* | transmembrane protein 116 | 0.48 | 7.8 |
| *Runx1t1* | runt-related transcription factor 1; translocated to, 1 (cyclin D-related) | 0.48 | 0.0 |
| *Aqp4* | aquaporin 4 | 0.48 | 0.0 |
| *Rgs3* | regulator of G-protein signaling 3 | 0.48 | 0.0 |
| *Tex11* | testis expressed gene 11 | 0.48 | 0.0 |
| *Gfm2* | G elongation factor, mitochondrial 2 | 0.48 | 0.0 |
| *Stxbp5* | syntaxin binding protein 5 (tomosyn) | 0.48 | 0.0 |
| *Traf3ip1* | TRAF3 interacting protein 1 | 0.48 | 0.0 |
| *Prps2* | phosphoribosyl pyrophosphate synthetase 2 | 0.48 | 2.8 |
| *Zfp708* | zinc finger protein 708 | 0.49 | 0.0 |
| *2610034B18Rik* | RIKEN cDNA 2610034B18 gene | 0.49 | 0.0 |
| *Kit* | kit oncogene | 0.49 | 0.0 |
| *Ankmy2* | ankyrin repeat and MYND domain containing 2 | 0.49 | 0.0 |
| *Ccdc85b* | coiled-coil domain containing 85B | 0.49 | 0.0 |
| *Fhdc1* | FH2 domain containing 1 | 0.49 | 0.0 |
| *Cpsf6* | cleavage and polyadenylation specific factor 6 | 0.49 | 0.0 |
| *9530067D14Rik* | Riken cDNA 9530067D14 gene | 0.49 | 0.0 |

| | | | |
|---|---|---|---|
| *Fam149a* | family with sequence similarity 149, member A | 0.49 | 0.0 |
| *1110021J02Rik* | RIKEN cDNA 1110021J02 gene | 0.49 | 0.0 |
| *Suv420h2* | suppressor of variegation 4-20 homolog 2 (Drosophila) | 0.49 | 0.0 |
| *Dguok* | deoxyguanosine kinase | 0.49 | 0.0 |
| *C87436* | expressed sequence C87436 | 0.49 | 0.0 |
| *Cbx7* | chromobox 7 | 0.49 | 0.0 |
| *Podxl* | podocalyxin-like | 0.49 | 2.8 |
| *Acox2* | acyl-Coenzyme A oxidase 2, branched chain | 0.49 | 0.0 |
| *Sp1* | trans-acting transcription factor 1 | 0.49 | 0.0 |
| *Megf6* | multiple EGF-like-domains 6 | 0.49 | 0.0 |
| *2900056M20Rik* | RIKEN cDNA 2900056M20 gene | 0.49 | 0.0 |
| *Rsph10b2* | radial spoke head 10 homolog B (Chlamydomonas) | 0.49 | 0.0 |
| *9530010C24Rik* | RIKEN cDNA 9530010C24 gene | 0.49 | 0.0 |
| *9330151L19Rik* | RIKEN cDNA 9330151L19 gene | 0.49 | 0.0 |
| *Tmcc2* | transmembrane and coiled-coil domains 2 | 0.49 | 0.0 |
| *Tef* | thyrotroph embryonic factor | 0.49 | 0.0 |
| *Rad1* | RAD1 homolog (S. pombe) | 0.49 | 2.8 |
| *Dnaja3* | DnaJ (Hsp40) homolog, subfamily A, member 3 | 0.49 | 0.0 |
| *Ttc30a1* | tetratricopeptide repeat domain 30A1 | 0.49 | 0.0 |
| *Sspn* | sarcospan | 0.49 | 0.0 |
| *6330503K22Rik* | RIKEN cDNA 6330503K22 gene | 0.49 | 0.0 |
| *Tmem129* | transmembrane protein 129 | 0.49 | 0.0 |
| *Chd6* | chromodomain helicase DNA binding protein 6 | 0.49 | 0.0 |
| *Btrc* | beta-transducin repeat containing protein | 0.49 | 0.0 |
| *Asxl2* | additional sex combs like 2 (Drosophila) | 0.49 | 0.0 |
| *Irgm2* | immunity-related GTPase family M member 2 | 0.49 | 0.0 |
| *Rgl3* | ral guanine nucleotide dissociation stimulator-like 3 | 0.49 | 0.0 |
| *Mthfr* | 5,10-methylenetetrahydrofolate reductase | 0.49 | 0.0 |
| *Mr1* | major histocompatibility complex, class I-related | 0.49 | 0.0 |
| *Traf5* | TNF receptor-associated factor 5 | 0.49 | 0.0 |
| *6720401G13Rik* | RIKEN cDNA 6720401G13 gene | 0.49 | 0.0 |
| *Wwc2* | WW, C2 and coiled-coil domain containing 2 | 0.49 | 7.8 |
| *Zfp658* | zinc finger protein 658 | 0.50 | 7.8 |
| *Actb* | actin, beta | 0.50 | 0.0 |
| *Hist1h4a /// Hist1h4b /// Hist1h4c /// Hist1h4d /// Hist1h4f /// Hist1h4h /// Hist1h4i /// Hist1h4j /// Hist1h4k /// Hist1h4m /// Hist1h4n /// Hist2h4 /// Hist4h4 /// LOC100862646* | histone cluster 1, H4a /// histone cluster 1, H4b /// histone cluster 1, H4c /// histone cluster 1, H4d /// histone cluster 1, H4f /// histone cluster 1, H4h /// histone cluster 1, H4i /// histone cluster 1, H4j /// histone cluster 1, H4k /// histone cluster 1, H4m /// histone cluster 1, H4n /// histone cluster 2, H4 /// histone cluster 4, H4 /// histone H4-like | 0.50 | 2.8 |
| *Plekha6* | pleckstrin homology domain containing, family A member 6 | 0.50 | 0.0 |
| *Trpc2* | transient receptor potential cation channel, subfamily C, member 2 | 0.50 | 0.0 |
| *Fam13c* | family with sequence similarity 13, member C | 0.50 | 0.0 |
| *Prkd2* | protein kinase D2 | 0.50 | 0.0 |
| *Mtmr7* | myotubularin related protein 7 | 0.50 | 2.8 |
| *Sult1d1* | sulfotransferase family 1D, member 1 | 0.50 | 2.8 |

| | | | |
|---|---|---|---|
| *2810416A17Rik* | RIKEN cDNA 2810416A17 gene | 0.50 | 2.8 |
| *Hyal2* | hyaluronoglucosaminidase 2 | 0.50 | 0.0 |
| *Actc1* | actin, alpha, cardiac muscle 1 | 0.50 | 2.8 |
| *Mtap4* | Microtubule-associated protein 4 | 0.50 | 7.8 |
| *Tcf19* | transcription factor 19 | 0.50 | 0.0 |
| *Banp* | BTG3 associated nuclear protein | 0.50 | 0.0 |
| *Pcmtd2* | protein-L-isoaspartate (D-aspartate) O-methyltransferase domain containing 2 | 0.50 | 0.0 |
| *Odf3b* | outer dense fiber of sperm tails 3B | 0.50 | 0.0 |
| *Abhd14b* | abhydrolase domain containing 14b | 0.50 | 0.0 |
| *1700007K13Rik* | RIKEN cDNA 1700007K13 gene | 0.50 | 0.0 |
| *Mmab* | methylmalonic aciduria (cobalamin deficiency) type B homolog (human) | 0.50 | 0.0 |
| *Hes6* | hairy and enhancer of split 6 (Drosophila) | 0.50 | 0.0 |
| *Snx21* | sorting nexin family member 21 | 0.50 | 0.0 |
| *Nthl1* | nth (endonuclease III)-like 1 (E.coli) | 0.50 | 2.8 |
| *Pds5b* | PDS5, regulator of cohesion maintenance, homolog B (S. cerevisiae) | 0.50 | 0.0 |
| *Ptgr2* | prostaglandin reductase 2 | 0.50 | 0.0 |
| *Eif4e2* | eukaryotic translation initiation factor 4E member 2 | 2.00 | 0.0 |
| *Wac* | WW domain containing adaptor with coiled-coil | 2.00 | 0.0 |
| *8030448K23Rik* | RIKEN cDNA 8030448K23 gene | 2.00 | 0.0 |
| *Kcnk1* | potassium channel, subfamily K, member 1 | 2.00 | 0.0 |
| *2010002N04Rik* | RIKEN cDNA 2010002N04 gene | 2.00 | 0.0 |
| *Plxna2* | plexin A2 | 2.00 | 0.0 |
| *Rps20* | ribosomal protein S20 | 2.00 | 0.0 |
| *LOC269472* | uncharacterized LOC269472 | 2.00 | 0.0 |
| *AU021128* | expressed sequence AU021128 | 2.01 | 5.2 |
| *Usp53* | ubiquitin specific peptidase 53 | 2.01 | 5.2 |
| *Plscr1* | phospholipid scramblase 1 | 2.01 | 0.0 |
| *St6galnac4* | ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 4 | 2.01 | 0.0 |
| *Ndrg1* | N-myc downstream regulated gene 1 | 2.01 | 0.0 |
| *Dusp16* | dual specificity phosphatase 16 | 2.01 | 0.0 |
| *Edn2* | endothelin 2 | 2.01 | 0.0 |
| *Pim1* | proviral integration site 1 | 2.01 | 0.0 |
| *Map2k3* | mitogen-activated protein kinase kinase 3 | 2.01 | 0.0 |
| *Cdk13* | cyclin-dependent kinase 13 | 2.01 | 0.0 |
| *Gm5620 /// Gm6682 /// LOC100862648 /// Tuba1a /// Tuba1b /// Tuba1c* | predicted gene 5620 /// tubulin, alpha 1C pseudogene /// tubulin alpha-1C chain-like /// tubulin, alpha 1A /// tubulin, alpha 1B /// tubulin, alpha 1C | 2.01 | 0.0 |
| *Padi4* | peptidyl arginine deiminase, type IV | 2.02 | 0.0 |
| *Nipal1* | NIPA-like domain containing 1 | 2.02 | 5.2 |
| *Fam188a* | family with sequence similarity 188, member A | 2.02 | 0.0 |
| *Klhl15* | kelch-like 15 (Drosophila) | 2.02 | 0.0 |
| *Gcnt2* | glucosaminyl (N-acetyl) transferase 2, I-branching enzyme | 2.02 | 0.0 |
| *Sesn1* | sestrin 1 | 2.02 | 0.0 |
| *2310058N22Rik* | RIKEN cDNA 2310058N22 gene | 2.02 | 0.0 |

| | | | |
|---|---|---|---|
| *Mboat1* | membrane bound O-acyltransferase domain containing 1 | 2.03 | 0.0 |
| *Nop58* | NOP58 ribonucleoprotein homolog (yeast) | 2.03 | 0.0 |
| *Ept1* | ethanolaminephosphotransferase 1 (CDP-ethanolamine-specific) | 2.03 | 5.2 |
| *Rpf1* | ribosome production factor 1 homolog (S. cerevisiae) | 2.03 | 0.0 |
| *Cd84* | CD84 antigen | 2.03 | 0.0 |
| *2510009E07Rik* | RIKEN cDNA 2510009E07 gene | 2.04 | 0.0 |
| *1810032O08Rik* | RIKEN cDNA 1810032O08 gene | 2.04 | 0.0 |
| *Sco1* | SCO cytochrome oxidase deficient homolog 1 (yeast) | 2.04 | 0.0 |
| *Zwint* | ZW10 interactor | 2.04 | 0.0 |
| *Rpap2* | RNA polymerase II associated protein 2 | 2.05 | 0.0 |
| *Brd7* | bromodomain containing 7 | 2.05 | 0.0 |
| *Rbl1* | retinoblastoma-like 1 (p107) | 2.05 | 0.0 |
| *Abcc4* | ATP-binding cassette, sub-family C (CFTR/MRP), member 4 | 2.05 | 0.0 |
| *LOC100862515 /// Tbc1d1* | TBC1 domain family member 1-like /// TBC1 domain family, member 1 | 2.05 | 0.0 |
| *Pappa* | pregnancy-associated plasma protein A | 2.06 | 0.0 |
| *D3Ertd740e* | DNA segment, Chr 3, ERATO Doi 740, expressed | 2.06 | 0.0 |
| *Tlr4* | toll-like receptor 4 | 2.06 | 0.0 |
| *8430408G22Rik* | RIKEN cDNA 8430408G22 gene | 2.06 | 0.0 |
| *Pabpc1l* | poly(A) binding protein, cytoplasmic 1-like | 2.06 | 0.0 |
| *Rai14* | Retinoic acid induced 14 | 2.06 | 0.0 |
| *Tnfaip3* | tumor necrosis factor, alpha-induced protein 3 | 2.07 | 0.0 |
| *Tmem120a* | transmembrane protein 120A | 2.07 | 0.0 |
| *Fhl2* | four and a half LIM domains 2 | 2.07 | 0.0 |
| *Copa* | coatomer protein complex subunit alpha | 2.07 | 0.0 |
| *Rhoc* | ras homolog gene family, member C | 2.07 | 0.0 |
| *1700071A11Rik* | RIKEN cDNA 1700071A11 gene | 2.07 | 0.0 |
| *Ctse* | cathepsin E | 2.07 | 5.2 |
| *Slc9a8* | solute carrier family 9 (sodium/hydrogen exchanger), member 8 | 2.07 | 0.0 |
| *Pip5k1b* | phosphatidylinositol-4-phosphate 5-kinase, type 1 beta | 2.07 | 0.0 |
| *Ammecr1l* | AMME chromosomal region gene 1-like | 2.08 | 5.2 |
| *St3gal1* | ST3 beta-galactoside alpha-2,3-sialyltransferase 1 | 2.08 | 0.0 |
| *Tm4sf1* | transmembrane 4 superfamily member 1 | 2.08 | 0.0 |
| *Cdkn2b* | cyclin-dependent kinase inhibitor 2B (p15, inhibits CDK4) | 2.08 | 0.0 |
| *Pxmp3* | Peroxisomal membrane protein 3 | 2.08 | 0.0 |
| *Cul2* | cullin 2 | 2.09 | 0.0 |
| *Rbm39* | RNA binding motif protein 39 | 2.09 | 0.0 |
| *Clptm1* | cleft lip and palate associated transmembrane protein 1 | 2.09 | 0.0 |
| *Clip4* | CAP-GLY domain containing linker protein family, member 4 | 2.09 | 5.2 |
| *Slc2a1* | solute carrier family 2 (facilitated glucose transporter), member 1 | 2.10 | 0.0 |
| *Enc1* | ectodermal-neural cortex 1 | 2.10 | 0.0 |
| *9430016H08Rik* | RIKEN cDNA 9430016H08 gene | 2.10 | 0.0 |
| *Orc4* | origin recognition complex, subunit 4 | 2.10 | 0.0 |
| *Pik3r5* | phosphoinositide-3-kinase, regulatory subunit 5, p101 | 2.10 | 0.0 |

| | | | |
|---|---|---|---|
| *Cdc42* | cell division cycle 42 | 2.10 | 0.0 |
| *B930098A02Rik /// Chic2* | RIKEN cDNA B930098A02 gene /// cysteine-rich hydrophobic domain 2 | 2.11 | 0.0 |
| *Them5* | thioesterase superfamily member 5 | 2.11 | 0.0 |
| *Zfp800* | zinc finger protein 800 | 2.11 | 0.0 |
| *Itgam* | integrin alpha M | 2.12 | 5.2 |
| *Nus1* | nuclear undecaprenyl pyrophosphate synthase 1 homolog (S. cerevisiae) | 2.12 | 0.0 |
| *AU014973* | expressed sequence AU014973 | 2.12 | 0.0 |
| *Fstl3* | follistatin-like 3 | 2.12 | 0.0 |
| *Ptprk* | protein tyrosine phosphatase, receptor type, K | 2.13 | 0.0 |
| *Wdr61* | WD repeat domain 61 | 2.13 | 0.0 |
| *Star* | steroidogenic acute regulatory protein | 2.13 | 0.0 |
| *Malt1* | mucosa associated lymphoid tissue lymphoma translocation gene 1 | 2.14 | 0.0 |
| *Cdk9* | cyclin-dependent kinase 9 (CDC2-related kinase) | 2.14 | 0.0 |
| *Lmnb1* | lamin B1 | 2.14 | 0.0 |
| *Grwd1* | glutamate-rich WD repeat containing 1 | 2.14 | 0.0 |
| *E030047P09Rik* | RIKEN cDNA E030047P09 gene | 2.14 | 0.0 |
| *9830001H06Rik* | RIKEN cDNA 9830001H06 gene | 2.14 | 5.2 |
| *Tgm1* | transglutaminase 1, K polypeptide | 2.14 | 0.0 |
| *Myh9* | myosin, heavy polypeptide 9, non-muscle | 2.15 | 0.0 |
| *Sla* | src-like adaptor | 2.15 | 0.0 |
| *4833412E19Rik* | RIKEN cDNA 4833412E19 gene | 2.15 | 0.0 |
| *LOC100044742 /// Ptp4a1* | protein tyrosine phosphatase type IVA 1-like /// protein tyrosine phosphatase 4a1 | 2.15 | 0.0 |
| *Adamts1* | a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 1 | 2.15 | 0.0 |
| *March3* | membrane-associated ring finger (C3HC4) 3 | 2.15 | 0.0 |
| *Bmp2k* | BMP2 inducible kinase | 2.15 | 0.0 |
| *Adarb1* | adenosine deaminase, RNA-specific, B1 | 2.16 | 0.0 |
| *Pmepa1* | prostate transmembrane protein, androgen induced 1 | 2.16 | 0.0 |
| *Mex3c* | mex3 homolog C (C. elegans) | 2.16 | 0.0 |
| *Klrb1b* | killer cell lectin-like receptor subfamily B member 1B | 2.16 | 0.0 |
| *Sdc4* | syndecan 4 | 2.16 | 0.0 |
| *Phf3* | PHD finger protein 3 | 2.17 | 0.0 |
| *Csf2rb2* | colony stimulating factor 2 receptor, beta 2, low-affinity (granulocyte-macrophage) | 2.17 | 0.0 |
| *D10Ertd709e* | DNA segment, Chr 10, ERATO Doi 709, expressed | 2.18 | 0.0 |
| *Gas5 /// Snord47* | growth arrest specific 5 /// small nucleolar RNA, C/D box 47 | 2.18 | 0.0 |
| *Cxcr7* | chemokine (C-X-C motif) receptor 7 | 2.18 | 0.0 |
| *Mpzl3* | myelin protein zero-like 3 | 2.18 | 0.0 |
| *Rps17* | ribosomal protein S17 | 2.18 | 0.0 |
| *Adamtsl2* | ADAMTS-like 2 | 2.18 | 0.0 |
| *Zfp259* | zinc finger protein 259 | 2.18 | 0.0 |
| *Camk2d* | calcium/calmodulin-dependent protein kinase II, delta | 2.19 | 0.0 |
| *Snx18* | sorting nexin 18 | 2.20 | 0.0 |
| *Esd /// Gm2904* | esterase D/formylglutathione hydrolase /// predicted pseudogene 2904 | 2.20 | 0.0 |

| | | | |
|---|---|---|---|
| *Itga5* | integrin alpha 5 (fibronectin receptor alpha) | 2.20 | 0.0 |
| *Dfna5* | deafness, autosomal dominant 5 (human) | 2.20 | 0.0 |
| *1700012B15Rik* | RIKEN cDNA 1700012B15 gene | 2.20 | 0.0 |
| *Trim16* | tripartite motif-containing 16 | 2.20 | 0.0 |
| *Map2k7* | mitogen-activated protein kinase kinase 7 | 2.21 | 5.2 |
| *5830407E08Rik* | RIKEN cDNA 5830407E08 gene | 2.21 | 0.0 |
| *Fosl2* | fos-like antigen 2 | 2.22 | 0.0 |
| *Kdelr3* | KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 3 | 2.23 | 0.0 |
| *Camk2n2* | calcium/calmodulin-dependent protein kinase II inhibitor 2 | 2.23 | 0.0 |
| *Dot1l* | DOT1-like, histone H3 methyltransferase (S. cerevisiae) | 2.23 | 0.0 |
| *Tpcn2* | two pore segment channel 2 | 2.23 | 0.0 |
| *Nes* | nestin | 2.23 | 0.0 |
| *F2rl1* | coagulation factor II (thrombin) receptor-like 1 | 2.23 | 0.0 |
| *Mbp* | myelin basic protein | 2.23 | 0.0 |
| *5830416P10Rik* | RIKEN cDNA 5830416P10 gene | 2.23 | 0.0 |
| *Lnx2* | ligand of numb-protein X 2 | 2.24 | 0.0 |
| *Dusp8* | dual specificity phosphatase 8 | 2.24 | 0.0 |
| *Ipcef1* | interaction protein for cytohesin exchange factors 1 | 2.24 | 0.0 |
| *Slc7a1* | solute carrier family 7 (cationic amino acid transporter, y+ system), member 1 | 2.24 | 0.0 |
| *Gnpnat1* | glucosamine-phosphate N-acetyltransferase 1 | 2.25 | 0.0 |
| *5430434G16Rik* | RIKEN cDNA 5430434G16 gene | 2.25 | 0.0 |
| *Tnfrsf22 /// Tnfrsf23* | tumor necrosis factor receptor superfamily, member 22 /// tumor necrosis factor receptor superfamily, member 23 | 2.25 | 0.0 |
| *Fam122a* | family with sequence similarity 122, member A | 2.25 | 0.0 |
| *Loxl1* | lysyl oxidase-like 1 | 2.25 | 0.0 |
| *2900046L07Rik* | RIKEN cDNA 2900046L07 gene | 2.25 | 5.2 |
| *4833441D16Rik* | RIKEN cDNA 4833441D16 gene | 2.25 | 0.0 |
| *Lass3* | LAG1 homolog, ceramide synthase 3 | 2.26 | 0.0 |
| *Cidea* | cell death-inducing DNA fragmentation factor, alpha subunit-like effector A | 2.26 | 0.0 |
| *Epha2* | Eph receptor A2 | 2.27 | 0.0 |
| *Artn* | artemin | 2.27 | 0.0 |
| *Uck2* | uridine-cytidine kinase 2 | 2.27 | 0.0 |
| *Il17ra* | interleukin 17 receptor A | 2.29 | 0.0 |
| *Sowahb* | sosondowah ankyrin repeat domain family member B | 2.29 | 0.0 |
| *Sh3bp2* | SH3-domain binding protein 2 | 2.29 | 0.0 |
| *Alyref* | Aly/REF export factor | 2.29 | 0.0 |
| *Tes* | testis derived transcript | 2.29 | 0.0 |
| *Nuak2* | NUAK family, SNF1-like kinase, 2 | 2.29 | 0.0 |
| *Slc25a25* | solute carrier family 25 (mitochondrial carrier, phosphate carrier), member 25 | 2.29 | 0.0 |
| *AU019559* | expressed sequence AU019559 | 2.30 | 0.0 |
| *Afp* | alpha fetoprotein | 2.30 | 0.0 |
| *C1d* | C1D nuclear receptor co-repressor | 2.30 | 0.0 |
| *Ugcg* | UDP-glucose ceramide glucosyltransferase | 2.31 | 0.0 |
| *Trim24* | tripartite motif-containing 24 | 2.31 | 5.2 |
| *Eif2ak1* | eukaryotic translation initiation factor 2 alpha kinase 1 | 2.31 | 0.0 |

| | | | |
|---|---|---|---|
| *Lrrc8c* | leucine rich repeat containing 8 family, member C | 2.31 | 0.0 |
| *B230303O12Rik* | RIKEN cDNA B230303O12 gene | 2.31 | 0.0 |
| *Tubb2b* | tubulin, beta 2B class IIB | 2.32 | 0.0 |
| *Ptger4* | prostaglandin E receptor 4 (subtype EP4) | 2.32 | 0.0 |
| *6720477C19Rik* | RIKEN cDNA 6720477C19 gene | 2.32 | 0.0 |
| *Ppargc1a* | peroxisome proliferative activated receptor, gamma, coactivator 1 alpha | 2.33 | 0.0 |
| *Gimap6* | GTPase, IMAP family member 6 | 2.33 | 0.0 |
| *Adipor1* | adiponectin receptor 1 | 2.33 | 0.0 |
| *Gda* | guanine deaminase | 2.34 | 0.0 |
| *Zc3hav1* | zinc finger CCCH type, antiviral 1 | 2.34 | 0.0 |
| *Trp53inp2* | Transformation related protein 53 inducible nuclear protein 2 | 2.34 | 0.0 |
| *Sdad1* | SDA1 domain containing 1 | 2.35 | 0.0 |
| *Tmcc3* | transmembrane and coiled coil domains 3 | 2.35 | 0.0 |
| *Prrc1* | proline-rich coiled-coil 1 | 2.36 | 0.0 |
| *Ms4a6b* | membrane-spanning 4-domains, subfamily A, member 6B | 2.36 | 0.0 |
| *Picalm* | phosphatidylinositol binding clathrin assembly protein | 2.36 | 0.0 |
| *Csf2rb* | colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage) | 2.36 | 0.0 |
| *Dnajb5* | DnaJ (Hsp40) homolog, subfamily B, member 5 | 2.36 | 0.0 |
| *Samsn1* | SAM domain, SH3 domain and nuclear localization signals, 1 | 2.36 | 5.2 |
| *Prosapip1* | ProSAPiP1 protein | 2.36 | 0.0 |
| *C80120* | expressed sequence C80120 | 2.37 | 0.0 |
| *Mbd1* | methyl-CpG binding domain protein 1 | 2.37 | 0.0 |
| *A330106F07Rik* | RIKEN cDNA A330106F07 gene | 2.37 | 5.2 |
| *Irs2* | insulin receptor substrate 2 | 2.37 | 0.0 |
| *Gpr65* | G-protein coupled receptor 65 | 2.37 | 0.0 |
| *Col5a1* | collagen, type V, alpha 1 | 2.38 | 0.0 |
| *Srsf7* | serine/arginine-rich splicing factor 7 | 2.39 | 0.0 |
| *E030010A14Rik* | RIKEN cDNA E030010A14 gene | 2.39 | 0.0 |
| *Shb* | src homology 2 domain-containing transforming protein B | 2.39 | 0.0 |
| *B230216G23Rik* | RIKEN cDNA B230216G23 gene | 2.39 | 0.0 |
| *Ttc9* | tetratricopeptide repeat domain 9 | 2.39 | 0.0 |
| *Srf* | serum response factor | 2.39 | 0.0 |
| *Zfml* | Zinc finger, matrin-like | 2.39 | 0.0 |
| *Prg4* | proteoglycan 4 (megakaryocyte stimulating factor, articular superficial zone protein) | 2.39 | 0.0 |
| *Hbegf* | heparin-binding EGF-like growth factor | 2.40 | 0.0 |
| *Smox* | spermine oxidase | 2.40 | 0.0 |
| *Rps9* | ribosomal protein S9 | 2.40 | 0.0 |
| *Mpp6* | membrane protein, palmitoylated 6 (MAGUK p55 subfamily member 6) | 2.40 | 0.0 |
| *Sema4c* | sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4C | 2.41 | 0.0 |
| *Egr2* | early growth response 2 | 2.41 | 0.0 |
| *Daam2* | dishevelled associated activator of morphogenesis 2 | 2.41 | 0.0 |
| *Smpd4* | sphingomyelin phosphodiesterase 4 | 2.41 | 0.0 |

| | | | |
|---|---|---|---|
| *Noc2l* | nucleolar complex associated 2 homolog (S. cerevisiae) | 2.41 | 0.0 |
| *Spsb1* | splA/ryanodine receptor domain and SOCS box containing 1 | 2.41 | 5.2 |
| *Vcan* | versican | 2.43 | 0.0 |
| *Upp1* | uridine phosphorylase 1 | 2.43 | 5.2 |
| *Tmem108* | transmembrane protein 108 | 2.44 | 0.0 |
| *Heyl* | hairy/enhancer-of-split related with YRPW motif-like | 2.44 | 0.0 |
| *Tacc3* | transforming, acidic coiled-coil containing protein 3 | 2.44 | 0.0 |
| *Clec4n* | C-type lectin domain family 4, member n | 2.45 | 0.0 |
| *1700017B05Rik* | RIKEN cDNA 1700017B05 gene | 2.45 | 0.0 |
| *Itpkc* | inositol 1,4,5-trisphosphate 3-kinase C | 2.45 | 0.0 |
| *Itgb6* | integrin beta 6 | 2.45 | 0.0 |
| *Dbn1* | drebrin 1 | 2.46 | 0.0 |
| *Col3a1* | collagen, type III, alpha 1 | 2.46 | 0.0 |
| *Syncrip* | synaptotagmin binding, cytoplasmic RNA interacting protein | 2.46 | 0.0 |
| *Mapk6* | mitogen-activated protein kinase 6 | 2.46 | 0.0 |
| *Zkscan5* | zinc finger with KRAB and SCAN domains 5 | 2.46 | 0.0 |
| *Prmt8* | protein arginine N-methyltransferase 8 | 2.47 | 0.0 |
| *Arl4c* | ADP-ribosylation factor-like 4C | 2.47 | 0.0 |
| *Rnd3* | Rho family GTPase 3 | 2.48 | 0.0 |
| *Sorbs1* | sorbin and SH3 domain containing 1 | 2.48 | 0.0 |
| *Timp1* | tissue inhibitor of metalloproteinase 1 | 2.48 | 0.0 |
| *Kcnk5* | potassium channel, subfamily K, member 5 | 2.49 | 0.0 |
| *Plat* | plasminogen activator, tissue | 2.49 | 0.0 |
| *Nid1* | nidogen 1 | 2.49 | 0.0 |
| *F3* | coagulation factor III | 2.50 | 0.0 |
| *Pla2g7* | phospholipase A2, group VII (platelet-activating factor acetylhydrolase, plasma) | 2.50 | 0.0 |
| *Neurl3* | neuralized homolog 3 homolog (Drosophila) | 2.50 | 0.0 |
| *Fam176a* | family with sequence similarity 176, member A | 2.50 | 0.0 |
| *March1* | membrane-associated ring finger (C3HC4) 1 | 2.50 | 0.0 |
| *Rasl11b* | RAS-like, family 11, member B | 2.51 | 0.0 |
| *AI607873* | expressed sequence AI607873 | 2.51 | 0.0 |
| *D8Ertd82e* | DNA segment, Chr 8, ERATO Doi 82, expressed | 2.52 | 0.0 |
| *Entpd4 /// LOC100862375* | ectonucleoside triphosphate diphosphohydrolase 4 /// ectonucleoside triphosphate diphosphohydrolase 4-like | 2.52 | 0.0 |
| *Rnf152* | ring finger protein 152 | 2.52 | 0.0 |
| *Egfr* | epidermal growth factor receptor | 2.53 | 0.0 |
| *Btg1* | B cell translocation gene 1, anti-proliferative | 2.53 | 0.0 |
| *Gm8369* | predicted gene 8369 | 2.53 | 0.0 |
| *Gm11425 /// LOC630855 /// Rpl12* | predicted gene 11425 /// 60S ribosomal protein L12-like /// ribosomal protein L12 | 2.54 | 0.0 |
| *Mfsd2b* | Major facilitator superfamily domain containing 2B | 2.54 | 0.0 |
| *Unc5b* | unc-5 homolog B (C. elegans) | 2.55 | 0.0 |
| *Bcar1* | breast cancer anti-estrogen resistance 1 | 2.55 | 0.0 |
| *Krt18* | keratin 18 | 2.56 | 0.0 |
| *Gfpt2* | glutamine fructose-6-phosphate transaminase 2 | 2.56 | 0.0 |
| *Kalrn* | kalirin, RhoGEF kinase | 2.56 | 5.2 |
| *9930012K11Rik* | RIKEN cDNA 9930012K11 gene | 2.56 | 0.0 |

| | | | |
|---|---|---|---|
| *2310014L17Rik* | RIKEN cDNA 2310014L17 gene | 2.56 | 0.0 |
| *Twistnb* | TWIST neighbor | 2.56 | 0.0 |
| *Gadd45a* | growth arrest and DNA-damage-inducible 45 alpha | 2.56 | 0.0 |
| *Nedd9* | neural precursor cell expressed, developmentally down-regulated gene 9 | 2.57 | 0.0 |
| *Snx10* | Sorting nexin 10 | 2.57 | 0.0 |
| *Itk* | IL2 inducible T cell kinase | 2.57 | 0.0 |
| *Lrp8* | low density lipoprotein receptor-related protein 8, apolipoprotein e receptor | 2.58 | 0.0 |
| *Eprs* | glutamyl-prolyl-tRNA synthetase | 2.58 | 0.0 |
| *C230007H23Rik* | RIKEN cDNA C230007H23 gene | 2.58 | 0.0 |
| *Gna13* | guanine nucleotide binding protein, alpha 13 | 2.59 | 0.0 |
| *Crem* | cAMP responsive element modulator | 2.59 | 0.0 |
| *4833411I10Rik* | RIKEN cDNA 4833411I10 gene | 2.60 | 0.0 |
| *Gp49a /// Lilrb4* | glycoprotein 49 A /// leukocyte immunoglobulin-like receptor, subfamily B, member 4 | 2.61 | 0.0 |
| *Slc20a1* | solute carrier family 20, member 1 | 2.61 | 0.0 |
| *E430014B02Rik* | RIKEN cDNA E430014B02 gene | 2.61 | 0.0 |
| *Uchl1* | ubiquitin carboxy-terminal hydrolase L1 | 2.63 | 0.0 |
| *Klhl29* | kelch-like 29 (Drosophila) | 2.64 | 0.0 |
| *Prdm2* | PR domain containing 2, with ZNF domain | 2.64 | 0.0 |
| *Gm3776 /// Gsta1 /// Gsta2* | predicted gene 3776 /// glutathione S-transferase, alpha 1 (Ya) /// glutathione S-transferase, alpha 2 (Yc2) | 2.64 | 0.0 |
| *Gas2l3* | growth arrest-specific 2 like 3 | 2.65 | 0.0 |
| *Tacstd2* | tumor-associated calcium signal transducer 2 | 2.65 | 0.0 |
| *AA408650* | expressed sequence AA408650 | 2.65 | 0.0 |
| *Zbtb20* | zinc finger and BTB domain containing 20 | 2.66 | 0.0 |
| *Nfkbid* | nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, delta | 2.66 | 0.0 |
| *Glipr1* | GLI pathogenesis-related 1 (glioma) | 2.66 | 0.0 |
| *Psme4* | proteasome (prosome, macropain) activator subunit 4 | 2.67 | 0.0 |
| *5730559C18Rik* | RIKEN cDNA 5730559C18 gene | 2.67 | 0.0 |
| *Arg2* | arginase type II | 2.67 | 0.0 |
| *Ccdc86* | coiled-coil domain containing 86 | 2.68 | 0.0 |
| *Adamts2* | a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 2 | 2.69 | 0.0 |
| *2700038G22Rik* | RIKEN cDNA 2700038G22 gene | 2.70 | 0.0 |
| *Preb* | prolactin regulatory element binding | 2.70 | 0.0 |
| *Itprip* | inositol 1,4,5-triphosphate receptor interacting protein | 2.71 | 0.0 |
| *Rin1* | Ras and Rab interactor 1 | 2.71 | 0.0 |
| *Flnb* | filamin, beta | 2.71 | 0.0 |
| *Btla* | B and T lymphocyte associated | 2.72 | 0.0 |
| *C230085N15Rik* | RIKEN cDNA C230085N15 gene | 2.72 | 0.0 |
| *Krt8* | keratin 8 | 2.72 | 0.0 |
| *Fem1c* | fem-1 homolog c (C.elegans) | 2.73 | 0.0 |
| *Gpr171* | G protein-coupled receptor 171 | 2.74 | 0.0 |
| *Chd1* | chromodomain helicase DNA binding protein 1 | 2.74 | 0.0 |
| *Peg3* | paternally expressed 3 | 2.74 | 0.0 |
| *Pvr* | poliovirus receptor | 2.75 | 0.0 |
| *4833422B07Rik* | RIKEN cDNA 4833422B07 gene | 2.75 | 0.0 |

| | | | |
|---|---|---|---|
| *Rnf144b* | ring finger protein 144B | 2.76 | 5.2 |
| *Slc7a6* | solute carrier family 7 (cationic amino acid transporter, y+ system), member 6 | 2.77 | 0.0 |
| *4930523C07Rik* | RIKEN cDNA 4930523C07 gene | 2.78 | 0.0 |
| *Nudt6* | nudix (nucleoside diphosphate linked moiety X)-type motif 6 | 2.78 | 0.0 |
| *Plcxd2* | phosphatidylinositol-specific phospholipase C, X domain containing 2 | 2.78 | 0.0 |
| *Srxn1* | sulfiredoxin 1 homolog (S. cerevisiae) | 2.79 | 5.2 |
| *Trib1* | tribbles homolog 1 (Drosophila) | 2.79 | 0.0 |
| *Myo1e* | myosin IE | 2.79 | 0.0 |
| *Tox* | thymocyte selection-associated high mobility group box | 2.79 | 0.0 |
| *Litaf* | LPS-induced TN factor | 2.81 | 0.0 |
| *Sphk1* | sphingosine kinase 1 | 2.81 | 0.0 |
| *Plk3* | polo-like kinase 3 | 2.81 | 0.0 |
| *Cd28* | CD28 antigen | 2.82 | 0.0 |
| *Anxa1* | annexin A1 | 2.83 | 5.2 |
| *Gprc5b* | G protein-coupled receptor, family C, group 5, member B | 2.83 | 0.0 |
| *Lox* | lysyl oxidase | 2.84 | 0.0 |
| *Zfand5* | zinc finger, AN1-type domain 5 | 2.85 | 0.0 |
| *Pkib* | protein kinase inhibitor beta, cAMP dependent, testis specific | 2.87 | 0.0 |
| *Dnajc25* | DnaJ (Hsp40) homolog, subfamily C, member 25 | 2.92 | 0.0 |
| *Armcx5* | armadillo repeat containing, X-linked 5 | 2.92 | 0.0 |
| *Slc22a3* | solute carrier family 22 (organic cation transporter), member 3 | 2.93 | 0.0 |
| *Rab20* | RAB20, member RAS oncogene family | 2.93 | 0.0 |
| *Gab2* | growth factor receptor bound protein 2-associated protein 2 | 2.95 | 0.0 |
| *Sh3pxd2b* | SH3 and PX domains 2B | 2.95 | 0.0 |
| *LOC100862072 /// Loxl2* | lysyl oxidase homolog 2-like /// lysyl oxidase-like 2 | 2.97 | 0.0 |
| *Fam46b* | family with sequence similarity 46, member B | 2.97 | 0.0 |
| *Slc7a11* | solute carrier family 7 (cationic amino acid transporter, y+ system), member 11 | 2.97 | 5.2 |
| *Slc12a9* | solute carrier family 12 (potassium/chloride transporters), member 9 | 2.98 | 0.0 |
| *Ptpn22* | protein tyrosine phosphatase, non-receptor type 22 (lymphoid) | 3.00 | 0.0 |
| *Fcgr4* | Fc receptor, IgG, low affinity IV | 3.01 | 0.0 |
| *Col1a1* | collagen, type I, alpha 1 | 3.01 | 0.0 |
| *Elp4* | elongation protein 4 homolog (S. cerevisiae) | 3.01 | 0.0 |
| *Pdk4* | pyruvate dehydrogenase kinase, isoenzyme 4 | 3.01 | 0.0 |
| *Eln* | elastin | 3.02 | 0.0 |
| *Tlr13* | toll-like receptor 13 | 3.02 | 0.0 |
| *Slco1c1* | solute carrier organic anion transporter family, member 1c1 | 3.02 | 0.0 |
| *Id2* | inhibitor of DNA binding 2 | 3.02 | 0.0 |
| *Cd300lf* | CD300 antigen like family member F | 3.04 | 0.0 |
| *2810403A07Rik* | RIKEN cDNA 2810403A07 gene | 3.05 | 0.0 |
| *G530011O06Rik* | RIKEN cDNA G530011O06 gene | 3.06 | 0.0 |

| | | | |
|---|---|---|---|
| *Zfp106* | zinc finger protein 106 | 3.07 | 0.0 |
| *Leo1* | Leo1, Paf1/RNA polymerase II complex component, homolog (S. cerevisiae) | 3.07 | 0.0 |
| *Slc39a14* | solute carrier family 39 (zinc transporter), member 14 | 3.08 | 0.0 |
| *Inhbb* | inhibin beta-B | 3.09 | 0.0 |
| *D14Ertd449e /// Gm10395 /// Gm9746* | DNA segment, Chr 14, ERATO Doi 449, expressed /// predicted gene 10395 /// predicted gene 9746 | 3.10 | 0.0 |
| *Chd7* | chromodomain helicase DNA binding protein 7 | 3.10 | 0.0 |
| *Thbs1* | thrombospondin 1 | 3.11 | 0.0 |
| *Dusp3* | dual specificity phosphatase 3 (vaccinia virus phosphatase VH1-related) | 3.13 | 0.0 |
| *Ikzf4* | IKAROS family zinc finger 4 | 3.14 | 0.0 |
| *Tnc* | tenascin C | 3.14 | 0.0 |
| *9130221J17Rik* | RIKEN cDNA 9130221J17 gene | 3.16 | 0.0 |
| *Rcan1* | regulator of calcineurin 1 | 3.16 | 0.0 |
| *5830453J16Rik* | RIKEN cDNA 5830453J16 gene | 3.16 | 0.0 |
| *Pdlim7* | PDZ and LIM domain 7 | 3.17 | 0.0 |
| *Stc1* | stanniocalcin 1 | 3.19 | 0.0 |
| *Rprd2* | regulation of nuclear pre-mRNA domain containing 2 | 3.20 | 0.0 |
| *Cdr2* | cerebellar degeneration-related 2 | 3.21 | 0.0 |
| *9630009C16* | uncharacterized protein 9630009C16 | 3.21 | 0.0 |
| *Plk2* | polo-like kinase 2 | 3.22 | 0.0 |
| *Mrpl15* | mitochondrial ribosomal protein L15 | 3.24 | 0.0 |
| *Rhou* | ras homolog gene family, member U | 3.25 | 0.0 |
| *Hk2* | hexokinase 2 | 3.27 | 0.0 |
| *Plaur* | plasminogen activator, urokinase receptor | 3.32 | 0.0 |
| *Il1rn* | interleukin 1 receptor antagonist | 3.32 | 0.0 |
| *Mbnl3* | muscleblind-like 3 (Drosophila) | 3.35 | 0.0 |
| *2010109K09Rik* | RIKEN cDNA 2010109K09 gene | 3.37 | 0.0 |
| *5033430I15Rik* | RIKEN cDNA 5033430I15 gene | 3.37 | 0.0 |
| *Cald1* | caldesmon 1 | 3.38 | 0.0 |
| *Akap12* | A kinase (PRKA) anchor protein (gravin) 12 | 3.39 | 0.0 |
| *Abtb2* | ankyrin repeat and BTB (POZ) domain containing 2 | 3.42 | 0.0 |
| *Cflar* | CASP8 and FADD-like apoptosis regulator | 3.44 | 0.0 |
| *Gjb2* | gap junction protein, beta 2 | 3.45 | 0.0 |
| *Sdcbp2* | syndecan binding protein (syntenin) 2 | 3.47 | 0.0 |
| *Eppk1* | epiplakin 1 | 3.48 | 0.0 |
| *Rbm12* | RNA binding motif protein 12 | 3.48 | 0.0 |
| *Pi15* | peptidase inhibitor 15 | 3.48 | 0.0 |
| *Cxcl1* | chemokine (C-X-C motif) ligand 1 | 3.48 | 0.0 |
| *Spon2* | spondin 2, extracellular matrix protein | 3.51 | 0.0 |
| *1700109H08Rik* | RIKEN cDNA 1700109H08 gene | 3.51 | 0.0 |
| *Rasd1* | RAS, dexamethasone-induced 1 | 3.53 | 0.0 |
| *Adamts15* | a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 15 | 3.54 | 0.0 |
| *Slfn1* | schlafen 1 | 3.55 | 5.2 |
| *Slc16a6* | solute carrier family 16 (monocarboxylic acid transporters), member 6 | 3.58 | 0.0 |
| *Selp* | selectin, platelet | 3.58 | 0.0 |
| *Ptpn2* | protein tyrosine phosphatase, non-receptor type 2 | 3.61 | 0.0 |

| | | | |
|---|---|---|---|
| *Spry4* | sprouty homolog 4 (Drosophila) | 3.63 | 0.0 |
| *Cdkn1a* | cyclin-dependent kinase inhibitor 1A (P21) | 3.64 | 0.0 |
| *6330406I15Rik* | RIKEN cDNA 6330406I15 gene | 3.65 | 0.0 |
| *Maff* | v-maf musculoaponeurotic fibrosarcoma oncogene family, protein F (avian) | 3.65 | 0.0 |
| *Syk* | spleen tyrosine kinase | 3.66 | 0.0 |
| *H2-Q10* | histocompatibility 2, Q region locus 10 | 3.66 | 0.0 |
| *Gadd45g* | growth arrest and DNA-damage-inducible 45 gamma | 3.66 | 0.0 |
| *Slc16a13* | solute carrier family 16 (monocarboxylic acid transporters), member 13 | 3.68 | 0.0 |
| *9430076C15Rik* | RIKEN cDNA 9430076C15 gene | 3.68 | 0.0 |
| *Pmvk* | phosphomevalonate kinase | 3.69 | 0.0 |
| *Slc38a4* | solute carrier family 38, member 4 | 3.74 | 0.0 |
| *Il18rap* | interleukin 18 receptor accessory protein | 3.74 | 0.0 |
| *Ccr1* | chemokine (C-C motif) receptor 1 | 3.77 | 0.0 |
| *Sbno2* | strawberry notch homolog 2 (Drosophila) | 3.82 | 0.0 |
| *Socs3* | suppressor of cytokine signaling 3 | 3.84 | 0.0 |
| *Btbd11* | BTB (POZ) domain containing 11 | 3.88 | 0.0 |
| *Bcl3* | B cell leukemia/lymphoma 3 | 3.89 | 0.0 |
| *Gm19966* | predicted gene, 19966 | 3.94 | 0.0 |
| *Nlrc3* | NLR family, CARD domain containing 3 | 3.95 | 0.0 |
| *Sgms2* | sphingomyelin synthase 2 | 4.01 | 0.0 |
| *Tnfrsf12a* | tumor necrosis factor receptor superfamily, member 12a | 4.01 | 0.0 |
| *O3far1* | omega-3 fatty acid receptor 1 | 4.01 | 0.0 |
| *Prkcg* | protein kinase C, gamma | 4.03 | 0.0 |
| *Tnfaip6* | tumor necrosis factor alpha induced protein 6 | 4.04 | 0.0 |
| *Adamts4* | a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 4 | 4.06 | 0.0 |
| *Tubb6* | tubulin, beta 6 class V | 4.06 | 0.0 |
| *Dus4l* | dihydrouridine synthase 4-like (S. cerevisiae) | 4.09 | 0.0 |
| *Gm3893 /// Gm5859 /// Gm7819 /// LOC100861635 /// LOC100862237* | predicted gene 3893 /// predicted pseudogene 5859 /// predicted gene 7819 /// protein FAM205A-like /// uncharacterized LOC100862237 | 4.10 | 0.0 |
| *Mt1* | metallothionein 1 | 4.10 | 0.0 |
| *Cldn23* | claudin 23 | 4.11 | 0.0 |
| *Obfc2a* | oligonucleotide/oligosaccharide-binding fold containing 2A | 4.14 | 0.0 |
| *9230110K08Rik* | RIKEN cDNA 9230110K08 gene | 4.18 | 0.0 |
| *Ereg* | epiregulin | 4.19 | 0.0 |
| *Acta1* | actin, alpha 1, skeletal muscle | 4.21 | 0.0 |
| *Gem* | GTP binding protein (gene overexpressed in skeletal muscle) | 4.27 | 0.0 |
| *Trem1* | triggering receptor expressed on myeloid cells 1 | 4.29 | 0.0 |
| *Bcl6b* | B cell CLL/lymphoma 6, member B | 4.37 | 0.0 |
| *Serpine1* | serine (or cysteine) peptidase inhibitor, clade E, member 1 | 4.38 | 0.0 |
| *Slc26a4* | solute carrier family 26, member 4 | 4.39 | 0.0 |
| *Sprr1a* | small proline-rich protein 1A | 4.51 | 0.0 |
| *Cd69* | CD69 antigen | 4.56 | 0.0 |
| *Tmem242* | transmembrane protein 242 | 4.60 | 0.0 |

| | | | |
|---|---|---|---|
| *Pde10a* | phosphodiesterase 10A | 4.61 | 0.0 |
| *Itpr2* | Inositol 1,4,5-triphosphate receptor 2 | 4.62 | 0.0 |
| *Txndc9* | thioredoxin domain containing 9 | 4.63 | 0.0 |
| *Myc* | myelocytomatosis oncogene | 4.64 | 0.0 |
| *Adm* | adrenomedullin | 4.66 | 0.0 |
| *Kcne4* | potassium voltage-gated channel, Isk-related subfamily, gene 4 | 4.69 | 0.0 |
| *Adora2b* | adenosine A2b receptor | 4.71 | 0.0 |
| *Ccrn4l* | CCR4 carbon catabolite repression 4-like (S. cerevisiae) | 4.75 | 0.0 |
| *Marco* | macrophage receptor with collagenous structure | 4.81 | 0.0 |
| *Ppp2ca* | protein phosphatase 2 (formerly 2A), catalytic subunit, alpha isoform | 4.88 | 0.0 |
| *4933409K07Rik /// Gm10590 /// Gm2163 /// Gm3893 /// Gm5859 /// Gm7819 /// LOC100041516 /// LOC100861610 /// LOC100861635* | RIKEN cDNA 4933409K07 gene /// predicted gene 10590 /// predicted gene 2163 /// predicted gene 3893 /// predicted pseudogene 5859 /// predicted gene 7819 /// protein FAM205A-like /// uncharacterized LOC100861610 /// protein FAM205A-like | 4.89 | 0.0 |
| *Ly6g6c* | lymphocyte antigen 6 complex, locus G6C | 4.89 | 0.0 |
| *Cd33* | CD33 antigen | 5.01 | 0.0 |
| *Tlk2* | tousled-like kinase 2 (Arabidopsis) | 5.08 | 0.0 |
| *Adamts9* | a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 9 | 5.13 | 0.0 |
| *Sdcbp* | syndecan binding protein | 5.25 | 0.0 |
| *Gdnf* | glial cell line derived neurotrophic factor | 5.27 | 0.0 |
| *D14Ertd449e* | DNA segment, Chr 14, ERATO Doi 449, expressed | 5.29 | 5.2 |
| *Mfsd2a* | major facilitator superfamily domain containing 2A | 5.32 | 0.0 |
| *Clec4d* | C-type lectin domain family 4, member d | 5.40 | 0.0 |
| *Cxcl5* | chemokine (C-X-C motif) ligand 5 | 5.44 | 0.0 |
| *Gm13889* | predicted gene 13889 | 5.52 | 0.0 |
| *AU023617* | expressed sequence AU023617 | 5.54 | 0.0 |
| *Fbxw10 /// Trim16* | F-box and WD-40 domain protein 10 /// tripartite motif-containing 16 | 5.71 | 0.0 |
| *Calca* | calcitonin/calcitonin-related polypeptide, alpha | 5.78 | 0.0 |
| *Mt2* | metallothionein 2 | 5.81 | 0.0 |
| *Areg* | amphiregulin | 5.86 | 0.0 |
| *Iffo2* | intermediate filament family orphan 2 | 5.97 | 0.0 |
| *Rdh12* | retinol dehydrogenase 12 | 5.99 | 0.0 |
| *Nfe2l2* | nuclear factor, erythroid derived 2, like 2 | 6.08 | 0.0 |
| *AA467197* | expressed sequence AA467197 | 6.12 | 0.0 |
| *Trim15* | tripartite motif-containing 15 | 6.31 | 0.0 |
| *Sfn* | stratifin | 7.04 | 0.0 |
| *Creb5* | cAMP responsive element binding protein 5 | 7.12 | 0.0 |
| *Arhgef7* | Rho guanine nucleotide exchange factor (GEF7) | 7.13 | 0.0 |
| *Alpl* | alkaline phosphatase, liver/bone/kidney | 7.28 | 0.0 |
| *Arid5a* | AT rich interactive domain 5A (MRF1-like) | 8.25 | 0.0 |
| *Rad18* | RAD18 homolog (S. cerevisiae) | 8.28 | 0.0 |
| *Ptx3* | pentraxin related gene | 8.75 | 0.0 |
| *Clec4e* | C-type lectin domain family 4, member e | 8.95 | 0.0 |

| | | | |
|---|---|---|---|
| *Arntl* | aryl hydrocarbon receptor nuclear translocator-like | 9.95 | 0.0 |
| *Mmp8* | matrix metallopeptidase 8 | 10.43 | 0.0 |
| *Apol8* | apolipoprotein L 8 | 12.51 | 0.0 |
| *Fosl1* | fos-like antigen 1 | 12.92 | 0.0 |
| *Prss22* | protease, serine, 22 | 14.51 | 0.0 |
| *Angptl4* | angiopoietin-like 4 | 15.94 | 0.0 |
| *Nfil3* | nuclear factor, interleukin 3, regulated | 18.51 | 0.0 |
| *Cxcl2* | chemokine (C-X-C motif) ligand 2 | 19.14 | 0.0 |
| *Dio2* | deiodinase, iodothyronine, type II | 21.83 | 0.0 |
| *Has1* | hyaluronan synthase1 | 22.59 | 0.0 |
| *Cldn4* | claudin 4 | 27.05 | 0.0 |
| *Krtap17-1* | keratin associated protein 17-1 | 29.21 | 0.0 |
| *Il1r2* | interleukin 1 receptor, type II | 29.39 | 0.0 |
| *Apold1* | apolipoprotein L domain containing 1 | 39.16 | 0.0 |
| *Il6* | interleukin 6 | 146.46 | 0.0 |

[a] FC: fold change, which is calculated by dividing the expression in VILI-exposed WT mice by the expression in WT control mice.